



Simple, efficient,  
and reliable

With the growth of Internet and mobile client services, new enterprise services demand quick response and flexible expansion from IT departments. Huawei FusionCube 1000 (Hypervisor) adopts an open, distributed architecture, focusing on virtualization and VDI scenarios. It provides a simple, efficient, and reliable solution to help enterprises cope with service challenges and accelerate digital transformation.

## Features

### Simple

The product is integrated before shipment, and can be deployed within minimum 30 minutes. After minimum three nodes are configured, the one-click installation tool allows you to deploy 8 nodes per hour. A unified management platform integrates virtualization, storage, and network resources. Northbound interfaces support integration into third-party products.

FusionCube Builder, an intelligent installation software, supports such as what you draw is what you get (WYDIWYG) and other functions, simplifying user operations.

FusionCube Vision, an intelligent management software, provides one-stop O&M and management of multiple sites, and supports one-click container push, application delivery, fault prediction, and log collection.

### Efficient

**High performance:** Huawei has accumulated years of experience in performance optimization algorithms, including CPU multi-core optimization, intelligent cache prefetch, and intelligent I/O scheduling algorithms, ensuring low latency, rapid response, and stability of mission-critical services. The DPU takes over storage system overheads, freeing up CPU computing power and improving computing power density by 20%.

**High available capacity:** The industry-leading EC, deduplication, and compression technologies greatly improve the available capacity. The highest 22+2 ratio brings the storage utilization rate to 91%.

**High intelligence:** Intelligent deduplication, compression, and reconstruction prioritize key services on the live network according to system workloads.

### Reliable

Intelligent detection algorithms predict faults and system health status, and handle system risks in advance.

Parallel data reconstruction (15 minutes/TB) ensures rapid data recovery.

Adopts industry-leading, cross-cluster active-active at the storage layer and cross-cluster HA at the virtualization layer.

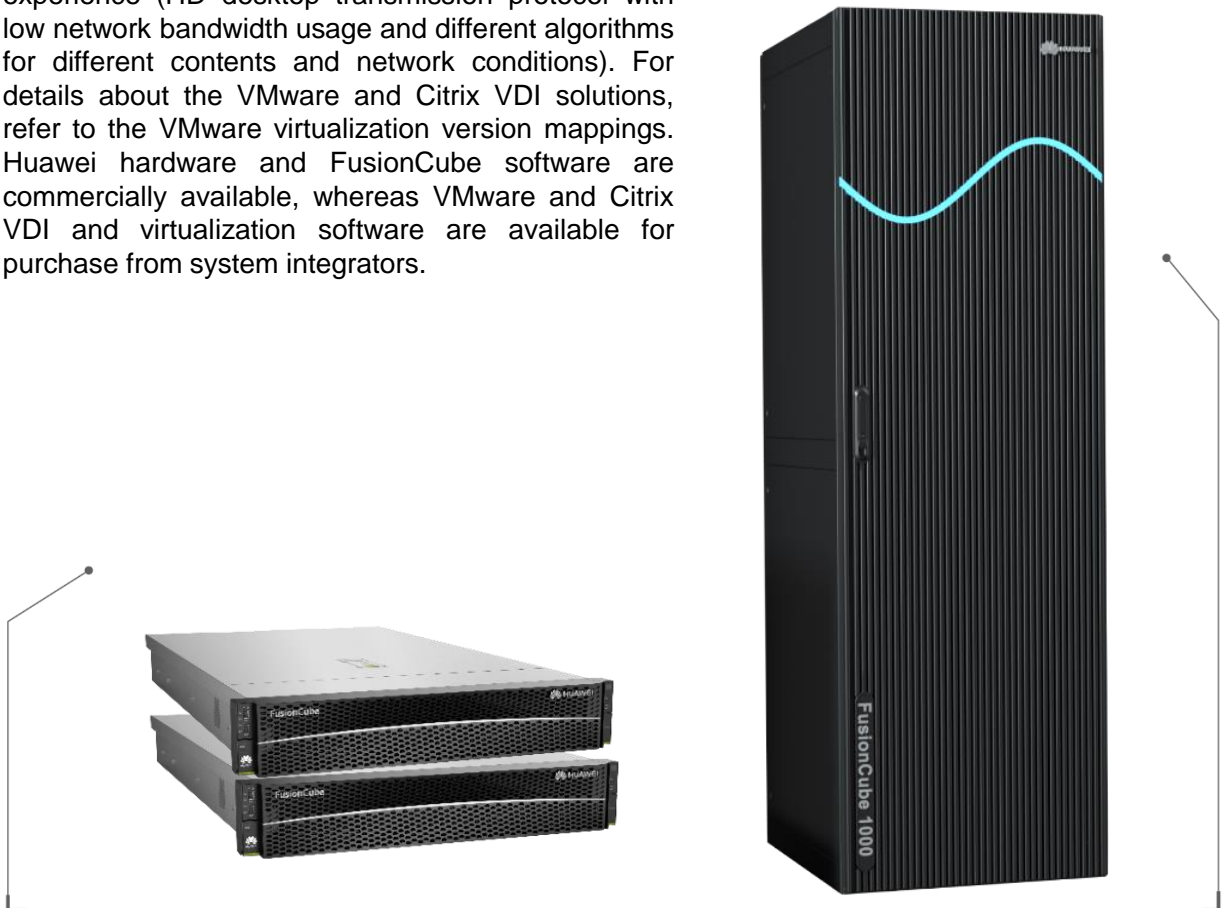
Synchronous/Asynchronous replication and active-active DR ensure business continuity.

