With the new IT we changed the way we collaborate and share research information, not only in the state of Rhineland-Palatinate, but also in our international scientific activities. Fujitsu’s ETERNUS CD10000 hyperscale storage system contributes to our vision of IT structures, serving the needs of our fast growing research capabilities.”

PROF. DR.-ING. ANDRÉ BRINKMANN, HEAD OF THE DATA PROCESSING CENTER JOHANNES GUTENBERG UNIVERSITY - MAINZ, GERMANY

INTRODUCTION
Organizations today are grappling with exponential data growth. The amount of data required to support current and new business functions has made dealing with cost, complexity, and management more difficult. Software-defined storage (SDS) addresses these challenges by separating the storage hardware from the software. With SDS, you can increase capacity, match performance to meet evolving demands, and control costs.

Red Hat and Fujitsu offer customers a low-risk path to SDS. Red Hat® Ceph® Storage combines SDS software from the open source community with a monitoring dashboard, easy-to-use deployment tools, and Red Hat support. FUJITSU ETERNUS CD10000 Reference Architecture (ETERNUS CD10000 RA) provides the guidance to implement Red Hat Ceph Storage on FUJITSU servers.

FUJITSU REFERENCE ARCHITECTURE
The ETERNUS CD10000 RA is based on software-defined and hyper-scale design principles. It provides a template for a scale-out architecture that enables customers to start with a capacity of a few terabytes and allows it to scale up to 50 petabytes or more by adding storage nodes. The reference architecture offers customers an option to create a hyperscale stack tailored to their specific requirements without any storage hardware vendor lock-in. It combines server technology from Fujitsu with Red Hat Ceph Storage open source storage software, along with an optional administration console from Red Hat.

Figure 1. Fujitsu ETERNUS CD10000 Reference Architecture

1 http://docs.ts.fujitsu.com/dl.aspx?id=8d5d50d0-54c9-49f9-ba2f-3501947be692
RED HAT CEPH STORAGE
Red Hat Ceph Storage is a self-healing, self-managing platform with no single point of failure, that significantly lowers the cost of storing enterprise data, and helps organizations manage exponential data growth. Red Hat Ceph Storage provides a unified storage platform for web-scale object stores, and supports block, object, and file storage on industry servers. Red Hat Ceph Storage is tightly integrated with Red Hat OpenStack Platform as well as the OpenStack director tool for installation, upgrades, and even hyperconverged deployment of storage and compute on the same hardware. Red Hat Ceph Storage scales the way Red Hat OpenStack Platform does—out, not up—and its extensible architecture allows it to integrate more tightly with Red Hat OpenStack Platform than traditional, proprietary solutions.

FUJITSU AND RED HAT STRATEGIC ALIGNMENT
Fujitsu, a Red Hat Global Alliance Partner, works with Red Hat to jointly serve global customers. The Fujitsu Reference Architecture for Red Hat Ceph Storage allows customers to choose Fujitsu industry-standard server hardware for storage. Fujitsu provides design support and implementation services that helps organizations to deploy more quickly.

CONCLUSION
ETERNUS CD10000 RA is based on open standards, is designed to scale virtually without limits, and offers you the freedom to build your own infrastructure stack. Fujitsu supports you through every phase of building your tailored software-defined storage stack that offers these benefits:

- **Scalability.** Start small and grow as you go based on validated Fujitsu reference architectures providing a proven foundation.
- **Time to value.** Fujitsu reduces deployment risk and shortens time to production with optional deployment services.
- **Choice.** Red Hat Ceph Storage is software defined storage that decouples hardware from the software and frees you from vendor lock-in.
- **Cost efficiency.** SDS allows you to adjust capacity and performance independently on industry-standard servers.

LEARN MORE
Learn more about Fujitsu and Red Hat joint offerings at [https://fujitsu.redhat-partner.com/resources](https://fujitsu.redhat-partner.com/resources).
You can also read more about Fujitsu ETERNUS Business-centric Storage at [https://business-datacenter.global.fujitsu.com/business-centric-storage#hyperscale](https://business-datacenter.global.fujitsu.com/business-centric-storage#hyperscale).

ABOUT FUJITSU
Fujitsu is the leading Japanese information and communication technology (ICT) company, offering a full range of technology products, solutions, and services. Approximately 140,000 Fujitsu people support customers in more than 100 countries. Fujitsu uses their experience and the power of ICT to shape the future of society with their customers.