LUMINEX™
MODERN MAINFRAME DATA SOLUTIONS

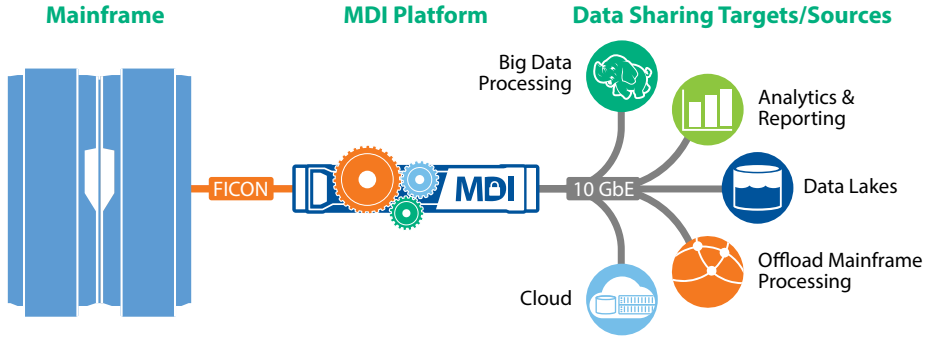
MDI
MAINFRAME DATA INTEGRATION PLATFORM

A Better Way to Securely Share Mainframe Data

For the last 50+ years and for the foreseeable future, mainframes will continue to process most of the world's corporate data. Big Data is most commonly used to refer to distributed systems with Hadoop, Spark and other Big Data technologies. We refer to the mainframe's high value, business and mission critical data as "Big Value Data."

Access to Big Value Data is essential for a successful enterprise-wide analytics strategy, and for business applications that depend on it for daily operations, competitive advantage and insight. However, reliable and secure access to mainframe data can be difficult to achieve and is also expensive when the ongoing mainframe IT and CPU resources required are considered.

Many data centers have relied on mainframe TCP/IP services, such as FTP, to share Big Value Data with the outside world. In addition to the security implications, high volume FTP use is also CPU-intensive. Fortunately, there is a better, more efficient and secure way to access and share mainframe data with distributed systems… Luminex MDI.



MDI provides secure, efficient access to Big Value Data from the mainframe for use by other authorized business units, partners or customers.

MDI transfers data to and from the mainframe using the same, trusted, highly available FICON I/O channels that are used by the mainframe's DASD and tape systems. Benchmarks have shown that FICON I/O processing of data will consume considerably less CPU resources than using FTP and will reduce cost. MDI can also accept data transfers from distributed systems to the mainframe as well.

Although the possibilities are endless, here are a few of the many use cases:

- Mainframe-Centric Managed File Transfer Over FICON
- Send Mainframe Data to Hadoop or Other Distributed System Applications
- Non-Disruptively Offload Mainframe Data Processing to Save MIPS
- Access Tape Archives Without Using Mainframe CPU Resources

Use Case #1: Mainframe-Centric Managed File Transfer Over FICON

When transferring files between mainframes and remote systems, security is always a matter of paramount importance and vulnerable IP ports are a frequent target of hackers seeking to gain unauthorized access to a company's data. With MDI, files are transferred to and from the mainframe using secure FICON I/O channels, which can provide better security, more reliability and consume much less CPU resources than FTP.

MDI™

MDI At-A-Glance

- Better Security vs. FTP
  - AES-256 Encryption
- More Reliable
  - Uses highly available FICON I/O instead of unsecured IP ports
- More Efficient
  - Uses less CPU resources than FTP
  - Supports up to 8Gb FICON connectivity
- Mainframe-centric design and operations using mainframe disciplines
- EBCDIC to ASCII conversion available
- Pre-Sales Consulting – No Charge
- Also available as a common platform with Mainframe Virtual Tape (MVT)

Better Together

Luminex can provide a common platform for MDI and Mainframe Virtual Tape (MVT) solutions, which offers industry-leading capabilities and scale to fit any mainframe data center… from entry-level to the largest, most demanding enterprises.