## Application Scenarios

### FusionCube 1000 (Hypervisor) for virtualization and VDI

**Virtualization:** With Huawei FusionCompute and VMware platforms, FusionCube 1000 (Hypervisor) converges compute and storage resources in a simple, efficient, and reliable virtualization environment. The product is integrated before delivery, and can be installed using the unified installation tool, for quick service rollout and flexible expansion. It features unified resource management, one-click capacity expansion, health check, and log collection to simplify O&M. Northbound interfaces allow integration into third-party products, interconnection with virtualization management platforms such as Fit2Cloud, and Rancher container orchestration. In addition, it supports multi-copy and EC technologies. Compared with the traditional multi-copy technology, EC greatly improves the available capacity without compromising performance and reliability. Intelligent deduplication and compression process data based on system workloads, enabling users to obtain even more available capacity.

**VDI:** FusionCube 1000 (Hypervisor) supports Huawei FusionAccess VDI, VMware VDI, and Citrix VDI. Huawei FusionAccess VDI supports cloud OA and cloud workstations with smooth user experience. The proprietary VDI features E2E security and reliability (data stored in clouds, various resources and peripherals under control, and multiple access policies available), agility and efficiency (convenient, self-service O&M, and one-click tools), and excellent user experience (HD desktop transmission protocol with low network bandwidth usage and different algorithms for different contents and network conditions). For details about the VMware and Citrix VDI solutions, refer to the VMware virtualization version mappings. Huawei hardware and FusionCube software are commercially available, whereas VMware and Citrix VDI and virtualization software are available for purchase from system integrators.



## Specifications

FusionCube 1000 (Hypervisor)	
Network	10GE, 25GE
Storage architecture	Distributed storage
Storage media	HDD, SSD
Cache media	SAS SSD, NVMe SSD
Server type	Rack server, 2288H V5
Storage efficiency	EC, deduplication and compression
Data redundancy protection mechanism	2- and 3-copy, EC (M + N, M ≤ 24, N = 2 or 3 or 4) )
Reliability	Asynchronous replication, synchronous replication, active-active, EC reduction upon a fault (EC redundancy), E2E DIF-based consistency check (online verification, background verification, and zero-impact self-healing)
Management software	FusionCube Vision
Maximum number of nodes	1024
Capacity expansion	By server and primary storage media
Capacity reduction	By server

Key Software Features	
FusionCube Vision	VM management: VM creation, template management, and migration
	Storage management: disks and storage pools
	O&M monitoring: status, alarms, and performance monitoring; system sub-health check
	Performance monitoring: IOPS, I/O bandwidth, I/O latency, CPU usage, memory usage, and NIC rate
	Log auditing: security, operation, and system logs
	System O&M: one-click capacity expansion, log collection, and health check
	System log collection: collects logs of system servers, system OSs, distributed storage, management systems. The maximum interval for log collection is two days, and logs of a maximum of five nodes can be collected concurrently.
	System upgrade: non-disruptive upgrade of the FusionCube Vision management system
	Management data backup: periodically backs up management data of distributed storage and management systems, ensuring rapid recovery in the event of a system failure.
System health check: checks health of servers, system OSs, distributed storage, and management systems, identifies system risks and exceptions, and supports scheduled system inspection.	

To learn more information about Huawei storage, contact your local Huawei office or go to the Huawei Enterprise website <http://e.huawei.com>.



Huawei Data Storage  
Official Website





Data Storage and  
Intelligent Vision  
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Huawei Technologies Co., Ltd.  
Huawei Industrial Base, Bantian, Longgang, Shenzhen  
Tel: +86 755 28780808  
Postal code: 518129

[www.huawei.com](http://www.huawei.com)