



ENDURADATA

PROTECTING, DELIVERING AND LEVERAGING DATA

FILE SYNC & MIRRORING IN HEALTHCARE: A SUCCESS STORY

A large \$20 Billion revenue Healthcare Payer and Provider company has successfully been using our EDpCloud™ solution for the last four years to mirror production data centers located hundreds of miles away, seamlessly transfer complex data files containing confidential data and exceed stringent SLAs with their partners.

The Challenge

Our customer cannot have any downtime and relies on a heterogeneous environment for its daily operations. It has a very large number of users and clients, who all need to access data from multiple sites. The customers' data files are very large, numerous and contain patients' personal health information from providers such as x-rays, physician notes and diagnostics. They also include employer enrollment data, which are equally highly sensitive. Furthermore, the data files include operational data, such as word and excel files, daily extracts and many financial, operational and regulatory compliance reports. The characteristics of the production environment are as follows:

- Very sensitive personal health, member, employer and claims information has to be transferred securely
- Data integrity is utmost critical with full traceability and audit of the data that has been processed
- 24x7 availability, with timely delivery of data despite heavy workloads
- Streamlining data transfer operations with automated error recovery from any point of failure

The Solution

Our engineers worked with the customer to configure EDpCloud bidirectional file replication, across multiple servers located in geographically dispersed and distant data centers. Any file changes that take place in one system are propagated to other remote sites to create a mirror without human intervention. The data is encrypted automatically in real-time during the transfer.

Key Benefits

Performance

- Continuous real time replication of file changes (deltas)
- Multiple streams and parallel I/O for efficient file transfer and synchronization
- Adaptive compression to speedup transfers while reducing system resource utilization
- Bandwidth throttling and control
- Dynamic system resource allocation and optimization.

Flexibility

- Ability to set up policies for file inclusions and exclusions
- Flexible replication topologies: multidirectional, bidirectional, one to one, one to many, many to one
- Heterogeneous platform support: Linux, Windows, Mac, Solaris, AIX, UNIX, VMware, VirtualBox



- Extensible architecture, which integrates with existing applications, leveraging current investment
- Supports many existing infrastructures, servers, clusters, and private, public and hybrid clouds.

Resilience and Operational Efficiency

- Automation of file transfers and synchronization
- Continuous retry and resumption of replication from the point of failure
- Multipath fallback support: uses other network links in case of failure
- Automates business processes and workflows and resumes automatically from point of failure
- Elimination of risks and errors due to manual file transfers.

Security and Compliance

- Data protected in transit and at rest, reducing risk of leaks and loss of data
- Highly secure data transfers via automatic stream encryption
- Multiple levels of security can be used for authentication between the file senders and receivers
- Full audit trail including reporting, statistics, file change and replication history
- Customizable notifications in the event of a failure.

Outcomes

The customer was able to automate file transfer, replication and synchronize over 30 million files per month, between multiple servers in different data centers in different cities while significantly improving operational efficiency, lowering costs of infrastructure and operations, alleviating the risk of data loss, data leaks and human errors, and comfortably meeting its stringent compliance mandates and service levels agreements.

Testimonials

“EDpCloud software performed very well. EnduraData engineers went beyond the call of duty to assist our company whenever we needed them. As always, they are very responsive. I am very satisfied with their work”.
Senior DevOps engineer.