

Reduce Complexity and Accelerate Your Migration With a Deployment-Ready Framework

Mainframe Re-hosting Reference Architecture by NTT DATA

Benefits:

- Utilize an end-to-end framework for re-hosting mainframe workloads on open systems
- Reduce migration risk, time and complexity with extensive compatibility with legacy environments
- Preserve existing investments in personnel, code, data and end-user interfaces
- Gain a practical platform for future application evolution

Simplify migration and modernization with a practical roadmap for success

Today's businesses are looking for ways to reduce costs and enhance operational effectiveness by moving existing mainframe applications to flexible, modern IT systems. However, complex supporting environments consisting of proven standards and procedures, in addition to a mature third-party product infrastructure commonly associated with mainframe applications can add complexity and impact your decision and timeline to migrate.

That's where NTT DATA Services can help. Mainframe Re-hosting Reference Architecture (MRRA) by NTT DATA provides a framework that addresses not only specific application requirements, but also the related operational infrastructure commonly found on mainframe systems. Our solution provides an end-to-end roadmap for moving mainframe application environments to industry-standard systems.

A tested, tuned and documented IT framework, Mainframe Re-hosting Reference Architecture better understands your existing mainframe and distributed environments in terms of infrastructure, skills, process, standards and products. Our solution addresses the criteria essential for you to design, deploy and maintain successful mainframe migration implementations.

Based on Mainframe Re-hosting by NTT DATA and select third-party infrastructure products, MRRA helps reduce migration risk, cost and deployment time, and assists you in efficiently moving mainframe workloads to robust, cost-effective platforms. The flexible nature of our solution simplifies migration to an existing distributed-computing infrastructure or eases a move to a new target implementation.

Considerable emphasis in MRRA is placed on the third-party products that offer key functionality, such as scheduling, print and output management, systems and performance management, database management and security. Unlike alternative approaches that can limit you to an individual product suite, MRRA provides an open framework that enables you to tailor a mainframe migration implementation to your specific business needs.

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After deployment, MRRA can enable you to further modernize your application environment with enhancements to basic functionality, system interoperability and end-user interfaces.

Table 1: NTT DATA products included in Mainframe Re-hosting Reference Architecture

Product	Type	Description
NTT DATA Transaction Processing Environment (TPE)	Transaction Processing System	Distributed transaction processing system for supporting re-hosted IBM® CICS® transactions, IBM IMS™ applications, IDMS DC and other environments
NTT DATA Batch Processing Environment (BPE)	Batch Processing System	Distributed batch processing environment for supporting re-hosted IBM z/OS® and z/VSE® Job Control Language (JCL) and related workloads
NTT DATA TPE Manager	Region Administration and Performance Monitor	Real-time monitoring and administration of TPE
NTT DATA Transaction Security Facility	External Security Manager	Provides role-based access control for TPE regions
NTT DATA Enterprise COBOL	Cobol Platform	A distributed COBOL development and runtime environment
NTT DATA Enterprise Applications Integrated Development Environment (IDE)	Cobol Development Environment	Visual Studio-based COBOL development environment containing full syntax checking, remote debugging, compilation and deployment
NTT DATA TPE J3270	Tn3270 Terminal	Java-based TN3270 client used to connect to TPE regions or any TN3270-based server
NTT DATA Map Editor	Screen Management	Java-based IDE for maintaining and developing BMS-based maps
NTT DATA Universal Test Manager	Testing	Technology to automate the capture, management and playback of mainframe-based test cases initiated by TN3270 screen communications
NTT DATA Enterprise Applications IDE for Eclipse	Cobol Development Environment	Eclipse-based COBOL development environment containing full syntax checking, remote debugging, compilation and deployment

