



# Powering cross-country video distribution to online streaming platforms

## AT A GLANCE

### Industry

Media & Entertainment

### Products

Aspera Enterprise Server  
Aspera Console  
Aspera Orchestrator

### Challenge

Cross-country distribution of large video files over the public Internet.

### Solution

Using hot folders, Enterprise Server automatically sends transcoded video files to Internet video providers and PBS administrators use Console to control and manage transfers.

### Results

- Fast, reliable transfers allow PBS to guarantee delivery times to its video streaming partners.
- Automatic retry and resume of incomplete transfers ensures that temporary network problems do not result in failed transfers.
- Real-time per-transfer bandwidth utilization control enables prioritization of time-sensitive content.

Public Broadcasting Service (PBS) is a mission-driven public service media enterprise and leading provider of television programming encompassing the arts, education, history, and culture such as the iconic children's television show *Sesame Street* as well as other successful shows including *Downton Abbey* and *Frontline*.

Reaching an audience of nearly 120 million viewers per month through television programming alone, PBS has expanded its reach to include video streaming services for desktops, tablets, smart phones and other streaming devices.

PBS uses Aspera to transfer content quickly and reliably to leading video hosting platforms where consumers can conveniently access shows from a wide variety of devices.

## CHALLENGE

As its audiences moved online, PBS followed. In January 2013, Americans watched 229 million videos across all of PBS' web and mobile platforms. PBS content is also consumed through a growing number of providers such as Netflix, LodgeNet, Hulu, Amazon Instant Video and Comcast Video On Demand. To distribute its content, PBS transcodes its videos into a variety of formats and delivers them via the Internet to partners around the country.

To ensure reliable, predictable and on-time delivery, PBS was looking for a transfer solution that would overcome the challenges of using the public Internet for large-file deliveries – slow, unreliable transfers that fail to fully utilize available bandwidth and lack sufficient control to share bandwidth with other critical network traffic.

*“With Aspera, I don't need to worry because it does the job we need it to do – which is predictable delivery times and excellent reliability regardless of the vagaries of the Internet.”*

 Steve Wynn

Director of Engineering and Maintenance,  
Media Operations Center, PBS

## SOLUTION

After evaluating several options, PBS selected Aspera Enterprise Server to run transfers over a 90 Mbps pipeline and Aspera Console for real-time transfer monitoring and control.

After receiving content from producers, PBS's Media Operations Center performs quality control checks, initiates transcode jobs in all the target formats needed for streaming, and then drops the newly created video files into hot folders where Aspera Enterprise Server automatically retrieves and delivers them at high-speed to video streaming partners.

## BENEFITS

**Fast, reliable transfers:** Aspera provides a worry-free experience with transfers that maximize the utilization of available bandwidth and automatic retry and resume for partial or failed transfers assures 100% reliability.

**Precise transfer management:** PBS is able to allocate bandwidth based on transfer priority, so time-sensitive content is always delivered by the deadline.

**Strong security:** With built-in, thorough SSH authentication, encryption in transit and at rest, and data integrity verification for each transmitted block, PBS can rest assured their valued content will remain safe throughout the transfer process.

**Comprehensive control:** With Console, PBS has complete, real-time visibility over Aspera transfers, as well as comprehensive logging and reporting capabilities.

**Aspera ecosystem:** The expansive network of businesses that use Aspera in the media and broadcast industry enables PBS to plug into existing transfer workflows, eliminating the need to develop dedicated transfer mechanisms for individual partners.

Further simplifying the process, most of the video platforms PBS works with already use Aspera for other transfers, so they simply provide PBS with the login credentials and point them to a directory where PBS can upload the video files.

PBS uses Aspera Console to monitor transfers and control bandwidth based on project priorities, as well as to create custom reports. Console has proven particularly useful for time-sensitive deliveries; for instance, when editors need to move content to a customer on a quick timeline, they can use the Console dashboard to monitor the transfer and modify the transfer priority and bandwidth allocation in real time to make sure the files reach their destination when needed.

## RESULTS

PBS was looking for a fast, reliable and secure transfer solution, and Aspera delivered.

“With Aspera, I don’t need to worry because it does the job we need it to do – which is predictable delivery times and excellent reliability regardless of the vagaries of the internet,” said Steve Wynn, Director of Engineering and Maintenance at the PBS Media Operation Center.

Aspera’s patented FASP transfer technology dynamically adapts its transmission rate to fully utilize available bandwidth while remaining fair to other network traffic, an important feature for the Media Operation Center as they share bandwidth with other teams in the building. If a session fails, Aspera transfers automatically retry and restart from the drop-off point.

Additionally, PBS benefits from Console’s intuitive, easy-to-use dashboard which makes it accessible not only for PBS’s engineering and maintenance staff, but also for casual operators, such as the editors and technicians working with video files. Using Console’s interface, PBS staff can monitor and control transfers in real time, adjusting bandwidth allocation to reflect project priorities.

## WHAT’S NEXT

Having achieved success with Aspera for high-speed content transfers, PBS has begun deploying Orchestrator, Aspera’s file-based workflow automation and orchestration software, to automate and manage complex workflows. With Orchestrator, PBS will be able to integrate QC, third-party plug-ins for media file management and transformation, as well as take advantage of Orchestrator’s tracking and journaling capabilities for a fully automated end-to-end production workflow.

*“Console provides an easy way for editors and other non-technical staff to monitor transfers using the dashboard, adjusting bandwidth as needed to ensure high-priority content always makes it through on time.”*

● Steve Wynn  
Director of Engineering and Maintenance,  
Media Operations Center, PBS

## About Aspera

Aspera 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 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.

Learn more at [www.asperasoft.com](http://www.asperasoft.com)