MDI Solutions

The Luminex MDI Platform enables limitless data integration, transfer and off-host processing capabilities via task-specific Profiles. Use cases include:

- **MDI SAS Language Processor**
  Designed to off-load mainframe processing of SMF records to our MDI Platform where the Performance Database (PDB) is created and the desired MXG reports are sent back to the mainframe for report distribution.
- **MDI SecureTransfer**
  Leverage native FICON to transfer data to and from the mainframe faster, more efficiently and more securely than TCP/IP. Significantly reduce MSUs by offloading compression, encryption and data conversion processing. Ease the transition with JCL conversion services and eliminate the need to install digital certificates.
- **MDI BigData Transfer**
  Integrate mainframe Big Value Data with Big Data Analytics and Data Lakes using more efficient FICON I/O channels. Greater efficiency and faster data movement enables more frequent access to data for better business intelligence, decision-making and competitive advantage.
- **MDI Cross-Platform Data Sharing**
  Provide integration with other computing platforms and grids by transferring mainframe data to the platform/grid and, when processing is complete, transferring the data back to the mainframe, triggering downstream batch processing.

About Luminex

Luminex serves as a trusted advocate helping enterprise customers protect, manage, and leverage corporate data assets by developing and delivering high quality, innovative technology solutions.

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Use Case #2: Send Mainframe Data to Hadoop or Other Distributed System Applications

The process and workflow for sending mainframe data to distributed systems can be initiated by MDI. Data can be converted from EBCDIC to ASCII, encrypted and distributed to other downstream processes, including CD/DVD publishing systems and Big Data analytics. The solution also supports distributed systems initiated data transfers from key distributed systems applications.

Use Case #3: Non-Disruptively Offload Mainframe Data Processing to Save MIPS

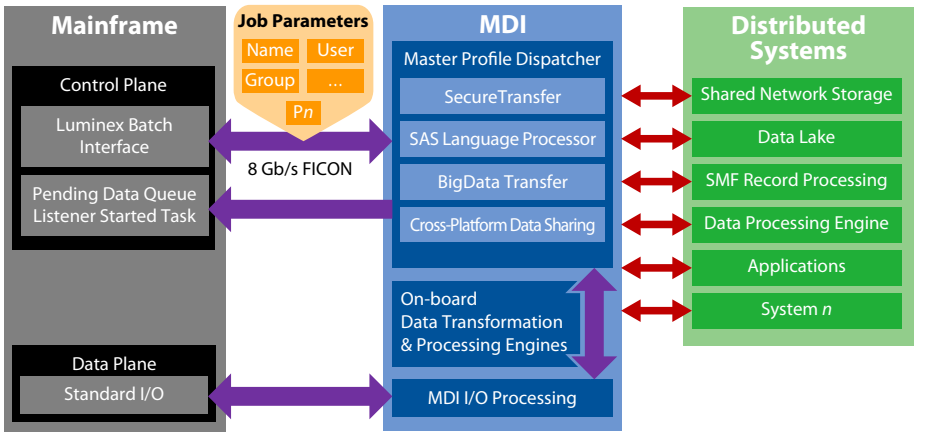
When combined with an ETL or stream computing appliance, MDI enables real-time, in-line data transformation off-host, saving MIPS and accelerating operations, over secure and efficient FICON channels. The resulting data can be made available to the host faster and more cost-effectively than native processing.

Use Case #4: Access Archives Without Using Mainframe CPU Resources

Mainframe archives can offer more value to an organization when they're leveraged by Big Data analytics and other applications for the retail, healthcare, insurance, financial services and other industries. Access to large mainframe archives can be provided to a company's data scientists and others, without using mainframe CPU resources or requiring development for data conversion.

How MDI Works

MDI supports mainframe-initiated requests to transfer data securely as mainframe tape files to distributed systems as binary files. The data is encrypted by MDI for secure, internal and external data sharing. As a binary file, data can be used as-is, transformed, mapped, sorted or streamed at high speeds using ETL, streaming appliances or other Big Data technologies for analytics or other business processes that offer valuable insight.



MDI uses a modular, highly customizable profile architecture allowing new data sharing workflows to be quickly created by Luminex, customers or third party vendors for each data center's unique requirements.

MDI can respond to distributed systems-initiated requests that meet MDI's protocol requirements. This data can be provided to the mainframe in recognized tape data formats and used for processing by various mainframe jobs.

Now, enterprises can take full advantage of all of the data that is stored in mainframes and non-mainframe environments for competitive advantage.