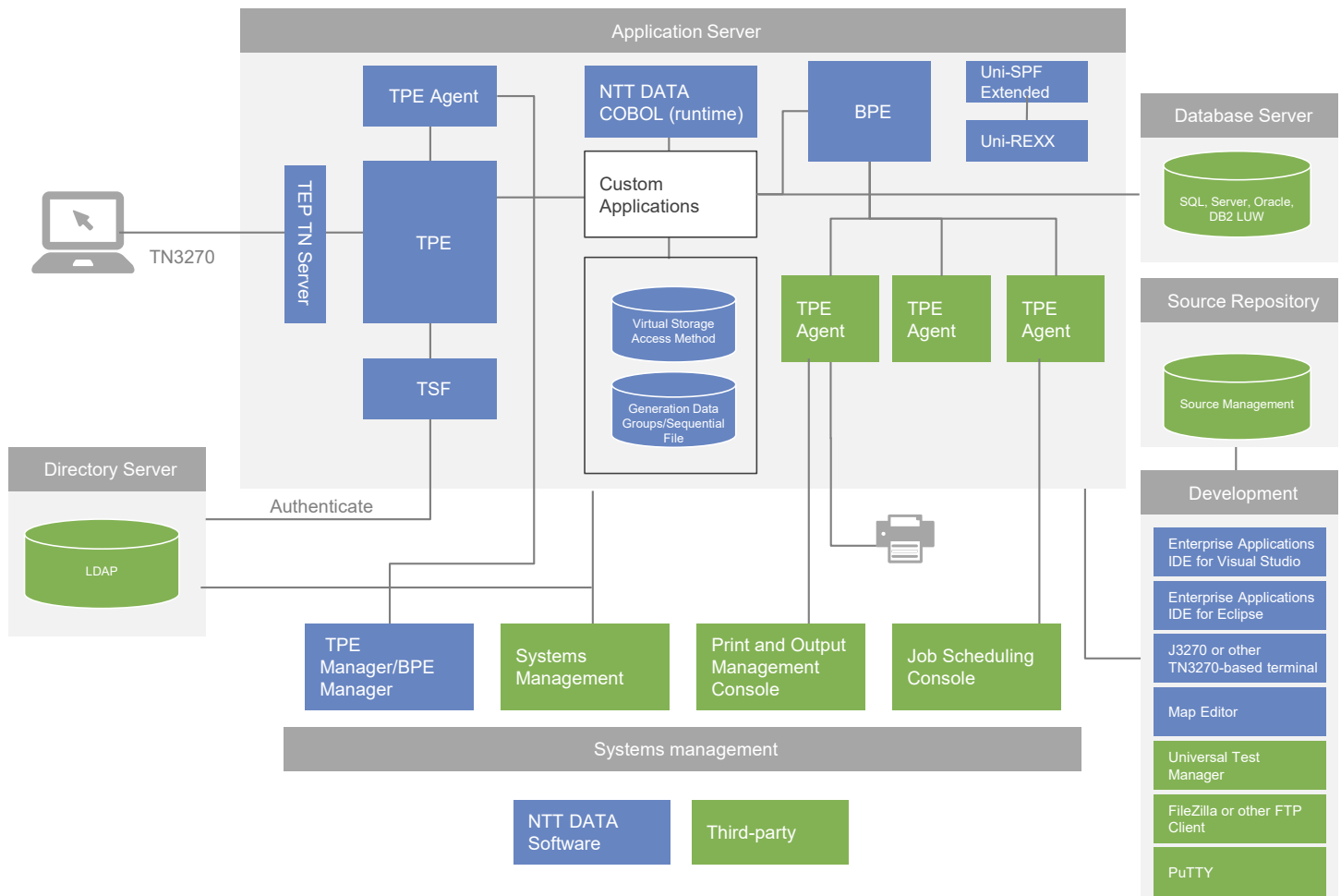
Multilayered deployment architecture addresses the complete picture

Every time you utilize Mainframe Re-hosting Reference Architecture, you can rest assured that NTT DATA has completed the due diligence required to architect a complete implementation designed to deliver results.

Our solution's application architecture consists of distinct platforms (see Figure 1):

- Application and database servers – Provides the necessary production platforms for supporting re-hosted workloads. Solutions running on these platforms include Mainframe Re-hosting, relational databases and third-party products.
- Development – Includes all the necessary development, debugging and test-related solutions required to support and modernize the re-hosted applications.
- Systems management – Provides dedicated monitoring on the health of the application and systems environment.
- Product Type Description

Figure 1. Sample Mainframe Re-hosting Reference Architecture infrastructure



Mainframe Re-hosting Reference Architecture can be implemented to meet elevated availability requirements. A systematic approach is taken to illustrate redundancy, fault isolation and rapid recovery options.

Our solution scales from small, single or dual-processor servers up to massive symmetrical multiprocessing systems, all using the same binary code. As resource demands grow with more users, transactions, data sets or other variables, Mainframe Re-hosting Reference Architecture can scale seamlessly to meet evolving needs.

Visit nttdataservices.com to learn more.

NTT DATA Services partners with clients to navigate and simplify the modern complexities of business and technology, delivering the insights, solutions and outcomes that matter most. As a division of NTT DATA Corporation, a top 10 global IT services and consulting provider, we wrap deep industry expertise around a comprehensive portfolio of infrastructure, applications and business process services.