OceanStor

OceanStor 2600 V5 Intelligent Hybrid Flash Storage System





OceanStor 2600 V5 Intelligent Hybrid Flash Storage System

Huawei OceanStor 2600 V5 entry-level storage system is the next-generation intelligent hybrid flash storage designed for developing businesses and branches of large enterprises. The storage system comprises a flash-ready storage operating system, powerful next-generation hardware design, built-in virtualization platform, and intelligent management software to meet the storage requirements for database OLTP/OLAP and file sharing, and supports cloud migration of enterprise services. The storage system also takes the lead in terms of functions, efficiency, reliability, and intelligent O&M, making it an excellent option for developing businesses. What's more, it can be expanded to cover a range of scenarios in many industries, such as government, enterprises, energy, media, education, and healthcare. OceanStor 2600 V5 provides efficient and flexible backup and disaster recovery (DR) solutions to ensure excellent business continuity and data security and storage.

Product Highlights

Multiple-level Convergence

Reducing TCO for developing businesses

Powered by the latest OceanStor OS, OceanStor 2600 V5 provides a converged compute and storage resource pool for agile resource scheduling and free data mobility to help IT architectures evolve to the cloud architectures.

• Flash convergence: SSDs and HDDs are converged to deliver optimal performance from different types of media in mixed configurations. OceanStor 2600 V5 is supplemented by multiple SSD acceleration technologies (SSD cache and intelligent tiering) for blocks and files, and interoperates with Huawei all-flash of different types, levels, and generations for converged data, management, and O&M.

• SAN and NAS convergence: SAN and NAS are converged to provide elastic storage, improve storage resource utilization, and reduce the total cost of ownership (TCO). Underlying storage resource pools directly provide both SAN and NAS services, thereby shortening storage resource access paths and supercharging performance and functionality of the two services.



• **Convergence of storage resource pools:** OceanStor 2600 V5 is equipped with a built-in heterogeneous virtualization function to take over and integrate storage arrays of other mainstream vendors into a unified resource pool. This eliminates data silos and achieves unified resource management for automated service orchestration. In addition, data can be automatically migrated from third-party storage to Huawei storage without interrupting services. On average, the Huawei automatic migration tool accelerates migration by 60%.

• **Convergence of multiple data centers:** The gateway-free active-active solution for both SAN and NAS guarantees the service continuity across data centers. The A-A deployment can be smoothly upgraded to the geo-redundant 3DC layout to achieve optimal service continuity. Users can also deploy 64:1 of hierarchical DC model for the purpose of centralized DR.

• **Cloud convergence:** The storage hybrid cloud solution implements data disaster recovery between private cloud and public cloud by resource collaboration and data flowing on and off the clouds, achieving smooth migration of enterprise storage services to the cloud.

• **Convergence of applications and storage:** OceanStor 2600 V5 supports SmartContainer and provides a built-in virtualization platform to fully utilize the computing resources of storage controllers. Users can directly deploy applications in storage systems for full computing and storage convergence.

Excellent Performance

Meeting performance targets for developing businesses

• Flash-oriented storage architecture: OceanStor 2600 V5 employs a flash-oriented system architecture where flash storage is improved by multi-core optimization, cache adaptive algorithm, and intelligent I/O scheduling technologies. This means a stable I/O response time of under 1 ms in the event of massive access requests, ensuring optimal performance of critical applications.

• **Leading flash-oriented specifications:** OceanStor 2600 V5 supports industry-leading host interfaces, such as 32 Gbps FC/25 Gbps Ethernet, and provides 12 Gbps SAS 3.0 high-speed disk ports, making it essential for high-performance scenarios.



• **All-around efficiency boost:** The Smart series comprises value-added functions, such as SSD cache, block and file-level tiering, Quality of Service (QoS), cache partitioning, thin provisioning, file quota management, that are designed to improve application efficiency.

Solid Reliability

OceanStor

99.9999% availability at product and solution levels

• Load balancing among multiple controllers: OceanStor 2600 V5 enables load balancing among controllers and eliminates single points of failure, ensuring high system availability and stable service running.

• **Unique rapid DR technology:** Innovative block-level virtualization reduces data reconstruction of 1 TB data from 10 hours to 30 minutes. Compared with the traditional RAID model, the innovative technology reduces data risks from disk failures by 95%.

• Extensive data protection solutions: The Hyper series of data protection software includes snapshot, clone, all-in-one backup, remote replication, active-active, and other data protection technologies that combine to protect user data locally, remotely, inside systems, and across different regions. The software helps the system achieve 99.9999% data availability, maximizing business continuity.

