OpenFrame

A Mainframe Rehosting Solution

A rehosting solution that automatically migrates mainframe programs to an open system environment without modifications
What's OpenFrame

OpenFrame is a rehosting solution that migrates existing mainframe programs without modifying the source code for users in a reliable and high-performance open system environment. It provides an optimal open system environment at minimal cost through future-oriented standard architecture, automated migration, compilers, and an integrated assets management environment.
**Future-oriented Standard Architecture**

Built upon a future-oriented standard 3-tier architecture to create an open system environment that offers maximum reliability, high performance, scalability, and flexibility.

**Flexibility**
Separates the UI from the AP to flexibly respond to changes. (Changing the UI does not require modifying the AP)

**Scalability**
Easy to integrate APs, increasing AP scalability.

**Efficiency**
Efficiently handles business since an AP does not process the UI.

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**Automated Conversion**

Provides advanced compiler technology that implements automated conversion and enables reliable migration to an open system environment at minimal cost.

**Other Solutions**

- **Manual Conversion**
  - Requires manual modification of semantics and mainframe source code.
  - Lengthens the rehosting project period.
  - Increases human resources and migration risks.

**OpenFrame**

- **Automated Compiler Conversion**
  - Unnecessary to modify mainframe source code, and provides automated compiler conversion.
  - Drastically shortens the rehosting project period.
  - Provides convenient migration and minimizes migration risks.

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**Key Benefits**

- Automated Tests

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**3-tier Architecture**

- Client Using integrated UI
- UI (User Interface)
- AP (Application)
- DATA

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**Automated Conversion**

- **Manual Conversion**
  - Requires manual modification of semantics and mainframe source code.
  - Lengthens the rehosting project period.
  - Increases human resources and migration risks.

- **Automated Compiler Conversion**
  - “No Need to Modify” Mainframe Source Code
  - Unnecessary to modify mainframe source code, and provides automated compiler conversion.
  - Drastically shortens the rehosting project period.
  - Provides convenient migration and minimizes migration risks.
**Proprietary Compilers**

Offers the world’s only assembler compiler that not only converts mainframe programs written in COBOL or PL/I but also solves various migration issues in a timely manner and maximizes application source code reusability.

**Integrated Assets Management Environment**

The key features of OFMiner help provide an integrated assets management environment. It also enables mainframe assets to be migrated to a more reliable open system, without modifying the source code.
Architecture

Future-oriented standard 3-tier architecture provides maximum reliability, high performance, scalability, and flexibility.

Online (OpenFrame Online)

OpenFrame Online’s architecture separates the UI from an AP to offer maximum scalability, while the TP-monitor (Tmax) based online engine copes with various mainframe middleware. Application program interfaces and runtime resources enable CICS/IMS programs to be run on a UNIX system without modifications. Relevant management commands and tools are provided for the operation.
Batch (OpenFrame Batch)

OpenFrame Batch provides powerful management tools for batch programs to ensure reliability of batch jobs and to handle mass processing. It also provides utilities used by mainframes as sub-components.

- Provides an architecture similar to that of a mainframe, and reuses existing JCL.
- Supports an environment to process JCL and jobs for each system (IBM MVS, Fujitsu XSP, MSP, and Hitachi VOS).
- Manages resources related to operating tasks and jobs through TJES.
- Supports a TSO communications business environment and the CLIST language.
- Provides various utilities and automated migration of batch applications.

Security (OpenFrame TACF)

Provides functions for user authentication, authority management, and resource access management for an optimal security environment.

TSAM

TSAM corresponds to VSAM, which is commonly used in various mainframe environments. TSAM enables applications developed in a legacy environment with a dataset processing method to be reliably run on an open system environment at high performance without modifications.

HiDB

HiDB corresponds to IMS/DB in an IBM mainframe environment. It enables applications developed in an existing environment to be run on a rehosting environment without modifications by providing DL/I interface compatibility. It supports various layers in a layered model database with reliability and high performance.

NDB

NDB corresponds to AIM/DB in a Fujitsu mainframe environment. It completely implements logical and physical structures of the existing AIM/DB with reliability and high performance. It enables applications to run on a rehosting environment without modifications by supporting navigational DML.

* TJES : Tmax Job Entry Subsystem
Operation Management (OFAdmin)

OFAdmin offers a powerful GUI-based user interface and an environment in which applications are efficiently operated and monitored. Users can access OFAdmin in the latest user-friendly environment through a web browser without having to install separate client software.

Development Management (OFStudio)

OFStudio is a GUI-based integrated development environment tool that provides powerful user interfaces and an efficient application development environment. It enables developers to efficiently operate and maintain migrated JCL, COBOL, and PL/I applications.

OFTest

OFTest drastically shortens the rehosting project period by automating unit tests, application scenario tests, and load tests. It also increases test accuracy by providing data field based and online screen based comparisons and verification.

Compiler

OpenFrame's compiler is a conversion tool that enables mainframe programs written in COBOL, PL/I, and assembler to be used in an open system. Compilers developed with TmaxSoft's proprietary technology compile programs without modifying their source code and minimize potential issues caused by the differences between a mainframe and open system environments.

Utility

OpenFrame provides utilities that enable various mainframe applications and 3rd party software to run in an open system environment.

| ProSort | Supports sorting, merging, and the operation of large volumes of files and datasets for mainframe batch jobs. It allows SORT scripts written in an existing mainframe to be used in an open system environment without modifications because its syntax is compatible with DFSORT syntax unlike other products. |
| ProTrieve | Provides functions found in Easytrieve Plus (a reporting utility commonly used in a mainframe) in an open system environment. It offers various statistics functions about datasets and DB2 data without modifying scripts written for Easytrieve. |
| Dataset Utility | Provides functions found in a mainframe's default dataset utility (IDCAMS, ICEGENER, IEBCOPY, IEBGENER, IEBEDIT, IEPHPROM, and DSNUTILB) in an open system environment. |
| Other Utilities | Provides the FTP, IEBGDG, SDSF, ISRSUPC, DSNTIAD, DSNUTILB, and IKJEFT01 functions in an open system environment. |