Kanton Basel-Stadt

"We consider Fujitsu a highly competent and fair technology partner whose storage solutions are very safe and reliable. Our collaboration with Fujitsu has been professional and partner-ship-based."

Daniele Basile
Manager of Data Center Services
ZID Basel-Stadt

The ZID ensures the high availability of its business-critical data with ETERNUS CS800 data protection appliances in three separate data centers.

At a glance

Country: Switzerland
Industry: Public administration
Founded: 1996
Website: www.zid.bs.ch

Challenge

The ZID must back up a daily data volume of approximately 100 terabytes. In the past, tape robots with upstream staging servers have been used for this purpose. To reduce the amount of work and the complexity of the backup processes, the outdated tape backup solution was replaced with a modern disk-based system.

Solution

The ZID uses three FUJITSU ETERNUS CS800 data protection appliances for storing the backup data. Two systems are located in the two active data centers in the Basel region. The third appliance was installed at the disaster recovery location near Bern and is connected to Basel via a WAN.

Benefit

- Maximum reliability and availability of systems and data
- Powerful and reliable backup to disk
- Reduced complexity of backup processes
- Seamless integration with Veritas NetBackup software
- Lossless data compaction by a factor of 12 through integrated storage-based deduplication

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Customer

The Zentrale Informatikdienste (ZID; Central IT Services) of the canton of Basel-Stadt supplies basic IT services to the cantonal administration. As a business enabler, the ZID supports the use of modern digitization technologies with its professional IT services. The service portfolio consists primarily of IT workplace and mobile services, e-government services, infrastructure services and specialized cantonal applications. At the organizational level, the ZID is divided into the three departments "IT Operations", "IT Solutions" and "IT Management".

Products and services

- 3 x ETERNUS CS800 data protection appliances, each with 8 x 36TB Shelf
- SLAs with 4-hour response time and 24/7 support

Replication of data at three locations

The reliable daily backup of the entire data volume is one of the primary tasks of the ZID to ensure basic IT services for the canton of Basel-Stadt. Data has been growing rapidly and steadily, so that the volume of all stored backup generations has now reached approximately two petabytes. "Our customers expect a maximum level of security and availability for the data. In addition, we must also ensure the high-performance reading and writing of data," explains Daniele Basile, Manager of Data Center Services at the ZID. In the case of disruptions or failures, the operational systems must be restarted reliably, promptly and without data losses. To this end, the stored data is kept at three locations via the storage-based replication of the ETERNUS CS800 units. The two operational data centers in the Basel region form a cluster in which the backed-up data is replicated. To ensure that the data is retained even in the case of a natural disaster, it is continuously copied to the disaster recovery location in Bern, which is located 80 km from Basel.

In the past, the ZID used two tape robots with upstream staging servers for backups in the data centers. But the tape backup processes were very time-consuming, complex and therefore cost-intensive. "We wanted to replace the cumbersome tape backup system with a modern method. Therefore, we made the decision to invest in a disk-based system," remembers Daniele Basile. An important requirement was that all three data centers could be consistently integrated into the storage concept. In addition, the solution had to be able to manage the data volume of two petabytes per location and to quickly restore all of the operational data if required. Finally, the new hardware appliances had to be seamlessly connected to the backup software Veritas NetBackup.

Secure backup processes with ETERNUS CS800

Based on the extensive functional scope and favorable price-performance ratio, those in charge decided to purchase three FUJITSU ETERNUS CS800 data protection appliances for storing the backup data. In the course of daily operations, the appliances offer all of the properties that the ZID requires from a mature and sustainable solution, including various replication options and the lossless compaction of data.

The existing generation of ETERNUS CS800 systems was already replaced with a new performance class once. Daniele Basile is particularly satisfied with the professional and reliable service: "We consider Fujitsu a highly competent and fair technology partner whose storage solutions are very safe and reliable. Our collaboration with Fujitsu account management and the Fujitsu support organization has been professional and partnership-based. Because of the high support quality, we have also engaged Fujitsu to maintain the systems of other manufacturers," confirms the IT manager. A response time of four hours and 24/7 support were arranged as part of the service level agreements.

Maximum reliability and availability of systems

The ETERNUS CS800 appliance optimally backs up the high-performance and high-availability cluster of the ZID. It achieves maximum reliability and availability of the sensitive data. "The disk-based backup system is very powerful, low-maintenance and extremely reliable. Compared to the earlier tape robots, the technical and organizational complexity has been significantly reduced. Thanks to the high-performance ETERNUS CS800, we can do without upstream staging servers, which saves a lot of costs," says Daniele Basile.

Another advantage: The seamless integration of the ETERNUS CS800 with the Veritas NetBackup software supports the replication of data at the three locations and ensures automated backup processes. In addition, storage-based deduplication makes it possible to losslessly compact the data volume on the ETERNUS CS800 appliances by a factor of 12. In this way, storage resources can be used efficiently, and significant cost savings are achieved. Capacities can also be increased at any time since the systems can be scaled by easily adding more shelves. The advantage is obvious: Instead of making the environment unnecessarily complex by adding storage systems for capacity reasons, the storage of the existing ETERNUS CS800 systems is simply expanded. "In the future, we will probably also move into the cloud. Fujitsu already offers comprehensive cloud-based storage solutions, therefore we feel that we are in good hands in this regard," concludes the IT manager.

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