Checklist for Enterprise Storage Readiness

Today’s IT leaders want the security and performance of enterprise storage to meet their data processing needs. But without the right infrastructure, companies risk falling behind the competition. By using this checklist, you can gauge the readiness of your infrastructure for enterprise storage.

GLOBAL STORAGE VIRTUALIZATION

Support for active-active clustering between Hitachi Virtual Storage Platform (VSP) G1000 series storage systems enables continuous operation and an “always-on” infrastructure. Integrated active-active mirroring provides system and data center extensibility as well as enterprise scalability with 6x the performance of other leading storage virtualization appliances.

Enterprise Storage Advantage: With built-in storage virtualization, this vendor-agnostic continuous storage infrastructure eliminates data silos and virtualization islands, and solves migration problems. Integrated active mirroring simplifies and lowers operations overhead for Oracle RAC, VMware MetroCluster and Microsoft® cluster deployments. It improves application recovery time or recovery point objectives (RTO/RPO) and is easier to manage than traditional business continuity and disaster recovery solutions.

EFFICIENT WORKLOAD CONSOLIDATION

Up to 8 virtual storage directors and 2TB single image global cache deliver scalability advantage over competitive solutions. Systems are powered by 896GB/sec aggregate internal bandwidth 7th generation crossbar switch and multiple control chassis under 1 logical unit. They efficiently leverage flash media and deliver more than 3 million transactions per second.

Enterprise Storage Advantage: Increased virtual machine density for VMware, Microsoft Hyper-V® and Citrix servers reduces number of systems to manage and footprint size. Extreme bandwidth for flash performance boost. Systems enable more efficient use of storage and significantly reduces space, power and cooling costs.

PROTECTED DATA MOBILITY AND MIGRATIONS

Perform system migrations, keeping them transparent to running applications while maintaining quality of service (QoS) and mirrored copy relationships. Systems include up to 4 data center topologies, storage-based failover for active-active hypervisor site protection, and enhancements for 4x greater in-system and remote replication throughput.

Enterprise Storage Advantage: Reduces migration effort by more than 90% compared to host migration approaches, lowers operational risks, continuously maintains application QoS and RPO/RTO with no exceptions.

HITACHI ACCELERATED FLASH

Rack-optimized flash module built specifically for the most demanding enterprise-class workloads. Innovative Hitachi-developed embedded flash memory controller technology includes native firmware optimization that enables increased multithreading, express I/O processing, and long flash module life.

Enterprise Storage Advantage: Delivers up to 4x performance, up to 48% lower price per gigabyte, extended durability and greater capacity compared to commodity solid state drives. Also increases application QoS, eliminates application contention issues and executes more than 99% of I/O requests with submillisecond response times.
AUTOMATED BLOCK AND FILE TIERING
Hitachi Dynamic Tiering (HDT) manages internal and external data, including multivendor and mainframe data. HDT’s pools place the right data in the right place at the right time and efficiently leverage high-performance flash storage. Hitachi Tiered Storage Manager controls the automated behavior of HDT with standard and custom policies and profiles. Intelligent file tiering and automated migration enable dynamic policy-based hierarchical storage management.


GREEN ENVIRONMENTALS, POWER AND SPACE SAVINGS
Compare to VSP: VSP G1000 series systems have small footprint, require 10% less power and provide and substantially more savings in space and power compared to competitive offerings.

Enterprise Storage Advantage: Improved power efficiency, reduced power costs and less powered required per terabyte.

FLEXIBLE DATA CENTER PLACEMENT
Controller and storage racks can be installed up to 100 meters apart from each other.

Enterprise Storage Advantage: Increase floor-space efficiency, adjust to data center hot spots and flexibly add disks and controllers. Today’s IT leaders want the security and performance of enterprise storage to meet their data processing needs. But without the right infrastructure, companies risk falling behind the competition. By using this checklist, you can gauge the readiness of your infrastructure for enterprise storage. Hitachi Consulting can identify enterprise storage opportunities, and evaluate and architect enterprise storage solutions.