

Requirements for a Successful Replatform Project

Replatform Preparation

A successful Replatform Project begins with assessing and validating the current system, applications, jobs and associated application artifacts. Careful analysis must be performed by any organization desiring to maintain control of the IT business, both its assets and operations as the organization transitions itself for a Replatform Project.

The level of preparation required is dependent on the “change process” and “code control” rigor that is in place within an IT organization. Change control means that for each modification of the business, application test cases are developed and maintained to validate that functions work as designed and any changes that are made to the system do not regress current systems.

Some IT organizations maintain detailed “Run Books” that describe in detail how each application is used; possible error conditions along with methods for remediating errors. These “Run Books” are valuable, and to the degree that these are up-to-date and accurate, they can be valuable resources to be used in a Replatforming effort.

The first step is to gather and inventory as much information about the IT assets as possible. The result of this step will determine the level of preparation and cost that will be required as part of the Replatforming effort.

Sizing and Analysis

T3 Technologies will help develop a sizing and detailed analysis of systems, applications and jobs. A successful outcome is everyone’s responsibility and therefore, the following should be available:

- Source code for each application – specifically, the latest version of each artifact must be identified along with all of its dependencies. Source code includes, but not limited to every module, screen map, macro, etc.
- Table Layout (schemas) for every database table.
- All interfaces and dependencies identified for data and application flow.
- Units of work flow as defined, such as CICS transactions or batch job streams.
- Test cases that will be used to verify application function points and interfaces.
- Design and/or User Documentation; the later used to verify rudimentary functionality of the application after it has been Replatformed.
- Service Level Commitments/Performance Criteria; used to validate that the Replatformed environment meets overall expectations.

Replatform Assessment and Support Materials

An assessment prior to a Replatform project normally will try to identify required criteria as part of the project.

To support the assessment and the Replatform project it is important to include existing Backup Plans, Disaster Recovery Plans and any other operational criteria which are required resources to assembling the detailed Replatform project plan.

Security is another major component of the Replatform project. Knowing the security level definition and how these definitions are implemented for the IT environment is very important. Therefore, one should be prepared to provide access groups and other definitions that define access to applications and data. Please note that ACF2 or RACF will not be used going forward, and definitions currently in place will be incorporated into Windows security so that the business assets are protected at an equal to or greater than extent to that available on the mainframe.

Replatform Project Plan

An important part of the T3 Replatforming Proposal is the development of the Project Plan. The plan will include tasks, resources, and dependencies with an understanding of the work product resulting from each component of the plan. The Plan in many cases will include allowances for customer code drops so that updates can be received from the customer through the course of the project.

The project will depend heavily upon customer Subject Matter Experts (SMEs) as code and data is initially received. Access to these SMEs is crucial to the success and timely completion of the project. Customers should plan to have these SMEs available and ready to respond to questions and requests for additional information. A checklist of project required information will be provided by T3 during the project kick-off.

Subject matter experts may be called upon as each application and associated data is readied for initial testing using the customer developed application test cases. T3 will proceed with unit testing until the application is prepared for return to the customer for acceptance testing. Customer resources should be in place and ready to commence acceptance testing as soon as delivery is made by T3. Some basic training will be provided to individuals testing the applications so that they can perform their testing responsibilities.

Resource Allocation Spread

For planning purposes, it is important to understand how resources are allocated. Although T3's project team handles the actual migration of source code and data, the customer can be called upon to during a Replatforming project for support on tasks such as:

- Subject matter expertise for general and specific application and system information
- System/Application programmer(s) with access to source and data
- System Administrators to determine system configuration information
- Application Quality Assurance to obtain application testcases
- Customer Acceptance Test team to execute and report status, comments and successful resolution of any incompatibilities that may be found.
- Training requires staff available and prepared to participate in classes led by T3
- Deployment of the Replatformed system requires coordination between all parties so that a seamless switch can be accomplished without any business impacts.
- Turnover is the logistical handshake between T3 and the customer as the new system is in place and handling the application workload.

The following is a partial assignment list of major tasks in most migrations:

Project Task	Primary Responsibility	Effort Level	
		T3	Customer
Code Assembly and Drop	Joint	Minor	Minor
Code Conversion	T3	Moderate	Minor
Data Migration/Conversion	T3	Moderate	Minor
System Configuration	T3	Minor	Minor
Test and Testcase development	Customer	Significant	Significant
Training	T3	Minor	Moderate
Deploy	T3	Minor	Minor
Turnover	T3	Minor	Minor
Project Management	T3	Minor	Minor

Code, Data, and Configuration Responsibilities

Envisioning Center Workshop

T3 suggests that customers attend an Envisioning Center Workshop. This half-day briefing is designed to provide your company with a clear and actionable plan to move off your mainframe onto a Microsoft Windows environment quickly and without disruption. The day starts by examining your current mainframe environment, discussing the driving factors pushing you to consider mainframe migration, and moves on to discussions of where you want to take your IT infrastructure in the future. This allows you to clarify your goals and helps T3 Technologies professionals gain a better understanding of the environment and goals of your organization. Based on these discussions, T3 Technologies will show you how the integrated Liberty Server Replatforming solution can be customized to meet your specific needs.

The Strategy Session is a day of mutual discovery, tailored technology, solution drill-downs and interactive presentations.

