Hitachi Virtual Storage Platform F Series delivers superior all–flash performance and guaranteed data availability.

Hitachi Virtual Storage Platform F Series

Accelerate More Applications Without Compromise

Organizations today need stay competitive. To do so, they must deploy new and existing applications on platforms that more effectively meet high-performance and low-latency demands of customers. At the same time, it is critical that their infrastructures deliver enterprise reliability and operational simplicity to run business without disruption. The difficulty is that all-flash solutions today force you to choose between performance and continuous availability. With Hitachi Virtual Storage Platform (VSP) F series you no longer have to compromise.

VSP F systems are built on legendary Hitachi reliability. They offer complete system redundancy, hot-swappable parts, outstanding data protection and nondisruptive updates to keep storage operations up and running at optimal performance. The industry's only 100% data availability guarantee is offered for all models. Powerful data recovery and protection tools allow for application-aware recovery, as well as simpler backup, restore, failover and consistency across copies, reducing business risk and downtime concerns.

Building upon Hitachi's extensive flash optimizations, six times more bandwidth than other industry leaders, and the highly resilient VSP architecture, the VSP F series delivers superior all-flash performance for business-critical applications and guarantees continuous data availability. High-performance network attached storage with deduplication nondisruptively reduces required storage capacity by up to 90% with the power to handle large, mixed-workload environments. Leveraging the proven family of Hitachi Storage Virtualization Operating System (SVOS) tools, VSP F also delivers a better operational experience. Automated application-specific provisioning and global data protection can be completed in seconds, reducing operational time by 29% or more.

To deliver sustained high performance of up to 1.4 million IOPS and two times or more effective capacity, Hitachi combines high-speed VSP controllers with high-density flash module drives (FMDs). New FMD DC2 drives use patented flash I/O management and specialized offload engines to maximize flash utilization and remove overhead from the system. This approach enables more of your transactions to be executed within sub-millisecond response. This optimization includes FMD-based compression that runs 10 times faster than other technologies, allowing a higher return on investment without impacting performance or durability.

In addition to delivering high performance and continuous availability, the VSP F series increases IT efficiency. An embedded version of Hitachi SVOS software makes management, service delivery and application-specific provisioning faster with resource-aware centralized infrastructure control based on requested service levels. With a central point of control, VSP F series also unifies block and file access, enabling organizations to consolidate workloads to further simplify management.

Included business-defined data protection software eliminates backup windows and accelerates recovery by reducing copy data, or data instances, with a simple, easy-to-use policy management and work-flow solution. Advanced data replication software is available to enable robust business-continuity solutions among multiple data centers. Included local replication software provides nondisruptive, host-independent, full-volume data replication and logical, point-in-time, protected copies of changed data blocks.

Scalable storage analytics enables long-term storage capacity and performance trend analysis. Standard reports provide quick views of the current operating environment and custom reporting capabilities let you modify them to your specific needs. You can quickly identify flash performance trends and optimize resources for improved application performance.

25

HITACHI VIRTUAL STORAGE PLATFORM F SERIES SPECIFICATIONS

	VSP F400	VSP F600	VSP F800
Performance	Up to 500,000 IOPS <1ms latency 11GB/s bandwidth	Up to 800,000 IOPS <1ms latency 12GB/s bandwidth	Up to 1,400,000 IOPS <1ms latency 24GB/s bandwidth
Cache	128GB	256GB	512GB
Connectivity	32 FC 8Gb/sec 16 FC 16Gb/sec 16 iSCSI 10GB/sec 16 iSCSI 10GBase-T	32 FC 8Gb/sec 16 FC 16Gb/sec 16 iSCSI 10GB/sec 16 iSCSI 10GBase-T	48 FC 8Gb/sec 24 FC 16Gb/sec 24 iSCSI 10GB/sec 24 iSCSI 10GBase-T
Configurations	Small with 8 flash modules and 1 spare		
	Medium with 16 flash modules and 1 spare		
	Large with 40 flash modules and 2 spares		
	Each is available with 1.6TB, 3.2TB, or 6.4TB flash modules		
Capacity Range*	From 7TB to 224TB raw flash capacity From 14TB to 448TB effective flash capacity		
Expansion	Add a single shelf of 8 flash modules or a dual shelf of 25 flash modules		
Included Software	Management console, snapshots and clones, replication management, analytics, multipathing, thin provisioning, storage system utilities		
Optional Software	Data-at-rest encryption, provisioning automation, synchronous and asynchronous replication, advanced analytics		

* All capacities are expressed in Base 2: 1MB = 1,048,576 bytes. Effective capacity does not include thin provisioning. Expected compression ratios can vary and depend on individual environments and data structures. Raw capacity does not include spares or parity drives.

◎Hitachi Data Systems