

Mainframe Overview: KEY DRIVERS FOR MODERNIZATION

Historically, mainframes have provided a stable environment to support mission-critical applications and data. While organizations worldwide have sought options for retiring their mainframes for years, until now many have yet to make the move. However, there are several key challenges compelling organizations to modernize, including skyrocketing operating costs, few paths for innovation, limited data structures and a dwindling labor pool with the skills to support legacy mainframe technology.

The first stage of any mainframe modernization is comprehensively assessing and documenting the existing system, analyzing integration points within applications, as well as upstream and downstream environments. This lets you optimize your modernization roadmap, including phased modernization of each business application.

mLogica's **LIBER★DAHLIA**, part of our **LIBER★M Mainframe Modernization Suite**, offers unmatched automated discovery assessment technology that generates a detailed, targeted analysis of your entire existing application environment.

■ Mainframe Modernization Options

When moving legacy technologies to the Azure Cloud environment there are several mainframe modernization options and considerations.

Replatforming replaces proprietary mainframe hardware components with modern, open-standard systems such as Linux on x86. This involves migration to a new runtime platform, including re-compilation of the existing COBOL, making minimal changes to the code, while leaving code structure, features and functions unmodified.

Replatforming opens paths and opportunities for immediate innovation. Furthermore, when hosted on Azure, an organization can obtain the five nines required for its mission-critical applications while eliminating mainframe hardware and software for significant cost savings.

mLogica's **LIBER★M Mainframe Modernization Replatforming Suite** includes:

- ✓ **LIBER★COBOL:** Highly compatible with IBM Enterprise COBOL for z/OS compiler, offering significantly higher performance at a much lower cost than Micro Focus
- ✓ **LIBER★TP:** Replacement of IBM CICS and IMS DC, facilitating the replatforming of apps from IBM z/OS mainframe to open-standard systems, including tools to facilitate VSAM to RDBMS and more
- ✓ **LIBER★Batch:** Emulation engine of IBM z/OS Batch to run JCL

Language Refactoring is the restructuring and optimization of an application's existing code to remove technical debt and improve nonfunctional attributes. This strategy involves modifying existing software, or a large portion of the code base, to take advantage of cloud-based flexibility. A more complex approach than replatforming, since code changes require additional testing to ensure performance, refactoring allows organizations to standardize on a more modern codebase, mitigating the risk of diminishing legacy support resources.

mLogica's **LIBER★TULIP** automates code refactoring, ensuring application fidelity remains intact, for highly successful modernizations with limited business risk. mLogica's **LIBER★M** automated refactoring tools migrate a variety of legacy code, including Easytrieve, Assembler, Telon, VAGEN/CSP, PL/I and COBOL to modern languages such as Java, C++, and C# faster and at a sharply lower cost than semi-automated or manual approaches.

Transforming your business data is the key to any mainframe modernization. mLogica's **LIBER★IRIS** fully automates database and data migration from ISAM, VSAM, Db2 z/OS, and IMS DB to any RDBMS, including



MS SQL Server, PostgreSQL, Oracle, Db2 LUW, and more. When required, **LIBER*IRIS** can replace the data access layer in the application with I/O routines, bridging hierarchical applications with a relational database, introducing a modern MVC design pattern. Our **LIBER*IRIS Transparency**, an IMS replatforming database solution, migrates IMS DB to an RDBMS without making any changes to the dependent applications.

Ancillary Technology Considerations From the assessment of baseline legacy environments to scheduler and data migration, automated tools are the key to modernizing your mainframe environments to the cloud with optimum accuracy, speed and cost efficiency.

mLogica offers a variety of additional automated software solutions, including **LIBER*VIOLET**, which facilitates automated migration between all common schedulers such as BMC Control-M, CA 7 and Automatic Dollar Universe, as well as security migration, including RACF, CA Top Secret, ACF2 and more.

| Optimize Your Modernization with Azure

With efficient, scalable environments, managed databases, five-nine performance and a suite of leading-edge security and analytics tools, Azure is the ideal destination for businesses looking to get the most out of their business applications and hard-won data.

For information on how **mLogica** can help you transform your business, contact us:



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