INFINIDAT

Chalmers achieves improved data security with Infinidat

Chalmers University of Technology conducts research, and offers education in technology, science, shipping and architecture. Well-known for providing an effective environment for innovation, Chalmers has 13 departments servicing more than 12,000 full-time students and 3,100 employees.

In 2018, Chalmers University of Technology made the decision to update its storage infrastructure. In addition to the need for petabyte levels of storage, Chalmers also had a number of other special requirements for its chosen solution provider.

When Chalmers University of Technology overhauled its data storage infrastructure, it had numerous reasons to choose Infinidat. "Innovative" is one description that's been used when talking about the Infinidat offering. Other specific advantages included high availability levels and the simplified data management that Infinidat could offer.

"Thanks to excellent relationships, solid teams and effective planning from the outset, the implementation went smoothly and no challenges were experienced. The training and support provided by Infinidat throughout the journey ensured we got it right the first time. The proof of our success came from our customers' users, who noticed performance improvements without being aware that a storage upgrade had been performed."

Niklas Rosenqvist
Infrastructure Manager
Chalmers University
of Technology

THE CHALLENGE

The reasons for changing the storage system were predictable: the need for more capacity, better security and a solution that was easier to manage than the previous system. Better performance was the original requirement, alongside the need to future-proof an expected growth in data volumes. Achieving improved data security was also a compelling benefit.

THE SOLUTION

Chalmers' storage solution is now a storage area network (SAN) comprising 15 VMware servers, five file servers and a number of others storing and handling data. Replication is handled 'one level up' from the storage solution, which makes replication almost technically independent. The storage systems remain on a fibre network channel, which Chalmers was already familiar with.

"The new storage solution comprises two parallel systems that each handle a petabyte of data, as well as a third system of approximately 700TB, which is used for backups. In total, three systems handle the storage requirements for Chalmers' 12,000 technology students and 3,000+ employees, including researchers with high storage demands," explains Niklas Rosenqvist, IT infrastructure manager at Chalmers University of Technology.

"We have run some form of fibre network channel for at least five generations of storage solutions. The first storage system from Infinidat was commissioned in the summer of 2018."

This certainly contributed to an easy migration from Chalmers' previous storage solution. "The two large-scale systems each have a dedicated data centre and most of the data is replicated between them. In addition, the backup system is hosted in a separate fireproof room," Rosenqvist adds.

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THE RESULT

Chalmers University of Technology found that the performance level offered by Infinidat is very impressive. "The performance of Infinidat's solution is notable. Runs that previously took several hours are now completed in just 30 minutes. Infinidat has a very innovative solution and we had confidence in the company from the beginning," said Rosenqvist.

An additional aspect that Rosenqvist draws specific attention to is Infinidat's administration software module: "It's very easy to use, provides the IT team with solid and reliable insights into the storage operations and all updates take place seamlessly online. As it's web-based, there is no need for a Java client, which is yet another advantage. I also like the fact that we bought the software from Infinidat but still use standard components for the hardware."

The compelling price point of Infinidat's solution is also an advantage but price was not the determining factor for Chalmers ultimate choice. The conclusion was that Infinidat offered the most functionality against comparable costs, and that's what separated the company from the competition. Anyone familiar with storage solutions appreciates that hard drives break from time to time. The important question for Chalmers was how this would be handled. The Infinidat solution ensures that Chalmers' system will keep running if one – or a few – disks are broken. In fact, it's been cited that the IT team waits until about ten hard disks are broken before replacing them.

"Rebuilding problematic drives during an operation, whenever a problem occurs, happens in just a few moments now. It's really fast; in fact, it only takes ten minutes to rebuild a drive. I still don't understand how it can happen so quickly," commented Rosenqvist.

"We have used Infinidat for a while now and I can say that we made the right decision. I would recommend that any business or organisation with lots of data and a mix of high demanding workloads, looks at Infinidat. It has worked out really well for us."

To learn more about how Infinidat can help your organization expand or consolidate your data storage, visit Infinidat.com.

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