Data Sheet
IT Efficiency Services
Data Migration Service

Rapid and efficient data migration across your storage infrastructure with no application downtime*

Introduction

Migrating data between different storage infrastructures is a real challenge for IT departments. Incompatibilities in utilizing host-based and disk-array tools, coupled with the associated impact to productive IT environments means that data migration is often a lengthy and costly activity, and often prohibitive in today’s “always-on” business requirements. An ongoing requirement for faster and more efficient access to data by business units drives IT to implement the latest storage infrastructure technology to keep ahead of the competition. Additionally the introduction of new business applications is accelerating, and with it data is distributed and reorganized on a frequent basis, dictating, in turn, that data migration is becoming a more frequent discipline for IT. The requirement for rapid, efficient migration of data, whilst maintaining maximum data availability to the business is becoming increasingly sought after.

Customer’s requirements

Fujitsu’s experience gathered from a multitude of migration projects has highlighted the following requirements from our customers:

- Rapid migration of data with maximum data availability to the business and no application downtime
- No impact to server host performance and no agents to be used in migrating
- Migration of data between heterogeneous storage devices, supporting Fibre Channel and iSCSI host connectivity
- Data integrity retained - no manipulation of data format

Fujitsu’s solution

Data migration is very specific to an organization’s IT landscape. This in turn means that that a single method to migrate data from a source storage infrastructure to a target one is not viable. Several parameters need to be considered, when deciding on the best method and tooling in performing a successful data migration. The Fujitsu Data Migration Service utilizes a set of best-practice data migration methods to offer migration of data in many different types of storage environments. Based on the Fujitsu Data Migration Assessment, Fujitsu works with the Customer to select the best migration strategy utilizing one of the following migration methods:

- Array Based Data Migration
- Appliance Based Data Migration
- Host Based Data Migration

The methods used may be employed for a complete project or for each server individually, based on the data migration goals of the Customer.

Customer’s benefits

This service provides data migration between storage devices to achieve:

- Rapid migration typically with no application downtime*
- Migration between storage devices from many vendors, independent of drive sizes and RAID configurations
- Retained data integrity through block-level data migration

* Dependent on the host OS
Service Details

Service description

Phases of a Storage Migration Project:

1. Analysis & Assessments
   Prior to service commencement, it is necessary for Fujitsu to perform a Fujitsu Data Migration Assessment (a separate, chargeable service, order code CPS:ST-INT-11005F, see separate data sheet).

2. Migration Planning
   The output of the Data Migration Assessment enables Fujitsu consultants to create a detailed plan with the Customer as to how the data will be migrated into the new storage environment. The final migration plan is agreed and signed by both parties.

3. Preparation for Migration
   As part of the migration planning, all necessary support processes are prepared. This includes planning the maintenance windows for all involved environments, assessing and resolving any interoperability issues, upgrade of HBA drivers, firmware levels, OS patches, etc. as required.

4. Pilot Migration
   Each data migration segment or method is tested on the chosen area of the environment to prove the right data migration method. The pilot migration helps to prevent any negative impact on data availability.

5. Customer Training
   The responsible Customer IT personnel is trained on the migration steps and chosen methods. All the details of oncoming data migration are detailed in a Project Plan, which is then agreed and signed by both parties.

6. Data Migration
   Based on the selection of migration methods and migration tooling the data is migrated from the source to the target storage infrastructure. Fujitsu utilizes a set of migration tools including:
   a. ETERNUS Open Storage Migration
      • Included as a feature of the ETERNUS DX firmware
   b. VMware Storage vMotion
      • Online ESX based data migration
   c. Embedded Linux/UNIX Volume Manager with Mirroring capability
      • Online host based data migration
   d. Migration Appliance
      • Online appliance based data migration
      • Embedded into existing SAN/FC environment
      • Ask Fujitsu for the most recent list of supported platforms

7. Remove old Components
   After all data are migrated to the new environment and tested for their availability, the migration tools would be removed from SAN/NAS/LAN infrastructure as well as the upgraded components.

Service conditions

The Customer agrees to the following conditions as pursuant to the delivery of the service defined:

- Provisioning of all the information necessary for planning on or before the delivery date.
- A customer contact available for the duration of the service to clarify questions and provide information, access and passwords where required.

The procurement of a Data Migration Appliance is not a part of the service scope. Fujitsu is happy to provide assistance if required, at a price to be negotiated with the Customer.

Unless expressly agreed otherwise the Fujitsu IT Services as set out in this Datashet will be performed based on the Fujitsu "General Terms on Consulting and Technical Assistance", or alternatively - where the main emphasis of the Services is on the performance of works - based on the Fujitsu "General Terms for IT Integration Services, IMAC/D Services and other works and services subject to acceptance”

Additional services

Fujitsu Professional Services can assist you in every phase of the storage lifecycle. Whether you need help planning your next-generation storage system, need an extra set of hands for a major storage deployment, or want to optimize your existing infrastructure, Fujitsu service personnel have the skills to assist you in meeting your ongoing storage infrastructure goals. Fujitsu offers a complete portfolio of related services, including consulting, design, implementation and support services.

Ordering

The Data Migration Service is available from your local Fujitsu Technology Solutions sales office. When ordering please quote:

<table>
<thead>
<tr>
<th>Title</th>
<th>Fujitsu Data Migration Service</th>
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<tr>
<td>Order code</td>
<td>CPS: ST-INT-21016H</td>
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In addition to the Data Migration Service, Fujitsu provides a range of IT Efficiency services, which enable customers to maximize the efficiency and effectiveness of their IT infrastructure in support of their business goals.

Dynamic Infrastructures
With the Fujitsu Dynamic Infrastructures approach, Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructure as a Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

Computing Products
www.fujitsu.com/fts/products
- PRIMERGY: Industry Standard Server
- SPARC Enterprise: UNIX-Server
- BS2000/OSD Mainframes
- PRIMEQUEST: Mission Critical IA Server
- ETERNUS: Storage Solutions
- ESPRIMO, LIFEBOOK: Workplace systems

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- Infrastructure as a Service
- Consulting & Integration Services
- Maintenance & Support Services

More information
To learn more about the Data Migration Service and other services please contact your Fujitsu sales representative, email us at expert@ts.fujitsu.com, or visit our website at http://www.fujitsu.com/fts/services/consulting/migration

Fujitsu green policy innovation
Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT. Please find further information at: www.fujitsu.com/global/about/environment/

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2013-04-03 CEMEA&I EN
*) each call 14 ct/min.; the prices for calls made from mobile devices are limited to 42 ct/min.