

# Aspera Virtual Catcher

## Satellite Replacement for Broadcast Distribution and VOD Delivery

### AT A GLANCE

#### Key Features

- Transfers ADI-compliant packages to many receivers at maximum speed by fully using all available bandwidth without saturating the network
- Sends notifications for package validation, automatic ingest into the CMS and exception conditions
- Automatically verifies with senders each delivered package upon transfer to CMS

#### Key Benefits

- Saves considerable costs that are incurred by satellite delivery services by using much cheaper terrestrial networks
- Operate more reliably and predictably to deliver the content to all target sites unlike satellite delivery that can be significantly degraded by bad weather to delay or prevent content delivery
- Achieve high-speed, robust and reliable transfers with end-to-end progress reporting and performance monitoring
- Access to more bandwidth at target sites using commodity IP networks enabled with FASP® allows recipients to receive larger and greater numbers of files

Satellite communication systems have long been the only commercially available means of distributing media packages to a large number of recipients located across wide geographic areas. While using a transmitter (“pitcher”) to send media packages to multiple satellite receivers (“catchers”) works well on most occasions, it has significant limitations for today’s Internet video demands where delivery times and package integrity are critical. Additionally, the cost to major broadcasters, networks, telecoms and MSOs to operate or purchase satellite delivery services and systems are significant.

Consequently, these organizations have explored and begun investing in more affordable solutions for media transport. Aspera’s Virtual Catcher was developed to fully leverage low-cost, commodity terrestrial IP networks enabled with Aspera’s industry-leading FASP technology and solutions.

#### END-TO-END TERRESTRIAL SOLUTION

Aspera offers a set of solutions that can be assembled together to replace satellite delivery systems for most if not all of its customers’ pitching and catching needs, except for delivery to locations with no terrestrial network. Designed as a part of the catching system, Aspera’s Virtual Catcher handles the complex catcher steps and interactions for the recipient that are typically supported by traditional satellite pitcher-catcher systems. It works in conjunction with Aspera Cargo or Aspera Point-to-Point Client which use Aspera’s patented FASP® transport technology to quickly deliver large media packages over commodity IP networks.

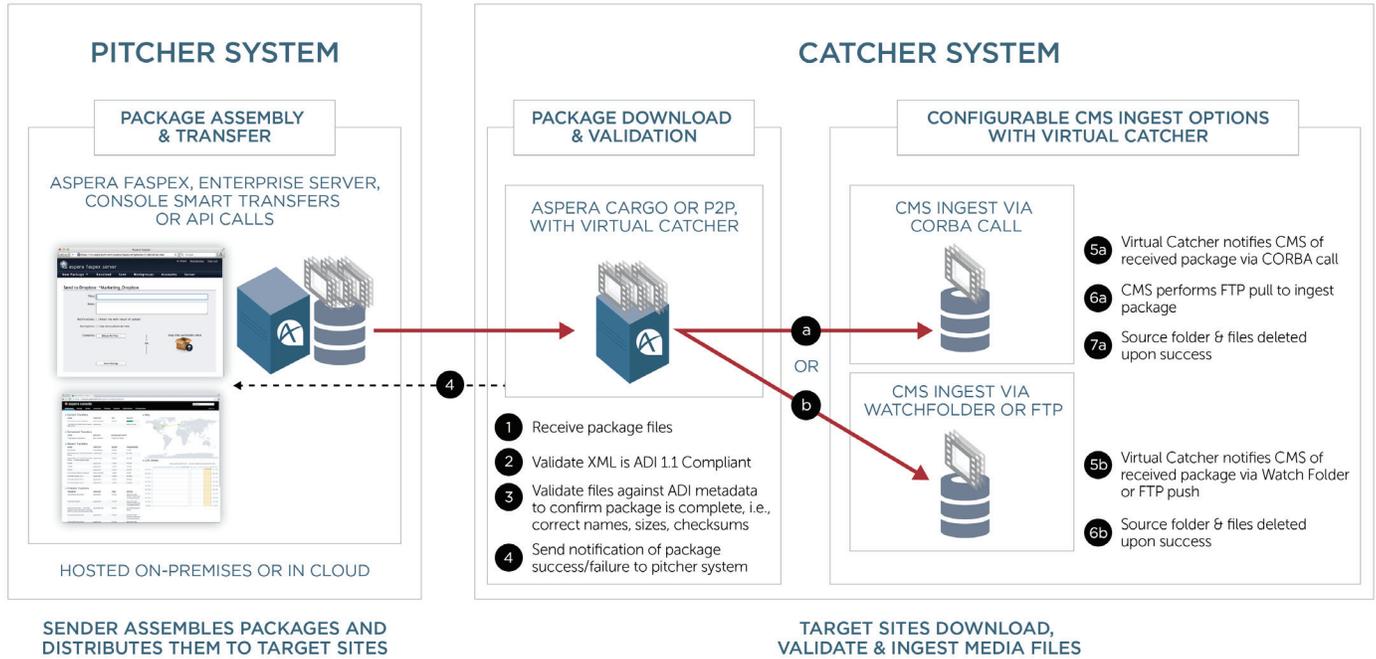
On the pitching system side, Aspera *faspx*, Enterprise Server or Connect Server can be used to send package files to the recipient systems. In addition, pitches can be initiated with Aspera Console or through Aspera API calls.

