New-Gen OceanStor 2220 Hybrid Flash Storage System

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Huawei New-Gen OceanStor 2220 Hybrid Flash Storage System is designed for MSMEs, featuring convenient and efficient data infrastructure. It fully exploits the value of enterprise data, and helps enterprises go digital.

The system provides industry-leading functions, efficiency, reliability, and intelligent O&M. Supporting database OLTP/OLAP, server virtualization, VDI, and resource integration, it is an ideal choice for the government, finance, healthcare, education, energy, and manufacturing sectors. It can ensure business continuity and data resilience, maximizing the return on investment (ROI) and making it inclusive to all industries.

Product Features

Excellent Performance with Cost Effectiveness

Upgraded architecture delivering ultimate performance

The system features the multi-controller active-active (A-A) technology, a high-end Huawei storage technology. This allows a single LUN to be load balanced among multiple controllers, maximizing controller performance in any scenario and supporting business reliability. The flash-ready system architecture implements E2E data acceleration and frees up performance. The system guarantees stable and low-latency responses even if a large number of services are accessed, ensuring the ultimate performance of critical applications.

Data acceleration with ultra-fast experience

The system uses the built-in hot data acceleration algorithm — SmartAcceleration — to dynamically and adaptively adjust data layout. It also deploys the neural network multi-dimensional feature learning algorithm to detect cold and hot data globally, delivering a better data layout. This realizes efficient prefetch of potential hot data and 100% higher performance than conventional hybrid flash storage. With SmartAcceleration, the NL-SAS HDDs can be used to replace SAS HDDs to achieve higher performance at lower costs.

ROW architecture without compromising performance

The system adopts redirect-on-write (ROW) and multi-point-in-time technologies to build performance-uncompromised snapshots and clones. Snapshots can be created by creating pointers, with no need to copy data. The overall storage performance will not be affected if snapshots are activated on mass. What's more, the storage performance remains at a high level even when the data protection feature is enabled.

Cross-system integration reducing investment

The system deploys asynchronous replication, heterogeneous virtualization takeover, data tiering, and migration to converge legacy and new generations of storage systems (including high-end, mid-range, entry-level products). This ensures data flows freely without requiring additional investment. In the event of product replacement, if the legacy and new devices are deployed in the same cluster, data is automatically taken over by the new-generation storage systems, and no data migration is required.

Available, Reliable, and Resilient Data

Leading gateway-free SAN A-A solution (HyperMetro)

The system adopts the gateway-free A-A solution for SAN to reduce faulty nodes, simplify system deployment, and improve system reliability. In addition, the A-A solution implements load balancing A-A mirroring and non-disruptive cross-site failover, preventing core applications from breakdown. Furthermore, this solution can be upgraded to the geo-redundant 3DC DR solution without interruption to services, providing higher-level data protection.

Extensive data protection solutions

The Hyper series data protection software includes technologies such as A-A, snapshots, clones, remote replication, and others. They can satisfy users' data protection requirements in the local, remote, and multi-site systems and achieve 99.9999% availability, ensuring business continuity and data availability to the greatest extent.

Non-disruptive upgrade (NDU) without interruption to services

The system adopts the modular software architecture, meaning nearly 95% of the upgrades can be performed in the user mode within 1 second, with no need to restart controllers. This means that services will not be interrupted during the upgrade process.

Secure snapshots ensuring solid resilience of data backup

The system supports retention period setting for snapshots. Snapshot data within the retention period cannot be deleted.

Intelligent, Easy Use and O&M

AI-integration with intelligent prediction

The system provides Huawei's powerful AI prediction feature. It automatically predicts capacity expansion needs for the following year based on the customer's workload and performance/capacity increase trend, and it promptly notifies users of budget application and capacity expansion operations.

Behavioral learning supporting three-step deployment

The system features built-in self-learning function. It automatically orchestrates and sets parameters based on administrators' operation procedures in common configuration scenarios and Huawei's extensive best practices. This means a new service can be deployed in just three steps, largely reducing the deployment time for users.

Cloud-edge integration with enhanced O&M

The system integrates edge personalized intelligence and cloud general intelligence. It features a built-in intelligent hardware platform for incremental training and deep learning of service characteristics, improving customer experience. The DME IQ Intelligent Cloud O&M Platform collects statistics of more than 190,000 devices on the live network in real time and extracts common rules to enhance basic O&M capabilities.

Technical Specifications

Model	OceanStor 2220
Hardware Specifications	
System Cache (Dual-Controller)	32 GB
Maximum Cache (Dual-Controller; Expands with Controllers)	32 GB to 128 GB
Supported Storage Protocols	FC, iSCSI
Front-End Port Types	8/16/32 Gbps FC, 1/10/25 Gbps Ethernet
Back-End Port Types	SAS 3.0
Maximum Number of Hot-Swappable I/O Modules per Controller Enclosure	4
Maximum Number of Front-End Ports per Controller Enclosure	22
Disk Types	SSD, SAS, NL-SAS
Supported SCMs	Not supported
Software Specifications	
Supported RAID Levels	RAID 10*, RAID 5, RAID 6, and RAID-TP (tolerating simultaneous failure of 3 disks)
Value-Added Features	SmartAcceleration, SmartThin, SmartMigration, HyperSnap, SmartQoS, SmartMulti-Tenant, HyperMetro*, HyperReplication*, HyperClone*, SmartVirtualization*, HyperCDP*, HyperEncryption*, SmartCompression*
Storage Management Software	UltraPath, DeviceManager, BCManager, DME IQ
Physical Specifications	
Power Supply	100 V to 240 V AC ± 10%, 192 V to 288 V DC –38.4 V to –75 V DC (only supported by disk enclosures)
Dimensions (H x W x D)	2.5-inch controller enclosure: 86.1 mm × 447 mm × 410 mm 3.5-inch controller enclosure: 86.1 mm × 447 mm × 488 mm
	2.5-inch SAS disk enclosure: 86.1 mm × 447 mm × 410 mm 3.5-inch SAS disk enclosure: 175 mm × 447 mm × 488 mm
Weight (Excl. Disk Units)	2.5-inch controller enclosure: 16.4 kg 3.5-inch controller enclosure: 16.3 kg
	2.5-inch SAS disk enclosure: 13.4 kg 3.5-inch SAS disk enclosure: 26.5 kg
Operating Temperature	–60 m to +1800 m altitude: 5° C to 35° C (cabinet) or 40° C (enclosure) 1800 m to 3000 m altitude: The maximum temperature threshold decreases by 1° C for every altitude increase of 220 m
Operating Humidity	10% to 90% RH

*Contact Huawei sales staff if you need this specification.

To learn more about Huawei storage for distribution business, please contact your local Huawei office or visit the Huawei eKit website: http://ekit.huawei.com.

HUAWEI eKit App

HUAWEI eKit – Data Storage Mall

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