Flexible, Scale-Out Storage for Massive Data Growth

Data explosion is increasing the cost, complexity and management of data within enterprises. Software-defined storage (SDS) addresses many of these challenges by separating the storage hardware from the software, enabling efficient use of storage resources. Agile and scalable SDS solutions reduce complexity, improve performance and scalability and increase ease of use. FUJITSU Storage ETERNUS CD10000 reference architecture, based on SUSE Enterprise Storage, offers an easy path to adopt SDS, enabling you to cope with exponential data growth—even when mountains of data reach breath-taking heights.

**FUJITSU Storage ETERNUS CD10000 Reference Architecture at a Glance:**
- Scalable capacity and performance
- Ceph-based architecture
- Zero downtime

**Products:**
- SUSE Enterprise Storage

**FUJitsu Reference Architecture**
FUJITSU Storage ETERNUS CD10000 RA enables your organization to manage extreme data growth, with ease. This hyperscale, software-defined reference architecture is designed for all environments with ambitious online data demands. The architecture integrates open source Ceph software with enterprise-class service support from SUSE® to fully benefit from open standards. ETERNUS CD 10000 reference architecture delivers compelling new economics for organizations where online data volumes are exploding—such as the cloud, telco service providers, financial, media or business analytics companies.

- **Open standards at enterprise-class service levels**
  The storage software is based on the Ceph enterprise open source platform and includes openATTIC, an open source management and monitoring system for the Ceph distributed storage system. This offers unsuppressed out-of-the-box administration functionality with the included Ceph Dashboard enabling IT organizations to benefit from open standards without implementation and operational risks.
- **Unlimited scalability of capacity and performance**
  ETERNUS CD10000 scales capacity and performance linearly through the addition of storage nodes.
- **Zero downtime architecture**
  Data copies are distributed automatically between disks and nodes to ensure full redundancy. The architecture is designed to be self-healing and self-optimizing, offering maximum resiliency to prevent outages.
- **Immortal system**
  Extremely long lifecycle: online technology refreshes reduce migration costs. The architecture allows for the easy addition, exchange or upgrade of new storage nodes without any downtime.
SUSE Enterprise Storage

The SUSE Enterprise Storage solution from SUSE enables IT teams to transform their enterprise storage infrastructure to deliver a unified, highly scalable storage solution that is cost-efficient and able to seamlessly adapt to changing business and data demands. As an intelligent software-defined storage solution, it delivers a self-healing and self-managed distributed storage cluster that is designed to scale from hundreds of terabytes to petabytes and beyond.

SUSE Enterprise Storage leverages industry standard server and storage building blocks, providing a cost-efficient infrastructure and unlimited scalability to meet your business demands, with no vendor lock-in. It also improves efficiency and automatically optimizes operations with intelligent, self-healing, self-managing distributed storage, enabling your organization to support more capacity per storage administrator and spend more time focused on delivering future innovations to the business.

Highly Scalable and Resilient

SUSE Enterprise Storage delivers a single, unified software-defined storage cluster that provides applications with object block and file system storage. It is designed with no single points of failure to maximize system resiliency and unlimited scalability—from hundreds of terabytes to petabytes and beyond. SUSE Enterprise Storage provides all of the storage services expected of an enterprise-grade storage solution, making it the ideal choice for most storage use cases.

Reduced IT Costs

Traditional storage solutions are expensive to scale in capacity or performance. SUSE Enterprise Storage helps to keep CAPEX costs down by leveraging industry standard, off-the-shelf hardware. It helps to reduce IT operational expense with a single tool for managing a storage cluster for your heterogeneous server environment. SUSE Enterprise Storage automatically rebalances data placement, eliminating manual intervention and helping to optimize your infrastructure without increasing your IT staff.

Seamlessly Adapt to Changing Demands

SUSE Enterprise Storage enables IT teams to be highly responsive to emerging business and data needs. This intelligent solution is self-managed and self-healing to optimize system performance. SUSE Enterprise Storage enables you to easily provision and seamlessly deliver additional storage without disruption. It provides maximum flexibility by using off-the-shelf commodity hardware that you can re-purpose as business priorities change, which also means no more forklift upgrades. In addition, because the solution is open source, you never have to worry about vendor lock-in.

Key Features

SUSE Enterprise Storage is built on open source, Ceph technology, which offers:

- **Scalable**: Designed as a distributed storage cluster to provide unlimited scalability, from hundreds of terabytes to petabytes and beyond.
- **Easy to manage**: Self-healing and self-managed, optimizing performance.
- **Unified Storage**: Supports object, block and file storage within a single cluster.
- **Enterprise Grade**: Highly redundant and designed with no single point of failure, maximizing system resiliency and availability.

Conclusion

ETERNUS CD10000 RA is based on open standards. It is designed to scale virtually without limits and offers the freedom to build your own infrastructure stack. Fujitsu and SUSE are here to support you through every phase of building your tailored software defined storage stack.

Learn more about Fujitsu and SUSE joint offerings, at suse.com/partners/alliance/fujitsu/. You can also read more about Fujitsu ETERNUS Business-centric Storage, at business-datacenter.global.fujitsu.com/business-centric-storage#hyperscale.