

Modernizing Mainframe Data Access for a Large Insurance Provider

Company Summary

A large insurance provider supports a rapidly expanding portfolio of policy, claims, and risk-management services. At the core of its operations is an IBM Z platform running z/OS, which continues to be the system of record for highly reliable, mission-critical data. As the business grew, so did the volume, velocity, and strategic value of the data stored on the mainframe, particularly for actuarial analysis and business intelligence.



Challenge Summary

As actuarial teams adopted more advanced analytics and modeling techniques, demand for timely access to mainframe data increased significantly. Existing batch-oriented data extraction processes struggled to keep pace, often delivering data hours after it was needed.

SLAs continued to shrink, while data volumes continued to grow. IT teams faced increasing pressure to provide faster data access without impacting production mainframe workloads or compromising data integrity.

Solution Summary

To address these challenges, the customer implemented Luminex's Mainframe Data Integration (MDI) to securely and efficiently share VSAM data from IBM Z with a cloud based analytics platform on Microsoft Azure. Luminex enabled non-disruptive data movement from the IBM Z to an Azure Data Lake, allowing cloud-based analytics to operate on trusted mainframe data in near real time.

Results Summary

By deploying Luminex MDI, the customer achieved measurable business and operational benefits:



Data availability reduced from hours to minutes, enabling near-real-time analytics



Improved business intelligence, empowering actuaries with timely, accurate data



Increased operational efficiency, eliminating complex multi-step data pipelines and manual data handling



No impact to production workloads, preserving mainframe performance and stability
Actuaries can now make faster, more informed decisions using up-to-date data delivered directly to Azure.

Breaking Down the Challenge

The company relies on a rapidly growing IBM Z environment to support its core insurance operations. Each day, the mainframe generates mission-critical data that is essential to actuarial analysis and business intelligence. However, sharing this data with distributed and cloud-based analytics platforms had become a complex and time-consuming challenge. VSAM-based data needed to be efficiently shared across platforms for ingestion into the organization's data lakes.

Legacy data-movement approaches introduced delays, increased operational risk, and added unnecessary complexity. The organization required a solution purpose-built for mainframe data, one capable of scaling with business growth while preserving the governance, reliability, and performance standards expected of IBM Z.

Deep Dive Into the Solution

Mainframe-Native Data Movement with Luminex MDI

Luminex MDI was deployed to extract VSAM data directly from z/OS and transfer it efficiently across the FICON channel to Luminex infrastructure. By leveraging high-performance mainframe connectivity, data movement occurred without disrupting production applications.

Luminex's VSAM conversion capabilities transformed mainframe-formatted data into analytics-ready formats, eliminating the need for custom parsing or downstream rework. Once converted, the data was securely uploaded to Microsoft Azure, where it was ingested into an Azure Data Lake for consumption by actuarial and analytics teams.

This architecture allowed IBM Z to remain the authoritative system of record while Azure served as the analytics engine, creating a seamless hybrid data pipeline purpose-built for enterprise scale.