

Hyperconverged Edge-to-Cloud File Services

Edge Computing Unified with Cloud File Storage,
Access, and Collaboration

Hyperconvergence and Multi-Cloud Data Management in a Single Platform

Hyperconvergence on the Rise in the Enterprise

Hyperconvergence enables organizations to consolidate silos of edge infrastructure into a single operating environment. Enterprises derive significant efficiency, performance, and cost benefits from consolidating application workloads as well as hardware silos of compute, network and storage. It's no surprise then that as enterprises shift storage investments from traditional architectures to software-defined platforms that hyperconverged infrastructure is one of the largest spending segments in IT today.

As enterprises converge infrastructure at the enterprise edge, so too are they continuing to migrate data and workloads to the cloud. As part of the shift toward software-defined platforms, they are re-architecting how their users store, access, and collaborate on unstructured data. CTERA provides a secure, hyperconverged solution that enables these organizations to enjoy dramatic IT infrastructure consolidation, as well as the simplification of a wide range of enterprise file services.

The CTERA X Series Edge Filer

The CTERA X Series delivers a fast, secure, and efficient hyperconverged platform to consolidate a wide range of enterprise IT infrastructure and to power enterprise file services from edge to cloud. The X Series integrates HPE SimpliVity hyperconverged technology with CTERA's global file system, providing all-in-one edge storage and compute, with local high availability and multi-site collaboration.

The CTERA X Series enables dramatic improvements to the management, protection, and performance of virtualized workloads for server, storage, networking, and compute services. The appliance also includes powerful cloud storage gateway technology that enables organizations to modernize file storage, collaboration, and disaster recovery in an all-in-one solution.

The powerful and comprehensive solution allows enterprises to drive operational efficiencies and resiliency in an integrated all-flash system that offers triple redundancy and in-line deduplication, compression, and optimization. Enterprises can centrally manage an unlimited number of X Series appliances across distributed locations and leverage their choice of private or virtual private cloud storage infrastructure.

Built for Secure and Distributed Enterprises

CTERA's data management middleware seamlessly integrates with any virtual private or datacenter environment to provide organizations with complete data privacy and control over residency and firewall perimeter. CTERA X Series appliances connect to the middleware to create a fully scalable global file system that supports multi-cloud tiering and enables users in any location to enjoy high-performance access to a consistent set of file data.

Because file data, metadata, encryption keys, and authentication processes are managed by the customer privately, there is no data exposure to a third party, and sensitive files are kept private. All files are protected at rest and in-transit using military-grade encryption methods. The solution delivers centralized management that enables IT admins to view an unlimited number of users, events, and devices in a single console.

Multi-Site Collaboration and Additional Features

A global file system empowers user collaboration in new and powerful ways. The X Series appliances offer built-in file collaboration services that deliver simple, fine-grained controls for internal and external file sharing that guarantee information security without sacrificing ease of use. Colleagues in separate offices across distant regions can work together on files and drive new levels of productivity in the organization.

The CTERA X Series also allows organizations to ingest local file data and tier it to lower-cost object or cloud storage, while frequently accessed data is stored on high-performance local flash drives. As well, enterprise can leverage the X Series's managed VMware hypervisor to run multiple tier-1 applications at the edge.

Mitigating Performance Challenges

Cloud storage performance challenges are based in the immutable laws of physics: data movement from edge to cloud (or data center) will result in latency (how big or small is dependent on a wide variety of factors, including network performance, file size, etc.). CTERA mitigates cloud performance challenges with a proprietary WAN-optimized protocol that reduces bandwidth through compressing and globally deduplicating file data at the edge. The CTERA X Series offers high local data efficiency as well, with hardware-assisted deduplication and compression. Additionally, the X Series delivers superior performance with an all-flash system with up to 46TB of local storage (raw, before deduplication), 192GB memory and 10Gbps Ethernet.

Powering the New Era of Hyperconverged File Services

The CTERA X Series provides organizations with a powerful way to consolidate traditional IT infrastructure and modernize how users, store, access, collaborate, and protect files. By unifying edge computing with secure cloud file services, the CTERA X Series facilitates next-generation hyperconvergence initiatives with no impact on data privacy or performance.

ROBO Architecture for CTERA Hyperconvergence Solution

