

LzBatch™

Many organizations continue to depend on the mainframe for batch job processing. This traditional method of overnight workload remains a key component of many existing mainframe applications.

LzBatch

LzBatch delivers binary-compatible execution for batch applications written as JCL jobs in PL/I, COBOL and Assembler and also using standard mainframe utilities (file allocation or copy, data sort, etc.). Batch applications can run, without recompilation or data reformatting, in a Linux® environment based on x86 hardware.

Standard mainframe JCL support is provided, enabling batch jobs to be submitted locally, by Network Job Entry (NJE), or via FTP-connected mainframes.

In practice, LzBatch enables existing customer batch applications to be executed with industry-leading performance and throughput. The deployment of the Linux/x86 architecture also future-proofs the application while enabling modernization and integration of batch applications.

Product Overview

In conjunction with the LzLabs Software Defined Mainframe® (SDM), LzBatch provides support for executing legacy mainframe batch jobs in a modern x86-Linux environment.

Existing batch workflows, defined with legacy mainframe job control language (JCL) functions, can be executed without change. Many capabilities equivalent to legacy mainframe utilities are also available.

Key Benefits

LzBatch provides customers with the following advantages:

- Low cost, functionally-equivalent platform for existing legacy mainframe batch applications.
- Reduced MIPS consumption for rehosted batch jobs.

Technical Benefits

- Low migration risk compared to solutions requiring program changes and recompilation.
- Maintains data integrity by leaving it in its mainframe encoding format (EBCDIC, big endian, etc.).
- Support for standard JCL and REXX. No migration to Linux scripting language (shell) is required.

Features Overview

The following features are provided in support of legacy mainframe batch applications:

- Support for JCL including in-stream procedures; cataloged procedures; nested procedure calls; in-stream symbols, SET, EXPORT, INCLUDE and JCLLIB statements; and IF/THEN/ELSE processing.
- Access to Linux file system via DD PATH.
- Access to relational and hierarchical data via integration with LzRelational™ and LzOnline™.
- Job Submission via FTP or Internal Reader.
- Support for Job and Output Classes.
- Support for Standard Legacy Mainframe Utilities (see below).
- Support for Spool Data Set Browsing.
- Support for Message Logging.
- Support for Spool Browsing and Deletion.
- Support for JES2 NJE over TCP/IP.
- Support for MQ Client Applications.
- Support for Multi-Access Spool.
- Ability for the JCL to include Linux shell scripts as steps of batch jobs.

- Ability to start batch jobs on the SDM, including the provision of CLI utilities which can be used to allow shell scripts to start and interact with batch jobs, especially lz_batch which allows a shell script to dynamically construct JCL and then run it as a batch job and wait for the results.

LzDataSet™ (Mainframe File Support)

To support the easy transition of batch jobs, the following legacy mainframe file types are supported:

- Physical Sequential (PS) and Partitioned Data Set (PDS).
- Support for PS data sets (basic, large and extended).
- Support for partitioned data sets (PDS).
- Support for Queued Sequential Access Method (QSAM), Basic Sequential Access Method (BSAM) and Basic Partitioned Access Method (BPAM).
- Support for Direct Access (DSORG=DA) data sets and Basic Direct Access Method (BDAM).

Virtual Storage Access Method (VSAM)

Support for VSAM data sets (basic and extended) including:

- Key Sequenced Data Set (KSDS).
- Relative Record Data Set (RRDS) with both variable (VRRDS) and fixed (FRRDS) length records.
- Entry Sequenced Data Set (ESDS).
- Linear Data Set.

LzBatch

- Alternate Index Data Set.
- VSAM PATH.
- BLSRJCL compatibility.

Temporary Data Sets

- Support for basic sequential, large sequential and partitioned data sets.

Spool Data Sets

- Support for SYSOUT, INTRDR and in-stream data sets.
- Support for the browsing of SYSOUT data sets.
- Support for QSAM, BSAM and VSAM.

Linux Files

- Support for DD PATH.
- Support for DSNTYPE=PIPE.
- Support for QSAM, BSAM and BPAM.

LzManagedStorage™

- Support for data classes
- Support for storage classes

- Support for ACS scripts (if recompiled from source)
- ACS routines – assign data and storage classes according to various criteria (must be recompiled from the original source if not new)

Locking

- Support for enqueue (ENQ) and dequeue (DEQ).
- Allocation status (e.g., DISP=OLD and DISP=SHR).
- VSAM SHAREOPTIONS.
- Update PDS with DISP=SHR.

IBM DB2® Data Access

- COBOL, Assembler, and PL/I batch applications can access LzRelational (rehosting DB2 data) via either static or dynamic SQL. Note: Standard DB2 batch utilities (LOAD, COPY, etc.) are also supported – see the LzRelational Data Sheet.

Legacy Batch Utility Support

- AMBLIST.
- IDCAMS.
- IEBCOPY.
- IEBDG.
- IEBGENER.
- IEBPTPCH.
- IEBUPDTE (limited functionality).
- IEHPROGM (no support for managed volumes, use IDCAMS instead).
- IRXJCL (with support for commonly-used TSO/E commands and external functions).
- IKJEFTxx (with support for commonly-used TSO/E commands).
- FTP.
- SORT (Standard sort features).

Contact Us



LinkedIn: LzLabs GmbH
Twitter: @LzLabsGmbH

info@lzlabs.com

LzLabs GmbH
Richtiarkade 16
CH-8304 Wallisellen
Switzerland
Tel: +41 44 515 9880

LzLabs
25 Templar Avenue
Farnborough
GU14 6FE
United Kingdom
Tel: +44 (0)1252 917232

lzlabs.com/products

LzLabs®, the LzLabs® logo, LzLabs Software Defined Mainframe®, LzSDM®, v™, LzBatch™, LzRelational™ and LzHierarchical™ are trademarks or registered trademarks of LzLabs GmbH. z/OS®, RACF®, CICS®, IMS™ and DB2® are registered trademarks of International Business Machines Corporation. Linux is a trade mark or (in some countries) registered trademark of Linus Torvalds. All other product or company names mentioned in this publication are trademarks, service marks, registered trademarks, or registered service marks of their respective owners. Other third party marks are the trademarks or registered trademarks of their owners