• Active-active protection for both SAN and NAS: The A-A deployment for both SAN and NAS ensures high availability of databases and file services. The gateway-free HyperMetro solution enables load balancing of active-active mirrors and non-disruptive cross-site takeover, ensuring zero data loss of core applications and zero service interruption. In addition, the gateway-free design makes it cheaper and easier-to-deploy than other mainstream alternatives. A single set of devices can be smoothly upgraded to active-active mode, and can be further expanded to the 3DC layout.

Intelligent Support

Al-powered management

• Intelligent O&M: 24/7 cloud-based proactive monitoring is available, covering remote maintenance, minute-level fault detection, and automatic fault reporting and location, inspection, and trouble ticket creation. Intelligent fault diagnosis enables visualized paths between hosts and storage systems and performance association analysis.

• Intelligent prediction and evaluation: Intelligent risk prediction identifies system risks in advance based on the analysis of disks, configurations, capacity, performance, and other aspects. Intelligent service planning of system performance and capacity is based on host load analysis and system capacity prediction.



Product Specifications

OceanStor

Model	OceanStor 2600 V5
Controller Enclosure Specifications	
Processor	Multi-core processors
System cache	32 GB to 512 GB
Maximum number of controllers	8
Supported storage protocols	FC, iSCSI, NFS, CIFS, HTTP, FTP
Front-end ports	8, 16, or 32 Gbps FC 1, 10, or 25 Gbps Ethernet
Back-end ports	SAS 3.0
Maximum number of hot- swappable I/O modules (per controller)	2
Maximum number of disks (dual controllers)	500
Disk type	SSD, SAS, NL-SAS
Supported RAID	RAID 0, 1, 3, 5, 6, 10, 50
Key Software Features	
Data protection software	HyperSnap
	HyperClone
	HyperCopy HyperMirror
	HyperMetro
	HyperReplication
	HyperLock
	HyperVault
Mission-critical business protection	SmartEncryption
	SmartQoS
	SmartPartition SmartCache
	Smartcathe



Product Specifications

Model	OceanStor 2600 V5
Key Software Features	
Resource efficiency improvement software	SmartMigrationSmartVirtualizationSmartMulti-TenantSmartQuotaSmartDedupeSmartCompressionSmartThinSmartTierSmartMotionSmartErase
Storage management software	UltraPath BCManager DeviceManager eSight eService
Virtualization Features	
Heterogeneous virtualization	Consolidates storage resources of mainstream products for unified management and allocation of storage resources
Built-in virtualization	Provides a built-in virtualization platform to converge applications using OSs like CentOS and EulerOS
Block-level virtualization	Enables balanced data distribution and quick fault recovery
Physical Specifications	
Power supply	AC: 100 V to 240 V (adaptive to high-voltage DC)
Dimensions (H x W x D)	2.5" controller enclosure: 86.1 mm x 447 mm x 520 mm 3.5" controller enclosure: 86.1 mm x 447 mm x 600 mm 2 U disk enclosure: 86.1 mm x 447 mm x 440 mm 4 U disk enclosure: 175 mm x 447 mm x 490 mm
Weight	2 U controller enclosure: ≤ 24 kg 2 U disk enclosure: ≤ 20 kg 4 U disk enclosure: ≤ 40 kg
Operating temperature	5°C to 40°C (altitude: < 1,800 m), 5°C to 35°C (altitude: 1,800 m to 3,000 m)
Operating humidity (RH)	5% to 90%

To learn more about Huawei storage, please contact the local office or visit Huawei Enterprise website http://e.huawei.com.



Huawei Enterprise APP





Copyright © Huawei Technologies Co., Ltd. 2021. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

Trademark Notice

We , HUAWEI , and We are trademarks or registered trademarks of Huawei Technologies Co., Ltd. Other trademarks, product, service and company names mentioned are the property of their respective owners.

NO WARRANTY

THE CONTENTS OF THIS MANUAL ARE PROVIDED "AS IS". EXCEPT AS REQUIRED BY APPLICABLE LAWS, NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE MADE IN RELATION TO THE ACCURACY, RELIABILITY OR CONTENTS OF THIS MANUAL.

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO CASE SHALL HUAWEI TECHNOLOGIES CO., LTD BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES, OR LOST PROFITS, BUSINESS, REVENUE, DATA, GOODWILL OR ANTICIPATED SAVINGS ARISING OUT OF OR IN CONNECTION WITH THE USE OF THIS MANUAL. HUAWEI TECHNOLOGIES CO., LTD. Bantian, Longgang District Shenzhen518129, P. R. China Tel:+86-755-28780808

www.huawei.com