With the development of Internet and mobile services, user services increase rapidly, posing requirements on quick response, flexible expansion, resilience, and efficiency for IT departments. CloudVault 2000 complies with open distributed architecture standards and focuses on virtualization and desktop cloud scenarios, facilitating users build simplified, efficient, and reliableICT infrastructure and further driving the digital transformation of user services.

Product Features

Simplified

- Pre-integrated before delivery enables deployment within 30 minutes. At least two nodes are configured. The one-click installation tool can deploy eight nodes per hour.
- A unified approach is used to manage compute, storage, and network resources, as well as virtual machines (VMs) and databases. Northbound interfaces are provided to support integration.
- The intelligent installation software CloudVault Builder supports functions such as what you draw is what youget, simplifying user operations.
- The intelligent management software CloudVault MetaVision provides one-stop O&M management for multiple sites and supports functions such as virtualization resource management, container management, application delivery, fault prediction, sub-health management, and one-click log collection.

Efficient

- High performance: Multi-core CPU optimization, intelligent cache tiering prefetch, and intelligent I/O scheduling algorithm ensure low latency, fast response, and stable performance of mission-critical services. The high-performance CPUs offload storage system overheads. A Single CPU Supports up to 28 Computing cores. releasing CPU computing power and improving computing density by 20%.
- Optimal capacity: The industry-leading elastic erasure coding (EC) technology supports automaticEC fragment reduction, achieving an EC ratio of up to 22+2 and up to 91% storage utilization.
- High intelligence: Smart deduplication and compression and intelligent reconstruction guarantee optimalperformance of mission-critical services based on system loads.

Reliable

- The fully redundant architecture and intelligent detection algorithm support fault prediction, system health status prediction, and system risk control and preprocessing in advance.
- Parallel data reconstruction is performed after a fault occurs, ensuring fast recovery. The construction speed reaches 1 TB/15 min.
- Node- and cabinet-level protection and E2E DIF data verification ensure data resilience.
- Cross-cluster active-active at the storage layer and cross-cluster HA at the virtualization layer deliver industry-leading reliability. Synchronous and asynchronous replication and active-active DR capabilities ensures service continuity.

VRM BVMS iSCSI RAID RAID

Typical Application Scenarios

CloudVault 2000 for Virtualization and Desktop Cloud Scenarios

CloudVault 2000 supports virtualization platforms such as Fusion Compute and integrates compute and storage resources to establish a simplified, efficient, and reliable virtualization environment. It provides the option for pre-installation, pre-integration, or a unified installation tool, facilitating quick service rollout and flexible expansion. Streamlined O&M are achieved through unified resource management, one-click system capacity expansion, and simplified health check and log collection processes. CloudVault 2000 also provides northbound interfaces to integrate and interconnect with third-party virtualization management platforms, while also supporting container orchestration. It supports both multi-copy and ECtechnologies. However, compared with the traditional multi-copy technology, EC technology can deliver increased available capacity while maintaining equivalent performance and reliability. Moreover, CloudVault 2000 supports smart deduplication and compression to intelligently deduplicate and compress user data based on the system loads, further improving the available capacity.

The Fusion Access desktop cloud solution is designed for desktop cloud scenarios. Fusion Access desktop highlights security and reliability, ensuring data is not stored locally and allowing control over resources and peripherals through multiple access policies and an end-to-end security design. It also showcases agility and efficiency with convenient and self-service O&M, along with one-click tools. Additionally, it offers an excellent user experience through an HD desktop transmission protocol, diversealgorithms for different content and network conditions, and minimal network bandwidth usage. The Fusion Access desktop cloud solution is optimal for cloud office scenarios and cloud workstations.

CloudVault

Key Specifications

Cloud Vault 2000 Hardware Specifications	
Cabinet Height	2 U
Processor	High-performance CPUs (Dual Processor)
Number of Disk Slots per Node	12/25
Number of DIMM Slots per Node	32
DIMM Specifications	64 GB and above
Main Storage Disk Type	SATA HDD/SAS HDD/SAS SSD
Max. Raw Capacity per Node	120 TB and above
Network Type	25GE, 10GE, GE TCP/IP, 16G FC,100G IB
Power Supply	900 W/2000 W AC PSU (input: 100–240 V AC or 240 V DC), Supports hot swap (Dual)
Fan	Four hot-swappable counter rotating fan modules, supporting *N*+1 redundancy
System Capacity Expansion	Server capacity expansion and primary storage media capacity expansion
Management Software Features	
CloudVault MetaVision	VM management: creation, templates, and migration of VMs
	Storage management: disk and storage pool management
	Monitoring alarms: status, alarm, and performance monitoring, and system sub-health check
	Performance monitoring: IOPS, I/O bandwidth, I/O latency, CPU usage, memory usage, and NIC rate
	Log auditing: operation, system, and security logs
	System O&M: one-click capacity expansion, log collection, and health check
	System log collection: unified collection of logs generated from system servers, system OSs, scale-out storage, and management systems; up to two days of log collection intervals and a maximum of five-node concurrent collection
	System upgrade: online upgrade of the CloudVault MetaVision management system
	Management data backup: periodic management data backup of the scale-out storage and management systems, ensuring timely recovery in the event of system failures
	Health check: covering servers, system OS, scale-out storage, and management system to identify system risks and exceptions; periodic system inspection

**CloudVault – A G7 IT Product