

Databiology Platform with Aspera High-Speed Transfer

Moving genomic, clinical and life sciences data worldwide at high-speed

AT A GLANCE

Key Features

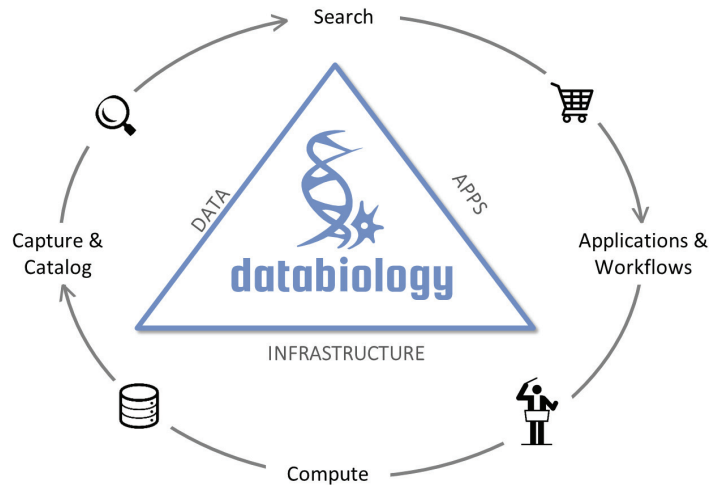
- Transfer large biomedical datasets globally at high-speed
- Quickly ingest genomics data from multiple worksites
- Orchestrate and move applications with DBE and move data at high-speed with Aspera across hybrid clouds
- Import data of any type, from any source including present and future omics data types
- Support a wide array of workload and infrastructure requirements
- Interoperate with any scientific, commercial, and clinical applications

Key Benefits

- Precise and secure control of user permissions and access rights
- Save significant time in moving large genomics datasets to, from, and across the cloud
- Reliably transfer huge files at maximum speed on existing infrastructure
- Provide maximum flexibility and control over all research information transfers
- Reduce reliance on slow, risky and expensive physical shipments of hard drives
- Use DBE to manage entire R&D projects across teams, business units and geographies
- Quickly configure and deploy analysis on any data registered in DBE

"We've relied on Aspera in extremely poor quality transmission environments and consistently found that with Aspera, we get superior performance regardless of the distance or network conditions."

 **Georges Heiter**
 Founder & Director, Databiology



Cutting edge research demands the most innovative tools and technologies. Databiology's platform for life sciences research helps organizations by integrating distributed data, applications, and infrastructure together in an easy to use Software as a Service solution. Using Databiology for Enterprise (DBE), organizations can increase the amount of biomedical data that is available to their researchers, improve operational workflow pipelines, and provide on demand analytics with High Performance Computing (HPC).

Researchers today face major challenges sharing and collaborating globally by moving data sizes that can reach several hundred gigabytes, especially for genomic sequencing sets. When a patient's health is dependent on the results of an analysis, the fast and reliable transfer of scientific research data is absolutely essential.

Databiology's platform combined with Aspera's patented FASP® transfer technology allows collaborating teams and organizations to securely and reliably transfer huge large research datasets to and from the DBE platform at maximum speed from anywhere in the world over existing commodity network infrastructure.

ASPERA FASP® HIGH-SPEED TRANSFER

Aspera's Fast, Adaptive, Secure Protocol (FASP) technology lets users avoid unexpected delays and transfer failures associated with traditional file transfer. With

Aspera, users consistently achieve reliable and predictable transfer times, allowing global research teams to enjoy more efficient workflows between internal groups as well as external third party researchers. In addition, FASP's built-in security capabilities include both encryption in transit and at rest, protecting valuable clinical and healthcare data throughout the transfer process.

DATABIOLOGY FOR ENTERPRISE INTEROPERABLE PLATFORM

Databiology for Enterprise allows organizations to be infrastructure independent, allowing them to choose the best fit for the task at hand. The open architecture enables interoperability with any scientific, commercial and clinical applications available. Organizations can build out their use case on the DBE platform while focusing on their respective domains such as running analysis, creating and publishing new applications, or managing and adding new storage and compute infrastructure.

PROCESS ORCHESTRATION

DBE works by automating processes, making it easier to build and deploy complex applications. DBE orchestrates all of the plumbing underneath, including workload management, data transport, credential management, and access control, allowing organizations to focus on discovery and insight.

Databiology Platform with Aspera High-Speed Transfer

INDUSTRY SEGMENTS

- Biomedical Big Data
- Pharmaceutical
- Biotech
- Healthcare
- Crop Science

SOFTWARE REQUIREMENTS

DATABIOLOGY

- Databiology for Enterprise (DBE)

ASPERA

- Aspera Application Platform on Demand (Cloud)
- Aspera Connect Server (On-Prem)
- Aspera Connect Browser Plug-in



About Databiology

Databiology is a Software as a Service (SaaS) business delivering biomedical information management and orchestration for the life sciences and healthcare sectors.

Learn more at www.databiology.com

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TYPICAL APPLICATIONS

Data Capture, Catalog, and Search

- Build a centralized data agnostic namespace with controlled access rights for users across multiple locations and ownerships
- Quickly build queries into very large datasets and funnel data into analysis workflow pipelines

Analysis Application Deployment

- Bring your own containerized apps and dynamically deploy using the Docker Ingestion Engine on any infrastructure
- Easily publish and develop new DBE applications that leverage the DBE Sandbox that's preloaded with over 100 analysis packages

Flexible Hybrid Infrastructure

- DBE facilitates transparent and location independent data analysis, bringing applications to the data
- Orchestrate and move pan-omics computing workloads and related data to and from different cloud computing and storage platforms

FEATURES AND BENEFITS

High-speed content transfer performance

- Transfers are powered by FASP® - to move at maximum speed, regardless of size, transfer distance, or network conditions
- Rapid and secure ingest and distribution of research data between global research partners
- Transfer data reliably with end-to-end progress reporting, transfer auditing, and performance monitoring

Faster collaboration between worldwide teams

- Streamline workflows in DBE for fast, efficient collaboration between internal users and external research partners
- Send very large genome data and clinical data reliably, even over difficult network conditions and wireless networks
- Analyze and share large lab data from multiple research locations to both internal and external collaborators

Reliable and secure transfers

- Precise bandwidth control ensures maximum transfer speeds are achieved while being fair to other critical network traffic
- Protect valuable research data with best in class security capabilities such as encryption in transit and at rest
- Enable incredibly reliable FASP transfers with auto-resume from the point of interruption and data integrity verification

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