FUJITSU

Case Study
TAP Portugal

"Fujitsu has enabled us to modernize and consolidate our backup and archiving processes making them simple, reliable and fast, enhancing our business processes as well as helping us reduce costs."

Victor Vieira, Storage Systems Manager, TAP

The customer

Country: Portugal
Industry: Aviation
Founded: 1945
Websites: www.flytap.com

The challenge

TAP's aging storage environment could no longer cope with the volume of data required and backing up critical data had become an incredibly time-consuming task. It needed a more modern approach to data storage.

The solution

Following an RFP, the company decided that Fujitsu offered the best combination of price, performance, capacity, scalability and flexibility and deployed both the FUJITSU Storage ETERNUS CS8000 Data Protection Appliance and ETERNUS LT260 Tape Library System.

The customer

TAP, Portugal's leading airline, has been flying since 1945 and has been a member of Star Alliance since 2005. Its Lisbon hub is a key European gateway at the crossroads of Africa, and North and South America. In 2015 it was elected as the world's leading airline for Africa and South America by World Travel Awards. Currently the airline has connections to 81 destinations in 34 countries. It operates an average of 2,500 flights a week and has a fleet of 78 modern aircraft: 61 Airbuses, and another 17 aircraft in the colors of TAP Express.

The challenge

TAP was reliant on an aging virtual tape library to handle its vital daily backup protocols, however, as the volume of data grew, the system began to struggle. With data protection, compliance and disaster recovery in mind, the company needed to find a more robust and scalable solution.

"We had outgrown our storage system, going from 100 nodes to 600 in under three years. It simply couldn't handle the necessary backups and archiving," explains Victor Vieira, Storage Systems Manager, TAP. "It took longer than 24 hours to copy data from our primary site to the secondary one and got to the point where we sometimes didn't have a second backup copy for disaster recovery."

The company needed a better performing storage environment with the scope for future growth. As such, it invited four vendors to propose a new solution with a proof of concept, which lasted three months. Following this detailed evaluation, TAP decided that Fujitsu ticked all the boxes.

"Our primary criteria were capacity, performance, scalability and flexibility. We also looked at compliance with our auditing and SLAs," adds Vieira. "We went through an approval process based on our findings and chose Fujitsu as our storage partner."

The solution

TAP chose to deploy the FUJITSU Storage ETERNUS CS8000, a unified data protection appliance for the complete consolidation of backup and archiving infrastructures of open systems and mainframes. Flexible service levels regarding capacity, speed and cost can be provided thanks to the uniform management.

The benefit	Products and services
■ Slashed backup times, enabling archiving at three times the previous speed ■ Little manual intervention or internal resources required, freeing up the team to focus on other areas ■ Reduced costs and consolidated storage libraries ■ System is easy to scale and so reliable that there has yet to be any downtime	■ FUJITSU Storage ETERNUS CS8000 Data Protection Appliance ■ FUJITSU Storage ETERNUS LT260 LTO Tape Library System

A modular grid architecture delivers extreme scalability of capacity and performance, while integrated data mirroring and replication features enable comprehensive disaster recovery concepts. This enables TAP to scale the platform as demand requires, up to a maximum of 22,000TB.

It works in tandem with the FUJITSU Storage ETERNUS LT260 LTO tape-based library, which combines flexible scalability and exceptional storage density with excellent automated and remote management capabilities. This enables the highly efficient handling of fast growing backup and archive volumes. It starts from 1,200TB of compressed capacity in a 6U chassis of up to 8.4PB in the maximum configuration.

Over the course of a year, the new storage platform ran in parallel with the existing environment as data was gradually migrated across.

"We were able to integrate the old mainframe and archive by working closely with Fujitsu and also use the same solution for all backup data of our open system environment," continues Vieira. "By integrating ETERNUS CS8000 directly onto the mainframe we were able to reduce costs and consolidate the libraries."

To be more precise this means: "The mainframe backup and archive environment was integrated and consolidated into the ETERNUS CS solution meaning there was no more need for the mainframe Virtual Tape Libraries, Physical Tape Libraries and drives that previously supported this environment, resulting in cost reduction." Furthermore, "there is no more need for Tivoli Storage Manager (TSM) copy pools which resulted in reduced resource consumption in the TSM environment as TSM was responsible for these copies in between the front-end Virtual Tape Libraries and the back-end physical tape libraries that previously supported this environment – this is inherent to the ETERNUS CS solution."

The benefit
TAP is seeing vastly improved performance since switching to a Fujitsu storage environment. For example, backing up its Oracle database would once have taken 72 hours for just a couple of terabytes; now twice the volume of data can be backed up in a third of the time. That reduces user frustration and increases productivity. The system is also incredibly reliable, giving Vieira and his team peace of mind while also ensuring that all data is quickly and securely backed up to meet disaster recovery compliance via the unique Cache Mirror for Split-site Systems functionality.

"There have been no problems and no down time so we can sleep soundly at night," says Vieira. "There are also a lot intangible benefits around compliance. We were audited recently and it was absolutely no hassle thanks to the Fujitsu solution."

The FUJITSU Storage ETERNUS platform is also super-scalable, with the ability to simply add new tapes for increased capacity. This, combined with the minimal maintenance and management requirements, has convinced the company that the technology will soon pay for itself.

"Fujitsu has enabled us to modernize and consolidate our backup and archiving processes making them simple, reliable and fast, enhancing our business processes as well as helping us reduce costs," comments Vieira.

Conclusion
The new Fujitsu storage solution combines best-of-breed components to deliver a stable, scalable and flexible storage environment that integrates with the existing mainframe technology. That means TAP is well set for future growth. As a result of this success, the company is exploring where else it might be able to work with Fujitsu.

"With ETERNUS CS8000, Fujitsu has reduced the stress on our team by making our back-up process simple, reliable and fast."
Victor Vieira, Storage Systems Manager, TAP