

# Aspera Orchestrator

## File-based workflow automation and orchestration

### AT A GLANCE

#### Key Features

- Easy-to-use visual designer allows users to create and test sophisticated file-based workflows.
- Powerful rules engine logically executes workflow steps, binding inputs to actions on the fly with support for parallel execution.
- Integrated with Aspera FASP™ for high-speed transfer regardless of file sizes, transfer distance or network conditions.
- Plug-ins for asset transformations, quality control, media management, ad insertion, antivirus, scheduling and billing, database/stores, encryption, email, IT management and other functions, as well as an SDK for future integrations.

#### Key Benefits

- Automates existing file-based workflows to ensure accurate file processing and to improve productivity.
- Highly scalable for high-volume workflows, processing hundreds of media files and thousands of metadata files per hour.
- Robust orchestration includes complex logical branching, automatic recovery for interrupted steps and configurable retry behavior on errors or failures.
- 100% reliable, high-speed data delivery with Aspera FASP transport technology.

Aspera Orchestrator enables precise control over the Aspera high-performance file transfer environment by allowing organizations to build efficient, predictable file processing pipelines that interconnect business units and external partners. With Orchestrator, files can be directed, processed and redirected with easy-to-define rules based on an organization's workflows and using existing IT infrastructure. Aspera automation streamlines complex workflows and ensures that each processing step is accurately performed.

### VISUALLY DEFINE AND AUTOMATE EXECUTION OF YOUR EXISTING WORKFLOWS

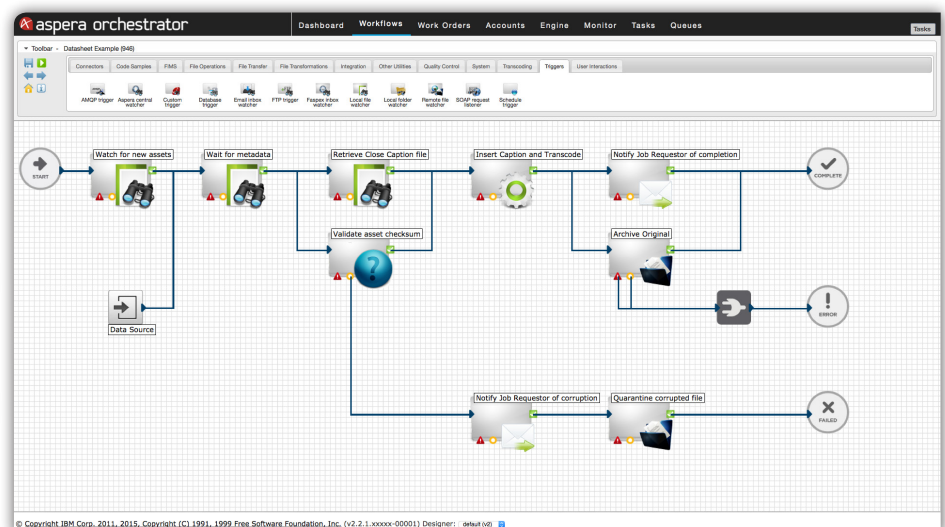
Aspera Orchestrator's interactive graphical designer makes it easy to compose execution streams based on your organization's existing workflows. Use drag-and-drop visual elements to define logical sequences, inputs, action types, outputs and dependencies, and group them into reusable templates. The graphical interface also allows you to monitor active workflows in real time and to drill down into a detailed history of operations.

### AN INTELLIGENT DECISION ENGINE WITH A RICH LIBRARY OF PLUG-INS

To automate workflows and assure timely delivery of content under fixed schedules, Aspera Orchestrator combines a logical execution engine with third-party plug-ins for asset transformation, quality control and other functions. Its conditional rules engine binds inputs to actions on the fly, allowing results from earlier steps to decide subsequent actions in the pipeline, including prompting for human input if needed. An expanded array of plug-ins covers the leading encoding, transcoding, watermarking, and verification products, in addition to full support of verification of file format standards such as ADI, MXF, AS-11 and DPP file formats, and FIMS.