Project Kick-off

The Replatform Project Kick-off is an important initial project step as Kick-off is where an interchange begins with the assembling and transfer of software, data, testcases, configuration and other information associated with your system environment. T3 and the customer need to be prepared for this event. T3 should come to this session with an inventory of the system and application assets, the customer bringing a thorough knowledge of the application configuration and requirements.

The successful Project Kick-off is the beginning of a partnership that will collaborate on the delivery of a complete Replatformed solution.

Code (Customer software)

All software to be Replatformed is assembled and transferred to T3. The Code should include all the source code, and its dependencies (copybooks, screen maps, macros, JCL, PROCLIBS, etc.). Part of the assessment as defined previously is to obtain information about each application or application set along with dependencies. Each application is delivered along with supporting information that enables T3 to compile, link, test and deploy the application(s).

Data

Customer application data, whether in data sets or databases will need to be collected and delivered to T3 for migration to the Replatformed system environment. Data will be migrated/converted multiple times during a project: initially to form the basis on which initial testing will be performed, and at established milestones throughout the project. A final update of this data will be required just prior to cutover to the Replatformed environment.

Testcases

Customer Application testcases should be provided at the outset of the project. Any missing or needed testcases will need to be delivered to T3 prior to completion of T3 Functional and System testing. All testcases should either be the same as the customer Acceptance Test or be equivalent to those tests to be performed by the customer. In addition, any criteria for acceptance should be communicated to T3 so that these criteria can be certified prior to releasing the Replatformed result to the customer.

System Configuration

Customer System Configuration can be a constant area where discovery can adversely affect the project cost and timeline. Therefore it is imperative that the requirements of the system are identified, discussed and accounted for during the Replatforming project. Areas that should be provided in detail are:

- Security – What are the security groups, what privileges do these groups have, and who are members of these groups?
- Networking – How is the network configured; are there any special considerations or requirements?
- Disaster Recovery – What processes and procedures are in place for disaster recovery; is redundancy a consideration and how is that done today?
- Backups – How often are backups performed and on what assets are these required?
- Tape and Virtual Tape Libraries – How are these used, and what is the strategy for these volumes, if different from today?
- Printing – What special printing requirements exist presently in the system environment, including any special hardware? Are there requirements for paperless printing and distribution?
- Existing third-party vendor applications – What is the need for the application and can existing functionality within the replatformed solution suffice?

This is not an exhaustive list, but it is the foundation of information that is required to learn and respond to customer business requirements.

Planning and Communication

A fundamental and extremely important element of any project is planning and communication. T3 will develop and communicate with the customer the Replatforming Plan. During the course of the project, regular status reports and communication forums will be conducted with the customer.

The customer will know the project status as well as any issues encountered where T3 may need assistance from the customer. T3 requires full participation from the customer in these status meetings and enjoys working with the customer in a collaborative relationship. The successful project is the result of building a supportive and responsive relationship with the customer.

Replatform Test Responsibilities

It is always the application owner's responsibility to be able to validate applications, and it is the business process owner's responsibility to verify that all business processes function as part of the Replatform effort. This obligation cannot be delegated and must be assumed through all phases of a successful Replatform effort.

Replatforming Functional and System Test (T3)

T3 will perform Functional and System tests based on test cases or validation suites provided by the customer. It is very important that these test cases thoroughly exercise the applications and systems; so that T3 can verify that all is working as intended. T3 will perform these tests and will consult with subject matter experts from the customer's organization to resolve any anomalies that may present themselves during tests. Replatforming tests will include testing of transaction flow, batch processes and normal data processing activities that include backup and recovery procedures.

Acceptance Certification Test (Customer)

The application and systems "Acceptance Test" must be executed and verified as accurate by the application owner. It is of prime importance that as each element of the Replatform effort comes online, dependencies are in place to ensure a seamless transformation from the mainframe can be facilitated and assured.

Performance and Configuration Test (Joint)

Establishing a performance baseline is an excellent first task as the applications are brought back on line. Hopefully, as part of the preparation for Replatforming the mainframe application, there was a prior baseline established upon which the new performance standard can be compared.

Database performance might need to be tuned to take advantage of new capabilities, which may not have been present in the mainframe database. Also, stored procedures, which may have changed during the Replatform process, might need to be monitored to enable leveraging new throughput (performance) opportunities.

The performance testing will verify that the performance Service Level Commitments will be met using the Replatformed systems. This test will verify Batch Job performance and that database access has acceptable performance for OLTP processing, along with any other mutually agreed upon performance criteria established between T3 and the customer.

Deploy and Turnover

The final step is to place and perform final configuration of the Replatformed environment; it is the transfer the configured system to the customer. The Replatform project deploy and turnover requires that the customer be engaged and walk-through the steps with the T3 technical staff to learn how to operate, maintain and use the new system environment.

Detailed training is provided and usage documentation is discussed with the customer.

Summary

The success of the T3 Replatforming project depends on total commitment to the success of the project. T3 will bring governance through a detailed, well-executed project plan and will collaborate with the customer through all phases of the project.

Internal costs will include access to subject matter experts through key (identified) steps of the project. It will include committed resources to perform Acceptance testing and communicate the results as successes or anomalies that require attention. Finally, internal cost will include accepting turnover of the completed Replatforming project and learning how to own and maintain the results.