# l<sup>z</sup>labs<sup>®</sup>

# Introduction to the L<sup>z</sup>Labs Sofware Defined Mainframe® The Power of Open

# Introduction to LzLabs®

"Our vision is to liberate organizations from the constraints and limitations of their legacy systems and move them to the flexible, more powerful and cost-effective solutions found in modern computing infrastructures."

Begin a graceful IT modernization journey with LzLabs...

Whether you are seeking to move legacy applications to open systems, modify them in a cost-effective environment, or transform them into new languages that drive innovation, the LzLabs Software Defined Mainframe<sup>®</sup> (**SDM**) will help you to take the first step.

# The Power of Open

As an organization builds a portfolio of applications to support its business, there is an inevitable need for modernization. As technological possibilities grow, and business models change, the demands for modernizing a company's IT infrastructure increase. But when it comes to modernizing mainframe environments, IT leaders have been driven to procrastination. Investments are made, applications work, the cost of modernization is seen to be too high, and the risks of migration are often considered to be too great.

Organizations can begin their modernization journey by leveraging modern technology deployment models, often already used in other parts of the company. The LzLabs Software Defined Mainframe approach dramatically reduces both the risk and cost of legacy mainframe applications, and provides a viable alternative to the complexities of other approaches to move legacy applications. Using the LzSDM as a first step for modernizing their IT infrastructure, organizations can preserve the business value in their legacy systems, whilst integrating them in modern x86, cloud and open-source technologies.

Modernization efforts are not without their challenges, but at LzLabs our mission is to create revolutionary software solutions, leveraging the innovation of open-source innovation and the power of cloud computing to mitigate the challenges of legacy application modernization.

# LzLabs Software Defined Mainframe®

The LzLabs Software Defined Mainframe<sup>®</sup> liberates legacy applications with a seamless shift from mainframe environments to commercial off-the-shelf Linux platforms without changing application logic. Legacy application programs are placed into a specialized software container that preserves existing application capabilities on a modern computing infrastructure environment – without the need for recompilation.

This innovative solution delivers reliability, availability and serviceability (RAS) requirements, as applications and data can now be managed by modern, open-source enterprise server tools. It also preserves mainframe data in its native formats. With **LzEnable**, LzLabs offers services to rehost customers' legacy applications onto the SDM, a binary-compatible execution environment, for applications primarily written in PL/I and COBOL. This means that both batch and online applications can run, without recompilation, in a RedHat<sup>®</sup> Enterprise Linux<sup>®</sup> environment based on x86 hardware, where they can be gracefully modernized over time.

## Every IT Modernization Journey Starts with the First Step

The SDM enables organizations to modernize individual components of their mainframe environment, one at a time. Moving to a modern infrastructure can be done, while preserving existing programming logic and data formats. Key individual programs can subsequently be transformed, and data converted to modern DBMS choices as business needs demand.

Change is inevitable. These applications will require maintenance as the journey continues. The LzLabs LzWorkbench<sup>™</sup> is designed to enable developers to continue maintaining these systems as dictated by business needs. Completely new programs can also be developed which run alongside existing, non-recompiled mainframe programs seamlessly. While modified programs are recompiled into a native x86 instruction set, they were originally written to run in a mainframe application operating environment. However, the SDM runtime environment provides functionally equivalent API and subsystem interface access to both the original re-hosted mainframe binaries and the enhanced and recompiled programs in their new x86 form.

# **Our Products**

## LzBatch™

LzBatch allows customers to run legacy batch applications primarily written in PL/I, and COBOL. Batch applications can run, without recompilation, in a Linux<sup>®</sup> environment based on x86 hardware.

## LzOnline™

LzOnline provides binary-compatible support for the most common mainframe transaction monitor – CICS® and IMS/TM™.

## LzRelational™

LzRelational is a thin layer that allows the legacy application to interoperate with PostgreSQL within the SDM. PostgreSQL shares many concepts and features with DB2® for z/OS®.

## LzHierarchical™

LzHierarchical takes IMS<sup>™</sup> databases migrated to a relational system (PostgreSQL) and provides a thin adaptation layer for the application to interoperate binary-compatible with the actual database. Any adaptations will happen transparently for the application.

#### LzWorkbench<sup>™</sup>

LzWorkbench provides an Eclipse-based development framework, that is designed for programmers to maintain and enhance existing COBOL and PL/I applications.

## **Our Services**

#### LzDiscover™

LzDiscover is the initial services phase which entails a detailed discovery of the customer's mainframe environment and its interconnections, prior to starting an SDM rehosting project. The results include a discovery report, demo and LzEnable project plan.

## LzEnable™

LzEnable is the services phase of the deployment of an application or a set of applications on the SDM. The outcome is a fully tested set of programs to run on Linux on x86 hardware, either on premise or in a cloud environment. This includes testing, testing automation and staff education modules, as well as integration into a modern DevOps process to ensure a seamless transition.

For further information, please refer to our website (www.lzlabs.com), or the *SDM Product Data Sheets*.

#### About LzLabs

LzLabs is a software company that develops innovative solutions for enterprise computing customers, including its LzLabs Software Defined Mainframe® (SDM). The company was founded in 2011 and is headquartered in Zürich, Switzerland. The SDM liberates and enables customer legacy applications to run unchanged on both Linux hardware and Cloud infrastructures. Thousands of mainframe transactions are processed per second, while maintaining enterprise requirements for reliability, availability, serviceability, and security. Our software solution provides unrivaled compatibility and exceptional performance, dramatically reducing IT costs. LzLabs' offices in Switzerland and the UK are home to highly-experienced mainframe experts and modern IT thought leaders from across the globe.

#### **Our Vision**

Our vision is to liberate organizations from the constraints and limitations of their legacy systems and move them to flexible, more powerful and cost-effective solutions found in modern computing infrastructures.

#### **Our Mission**

Our mission is to create revolutionary software solutions, leveraging the innovation of open source and the power of cloud computing to reduce the risks of legacy application modernization.



#### Contact Us



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