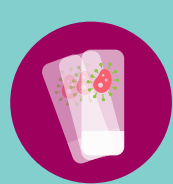


OVERCOMING THE CHALLENGES OF SHARING BIG DATA IN LIFE SCIENCES & HEALTHCARE

Healthcare and Life Sciences organizations are experiencing unprecedented growth in their data, but legacy file sending and sharing tools are failing to keep up. With patient outcomes on the line, researchers and medical professionals need a new approach to exchanging big data.

BIG DATA TRENDS & CHALLENGES

FILE SIZES are exploding



4GB-15GB
whole slide images



50GB-300GB
whole genome sequence



MULTIPLE TBs
super-resolution, multi-dimensional microscopy

BIG DATA is moving to the cloud

• **72%** of data storage managers say IT infrastructure will **create research bottlenecks**

• **85%** plan to **increase cloud compute resources** to meet research needs

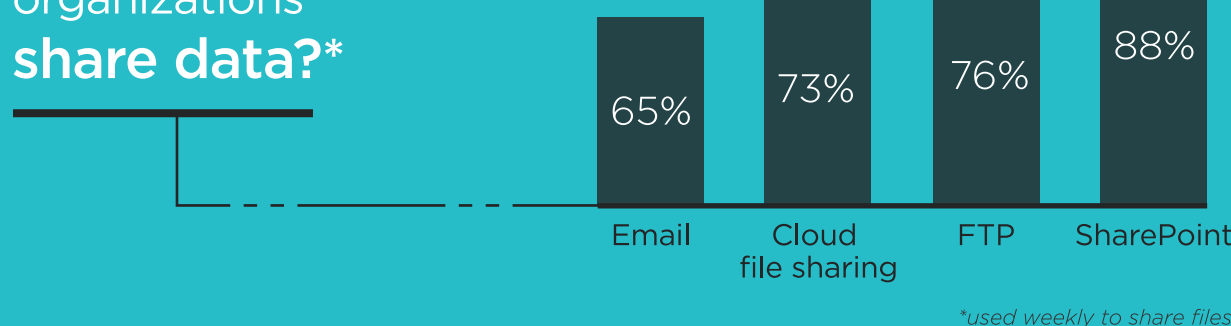
GLOBAL data sharing is on the rise

200+ medical centers in the US offer video consults to **support international telemedicine programs**

35% of research articles published in international journals are a product of **global collaboration**

FILE SHARING TOOLS ARE FAILING TO KEEP UP

How do employees at Healthcare & Life Science organizations **share data?***



Are Healthcare & Life Sciences organizations **satisfied** with these solutions? **Not really.**

95% say their file collaboration tools don't meet their needs

58% say file sharing and sync tools are **too slow** or simply fail with big files

53% report security as a roadblock to effective file sharing

LEGACY FILE SHARING PROBLEMS



FTP File Transfer

- Very slow over distance
- Unreliable for big files
- Creates network congestion
- No security out of the box



Hard Drive Shipments

- Increased risk of data loss & theft
- Time consuming & labor intensive
- Expensive to rush deliver



Cloud File Sharing

- Consumer grade security
- Slow upload/download for big files
- Limited or no support for private cloud or on-premises

ASPERA A NEW APPROACH TO SHARING BIG DATA

IBM Aspera offers a revolutionary way to share big data. Built on its patented FASP® transfer technology, IBM Aspera software enables healthcare & life sciences organizations to move huge research datasets and medical images at maximum speed - anywhere in the world, regardless of file size.

Fast

100x+ faster than FTP, anywhere in the world

Secure

Data encryption, verification, user authentication and reporting to protect data and help meet HIPAA requirements

Flexible

Support for cloud, on-premises and hybrid storage

Reliable

Guaranteed delivery, no matter how large the file

MOVING A 10GB FILE ON A 1 GB LINE ACROSS THE US

LEGACY
10-20
HOURS



ASPERA
1.4
MINUTES

40x Improvement in Transfer Speeds IMPROVES PATIENT OUTCOMES

When FTP failed to meet their needs, the University of Pittsburgh Medical Center and KingMed Diagnostics in China deployed Aspera software to help them share large whole slide images 40x faster over global WANs, reducing turnaround on cancer consults and improving patient diagnoses.

Learn how Aspera is helping healthcare and life science companies accelerate research and improve patient outcomes at www.asperasoft.com or follow us on Twitter @asperasoft.

SOURCES

Building Infrastructure to Enable Discovery, Avere Systems Report, 2015
Telemedicine breaks down international barriers, mHealthNews, February 20, 2014
Knowledge, Networks and Nations: Global Scientific Collaboration in the 21st Century 2011

HIPAA Enforcement Actions by the Numbers, Davis Wright Tremaine LLP, June 28, 2016
A Year of HIPAA Enforcement: OCR HIPAA Penalties Issued in 2015, HIPAA Journal, January 10, 2016
Vanson Bourne B2B Integration and MFT Global Study for IBM 2015