It is becoming increasingly more challenging to non-disruptively deliver improved efficiencies for storing and managing SAP data while functional teams concurrently drive SAP projects aimed at continuous business process improvement. In many cases deploying new technologies to facilitate improved data storage efficiencies and cost savings requires a storage technology refresh with migration of SAP data to a new storage array. This effort to improve efficiency looms as a major project with a fair amount of risk and one or more SAP production outages.

In today’s business environments, organizations with critical processes require near zero downtime, especially when it comes to improving or updating their IT infrastructures. There is also a significant need to simplify and shorten the duration of SAP storage migration projects in order to begin leveraging new technologies more quickly. EMC® Federated Live Migration (FLM) is just the solution to deliver fully non-disruptive data migration for faster deployment of these new technologies. FLM is a technological breakthrough that eliminates the requirement of host and SAP downtime during the migration of data to a new storage array. SAP projects for technology refreshes and migrations can now benefit from a shortened project timeline as well as the elimination of added complexity associated with host-based or disruptive migration strategies.

VALIDATING A LIVE MIGRATION

To validate a live migration while performing FLM with SAP data, EMC E-Lab™ simulated a typical storage consolidation migration use case by migrating two Symmetrix DMX™ systems to one Symmetrix VMAX system. The simulation was conducted in two parts: first, to establish a baseline for how long it takes to run SGEN (a well known SAP program that generates heavy database activity and I/O workload to the devices) against regular data devices, and second, running the same SGEN job while the data devices are being actively migrated with FLM. After the baseline SGEN procedure was run, FLM was configured on the same storage devices and the SGEN job was executed again.

The objective of the simulation was to see what, if any, impact there might be on completing a large SGEN operation while FLM was actively migrating the same data devices from the Symmetrix DMX systems to the Symmetrix VMAX system. The result was a difference in SGEN duration of less than two minutes while FLM was actively migrating the data to the new Symmetrix VMAX. This represents a negligible elongation of SGEN activity, proving how valuable FLM can be when migrating SAP data online.
The most common use case for FLM with SAP is migrating SAP data to a new EMC Symmetrix® VMAX™ system to take advantage of new technologies like virtual provisioning, FAST VP, and greater performance. Productivity gains will come from leveraging the new features, as well as reducing costs via a smaller data center footprint, reduced power and cooling consumption, and less system management.

**PROVEN RESULTS**

The goal of any technology refresh in an SAP environment is to deploy the new technology as quickly as possible to take full advantage of a more flexible architecture that enables faster time to value for business functional changes and fewer planned outages as infrastructure management is simplified.

The EMC E-Lab simulation documents the value FLM provides to SAP users—allowing them to migrate critical SAP data to a new storage system completely online, and in this simulation, with minimal elongation of process times.

**Federated Live Migration Use Cases**

**DATA CENTER CONSOLIDATION**

- Zero risk and downtime to critical SAP data
- FLM installs and is brought online non-disruptively
- Leverages EMC PowerPath® to manage SAP application re-direction with no impact to end-users
- Enables comprehensive migration rehearsals without weeks of setup time
- Speeds time to deployment for improved efficiency and cost savings
- Performs non-disruptive migrations when you need to, not when planned outages dictate
- Uses EMC Symmetrix Management Console or SYMCLI for centralized management

**TECHNOLOGY REFRESH**

Federated Live Migration is included with every Symmetrix VMAX purchase. There are no additional software charges, no additional agents installed on your SAP servers, and no additional hardware that needs to be inserted into your data center. It is simply our EMC commitment to bring advanced storage capabilities to SAP users.

**CONTACT US**

To learn more about how EMC products, services, and solutions can help solve your business and IT challenges, contact your local representative or authorized reseller, or visit us at www.EMC.com.