IBM z/TPF Migration Assistance: Moving toward an open architecture

Making the move to a new environment

Large-scale transaction processing based on the IBM Transaction Processing Facility (TPF) operating system lies at the core of many of today’s industries—from travel and transportation to financial services and banking. Proprietary, mission-critical TPF systems are fundamental to the existence of many of these businesses.

With the shift to On Demand Business and open systems, companies can make use of less costly development skills and take advantage of the flexibility offered by a service-oriented architecture (SOA). This has underscored the need to integrate current TPF systems with newer platforms. IBM’s newly released version of the operating system, z/TPF, was created specifically to meet this need—enabling companies to reap the benefits of open systems and the SOA model while protecting investments in hardware, software and business process and technical expertise.

Companies migrating from TPF to z/TPF face multiple challenges. Existing systems and software must be evaluated for remediation or

IBM z/TPF helps protect investments by leveraging existing hardware and applications where possible.

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<td>■ Helps extend legacy transaction processing to work with other open systems</td>
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<td>■ Provides investment protection while leveraging open-architecture advantages</td>
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<td>■ Offers expert assistance in all aspects of z/TPF migration planning and execution</td>
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replacement—a task that can divert costly internal talent from more productive work. Careful planning and testing must be conducted. Existing systems must be kept up and running during the transition, which can place additional demands on those same resources. Also, to reduce the financial and competitive impact on the organization, migration must happen as quickly as possible.

**IBM z/TPF Migration Assistance: Easing the transition**

IBM z/TPF Migration Assistance is designed to help companies make the move to z/TPF quickly, economically and with as little risk as possible. z/TPF Migration Assistance offerings are flexible—ranging from planning and design, to support of the existing environment while internal resources perform the migration, to complete turnkey solutions.

IBM z/TPF Migration Assistance is a multifaceted capability. IBM can perform a complete, turnkey migration if desired, or provide needed support to an internal migration initiative to help speed the process, reduce demand on IT staff and mitigate risk. IBM’s highly trained experts work closely with an enterprise’s internal IT resources to provide the level of expertise required for a smooth migration.

**Before the actual implementation takes place, rigorous testing of the total solution must be done.**

Resource limitations are an important consideration when evaluating a z/TPF migration. Performing the task quickly, cost-effectively and safely, without disrupting ongoing IT support to the business, can place unacceptable demands on internal staff. In addition, skilled resources that might be devoted to other important IT initiatives are diverted to the migration activity.

**Preparation is key**

IT migration involves more than just porting applications to a new platform. Detailed project planning, evaluation and validation are key activities that can help ensure success—activities that may lie beyond the realm of expertise of the IT department.

z/TPF helps protect investments by leveraging existing hardware and applications where possible. Part of the preparation process involves determining what changes to the overall IT infrastructure will be necessary to support the new environment, in particular the integration of existing systems into an SOA. This requires expertise in system integration, a skill set that often is not a core competency of internal IT departments.

The business logic built into transaction processing applications is where the real value of these applications lies. It is important to understand how this logic is incorporated into the applications, how it will be made available under z/TPF, and what changes, if any, will be needed to ensure a smooth transition to the new operating system. An expert analysis of the application portfolio with the assistance of IBM experts can help uncover this important information.

The portfolio can also be reviewed for functionality and efficiency; the open-systems architecture of z/TPF enables more efficient use of application resources, eliminating the need for some processing techniques that are necessary in a closed system.

z/TPF includes tools designed to help developers port existing assembly-language code so that it may be
IBM's expert assistance can help companies make the most efficient use of this capability, reducing the cost and time needed for the migration to take place.

Before the actual implementation takes place, rigorous testing of the total solution must be done. Existing testing regimens may not be sufficient to meet the company’s risk goals in the context of a large-scale migration to a new operating system. IBM can assess existing protocols and make this determination, expanding them as needed to achieve the desired result and level of risk management. In addition, IBM can perform the entire testing regimen if desired.

Implementation and beyond
To minimize the potential for business disruption during the migration, IBM can provide complete support for existing TPF production and development environments while the internal IT staff is occupied with migration activities. Or, IBM can be directly involved in the implementation phase if needed. Comprehensive ongoing support is also available, leveraging detailed knowledge of the individual z/TPF implementation gained by IBM during the course of the project to enhance the effectiveness of the support team.

Migrating existing applications to z/TPF is only part of the overall solution: the system’s new capabilities should be fully exploited as well. To maximize the potential of z/TPF, IBM can help design, develop, deliver and support a robust application development environment that makes optimum use of a company’s specific z/TPF environment. This infrastructure can help companies develop new applications that run efficiently under z/TPF. Such a facility may be entirely new to the company, or not previously used in the context of its mainframe environment.

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Take advantage of IBM’s expert assistance
The value of leveraging IBM’s expertise extends beyond specific z/TPF knowledge. IBM also brings extensive experience with IT migration and business transformation, as well as proven project management practices that ensure a rapid, cost-effective completion of the initiative.

Making the move to z/TPF is a critically important undertaking for any business that is reliant upon transaction processing. Depending entirely on internal resources to complete the project in a timely, efficient and cost-effective manner while avoiding disruption to ongoing operations can prove unnecessarily risky. IBM’s experts can provide everything needed to help ensure that your z/TPF migration project is smooth, timely, safe and successful.

For more information
To learn more about how IBM can help your company make the move to z/TPF, please contact your IBM representative, or visit us at:

ibm.com/tpf