### SUPPORT HIGH-VOLUME WORKFLOWS

Workflow orchestration systems depend on predictable delivery of files to feed their processing pipeline. To ensure uninterrupted data flow regardless of system load, Orchestrator relies on FASP™, Aspera's unique, patented, bulk data transfer technology that enables high-speed data delivery regardless of file size and format, transfer distance, or network conditions.



**SUPPORTED PLATFORMS****Operating Systems**

- 64-bit Linux, 64-bit Windows Server

**Browsers**

- Firefox, Safari, Chrome

**TYPICAL APPLICATIONS****High-volume Processing and Transformation**

Scales fluidly and reliably for the extreme processing required by Big Data workflows.

**Secure Contribution and Distribution**

Provides end-to-end secure transfers between suppliers and receivers, including user and endpoint authentication and authorization, encryption and integrations with antivirus and other security technologies.

**Ultra High-speed Ingest**

Integrated with high-speed storage platforms for scalable performance across metropolitan and long haul networks, over any distance, with speeds of 10 Gbps and beyond.

**PLUG-IN LIBRARY HIGHLIGHTS****File Transformations**

Harmonic's Carbon Coder (Rhozet), Digital Rapids Stream, FFmpeg, Telestream Flip Factory, BigBand, Sorenson Media Squeeze, ThoughtEquity, Zencoder, Handbrake, Telestream Vantage, Episode, Envivio VOD, Encoding.com, Elemental, Amberfin

**Quality Control and Analysis**

Interra Systems Baton, Mediainfo, ADI 1.1/3.0, Tektronix Cerify, Pulsar, Digimetrics Aurora, XSD/XML, IRT MXF, DPP

**Media Management**

YouTube

**Ad Insertion**

SeaChange

**Antivirus**

Symantec, McAfee, Sophos, ClamAV

**Scheduling and Billing**

Xytech, PilatMedia

**Database / Stores**

Microsoft SQL Server, MySQL, Central Desktop

**Encryption**

PGP, Symantec

**Email**

Microsoft Exchange, Gmail

**IT Management**

Microsoft System Center Management (SCOM) Notification

**FEATURES AND BENEFITS****Easy-to-use interfaces for defining and monitoring complex workflows**

- A drag-and-drop, browser-based interface allows you to graphically compose workflow sequences of inputs, actions and outputs quickly and efficiently.
- Templates can be exported and imported across Orchestrator instances, and workflow sub-sequences can be reused in new workflows, making it easy to create repeatable, consistent operations.
- Automation of restoration from a Snapshot and ability to schedule snapshots.
- Processes can be distributed over multiple globally dispersed instances. The master controls the end-to-end workflow, while execution of the sub-workflows is delegated to the remote nodes.
- Integrated Active Directory/LDAP eases user configuration and management.
- Execution dashboard and notifications enable real-time workflow oversight.

**Powerful engine for logical, conditional execution**

- Inline validation options include ADI, DPP, and Antivirus integrated in Aspera transfer allow for processing before, after, and while a transfer is in progress.
- Automatic restart on transmission failures and parallel execution support.
- Support for Active/Active without shared disk (for Cluster in Amazon cloud).
- Active / active support distributes and balances execution across multiple Orchestrator run-time instances in a high-availability configuration.
- A rich library of plug-ins including: Telestream Episode, XFTP, Pulsar file QC, McAfee Virus scanning, File Info, Generic REST adapter, SOAP listener trigger, Amazon SQS queue, Amazon S3 direct upload, MediaSilo, ADI Parser and Validator. XML-based API allows management, monitoring and control from 3rd party applications.
- Support for prioritized queues and support for load balancing between managed resources.
- Integrates through web services (SOAP, REST, XML-RPC), commodity wire protocols (FTP, HTTP, SMB2, NFS, SCP), SSH and open APIs.
- Engine optimization for timeout and heartbeat management.

**Integrated with Aspera FASP™ for maximum data transfer speeds**

- Scales for the most demanding file-based workflows.
- Precise bandwidth control ensures the entire allocated bandwidth is utilized to achieve maximum transfer speeds, while being fair to other traffic.
- 100% reliable data delivery: automatically resumes partial transfers, retries failed transfers and falls back to HTTP for highly restrictive networks.

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**About Aspera**

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)**