EMC Performance and Optimization for SAP
Increase Efficiency for SAP Landscapes with Symmetrix FAST VP

**Highlights**

**Fully Automated Storage Tiering**
- EMC Symmetrix VMAX FAST VP provides multi-tier storage system that is automatically and efficiently managed.

**22% CAPEX Reduction**
- A multi-tiered EFD/FC/SATA configuration with FASTVP results in a 22 percent cost reduction in CAPEX without compromising system performance or throughput.

**37% OPEX Reduction**
- A multi-tiered EFD/FC/SATA configuration with FAST VP resulted in a 37 percent savings in the operational expenditure.

**Automated and Optimized Storage Management**
- Simplified optimization of storage resources while meeting performance requirements of a realistic SAP workload.

**BUSINESS CHALLENGES**

As we know, SAP customers try to maintain their operational costs while the business demands change quickly, the data continues to grow and the number of users multiplies in their SAP landscapes because of mergers, acquisitions, expansions and other business reasons. With continuous growth, storage costs keep rising.

**Traditional SAP storage management methods are costly and labor-intensive**
Managing storage for SAP results in high-end storage costs over time and requires frequent manual intervention by database administrators in order to sustain dynamic performance requirements, especially as data grows.

**Typical over allocation of expensive storage**
Even though 65% or more of the data in a typical SAP database is not used or is rarely used, SAP customers often place their entire SAP multi-terabyte production systems on Tier 1 (highest performance, typically FC) storage. Customers do this to simplify management and ensure performance required for cycles of peak processing such as "period end" or seasonal demand spikes. In addition, SAP customers typically provision the Tier 1 storage to accommodate future, not current, needs.

**Pain point: Satisfying required performance SLAs without driving up costs**
Large SAP production databases can cause degradation of system performance overtime. Conventional methods of dealing with this issue include conducting complex projects to analyze data and then using SAP archiving or database technologies to ensure adequate system performance.

**What's needed**
SAP customers need an automated solution that makes the most cost-effective use of storage while sustaining the dynamic performance requirements of an SAP system, putting the right data in the right place at the right time.

**SOLUTION OVERVIEW**
EMC Symmetrix VMAX Fully-Automated Storage Tiering for Virtual Pools (FAST VP) provides SAP customers with a multi-tiered storage system that is automatically and efficiently managed.

- FAST VP analyzes the SAP workload and re-tiers frequently used data to a higher-performing tier, such as EFD, to offer optimal I/O performance.
- FAST VP also analyzes SAP data activity and moves seldom used data to lower-cost tier (such as from FC to SATA).
- I/O is optimized non-disruptively as the SAP data grows and changes over time. This reduces the need to perform manual data analysis and eliminates downtime associated with complex dist layout changes.
GET THE RIGHT DATA, TO THE RIGHT PLACE, AT THE RIGHT TIME

Symmetrix FAST VP policy-based system automatically places and moves SAP application data across storage types to achieve performance service levels or cost targets.

- Monitors I/O activity identifying data for relocation
- Automates migration during user-defined windows moving "hot" data to Flash drives and "cold" data to SATA drives

Smart Consolidation with FAST VP

This

100 TB
1080 disks

Becomes

this

100 TB
112 disks

100% Fibre Channel

+40% higher storage performance

-40% lower storage costs

EMC SERVICES

To help organizations get started on their journey, EMC Global Services performance for high-end and storage optimization service for SAP helps customers to speed up the responsiveness of their existing SAP system in heavy duty cycle environments where performance and user experience are paramount. This service also helps customers deploy and implement SAP platforms for maximum performance, accelerate the return on their technology investment, and minimize risk during the transition. The service positions EMC as the leader in delivering application performance optimization for highly available storage platform.