#### PURPOSE-BUILT WORKFLOWS

At the heart of the Aspera Virtual Catcher is a set of purpose-built workflows combined with a processing engine for parsing and executing the workflows, configuration screens to customize it to your needs, monitoring views to show status to ensure pitched packages are completely received. Once validated, files are correctly handed off to the recipient’s content management system (CMS). With Virtual Catcher, many receiver sites can automatically ingest large digital media securely and reliably, with a similar process that automatically ingests ADI compliant packages into their asset management systems or downstream systems.

Virtual Catcher allows recipients such as regional MSO’s and local network affiliates to receive digital packages sent from an Aspera server of a major broadcaster or content aggregator. When installed on the receiver side along with an Aspera transfer client (i.e., Cargo or Point-to-Point Client) or an Aspera transfer server, Virtual Catcher can automatically detect and assemble all the components of each individual package using the manifest data, track and confirm the delivery receipt or failure of each package component, and then move the received package to the designated CMS or downstream storage system.

# Aspera Virtual Catcher



## SUPPORTED PLATFORMS

### Operating Systems

- Linux 64 bit: RedHat EL, CentOS 6.x, 7.x
- Windows 64 bit: Windows 7, 8, 10; Windows Server 2008 R2, Server 2012 R2

### Web Browsers

- Firefox 27+
- Google Chrome 32+

## PACKAGE VALIDATION NOTIFICATION AND CMS INGEST

Once package files are received by either Aspera Cargo or Point-to-Point, the Virtual Catcher goes into action by picking up the files that were transferred and performing the following operations:

- Validate that the received XML file is ADI 1.1 compliant
- Validate that the ADI package has been completely and successfully transferred to the recipient (including the XML file and the files specified within it with correct file names, file sizes, checksums).
- Send confirmation of package validation success or validation failure with configurable email or REST call notifications to the pitcher and/or users

To complete the process, there are three configurable methods for package handoff to the asset or content management system (CMS). This includes:

- Deposit the package files into a watch folder interface for the CMS to pick them up
- FTP the files to the CMS
- Leverage the CORBA interface with its explicit handshake mechanism for high volume interactions with a CMS. Invokes a CORBA call to notify the CMS of an available package staged on an FTP server by Virtual Catcher, where the CMS can use FTP to pull and ingest the files.

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## TYPICAL APPLICATIONS

### Video on Demand delivery

Distribute VOD packages to many small content providers from a content aggregator.

### Distributing broadcast content to local affiliates or MSO's

Deliver content from major broadcasters to many local network affiliates and multiple-system operators.

## FEATURES AND BENEFITS

### Significant Cost Savings

- Enables customers to use their existing low cost network infrastructure
- Saves considerable costs incurred by using satellite delivery services

### More Reliable and Predictable Delivery Versus Satellite

- Packages are more reliably sent over terrestrial networks that are not affected by factors like bad weather
- Delayed or interrupted transfers are automatically restarted and resumed from the point of interruption
- Senders receive full confirmation of each package delivered to each target site with notification of all files downloaded by and delivered to each recipient

### Faster with greater bandwidth utilization

- On the sending side, Aspera FASP transfer technology enables a sender to transfer all content packages to its many receivers at maximum speed by fully using all available bandwidth without saturating the network
- On the receiving side, FASP-enabled networks provide greater performance relative to satellite delivery over low bandwidth connections

### Reliable and secure file transfers

- Achieve high-speed, robust and reliable transfers with end-to-end progress reporting and performance monitoring.
- Precise bandwidth control ensures the entire available bandwidth is utilized to achieve maximum transfer speeds, while being fair to other critical network traffic.
- Built-in endpoint authentication, encryption, and data integrity verification.

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## About 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. 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.

Learn more at [www.asperasoft.com](http://www.asperasoft.com) and follow us on Twitter @asperasoft for more information.