Local authority cuts admin and boosts performance

Personnel at Sandvikens Kommun maximise productivity with lost data recovered in minutes and IT staff delivering better service by reducing admin time by five hours a week

Business need
Sandvikens Kommun wanted to increase staff productivity and reduce costs by switching from tape backups to a disk-based system that cut recovery times and deduplicated data.

Solution
The local authority deployed four Dell DR4000 high-performance disk-based backup and recovery appliances as well as choosing Dell ProSupport to maximise performance.

Benefits
- Employees maximise productivity with data recovered in minutes not hours
- Staff enjoy greater service with IT cutting admin by five hours a week
- IT personnel boost efficiency with backups finished 50 per cent faster
- Authority cuts expense with a deduplication ratio of 15:1
- Sandvikens Kommun installs backup solution in just a couple of hours

Solutions featured
- Backup and Recovery
- Data Center Virtualization
- Support Services
- Storage

"With our Dell DR4000 in place. IT staff spend at least five hours more each week giving support to our end-users. This includes answering help desk calls or working on the environment to deliver better services."

Fredrik Ehrling, Infrastructure Manager, Sandvikens Kommun

Sandvikens Kommun is a municipality in Gävleborg, in the province of Gästrikland in Sweden. The area, which is around 190 kilometres north of Stockholm, is home to the high-tech Swedish engineering business, Sandvik AB, which has offices worldwide.

Sandvikens Kommun provides services to around 37,000 local residents, many of whom have helped the local authority define its objectives for the coming years in the Vision for 2025 strategy document.

The municipality is a great believer in the power of IT in helping to deliver better services. It's currently digitising all paper records with the aim of creating paperless offices so staff can enhance the support they give to the community. Because IT is at the heart of its operations, the authority regularly invests in its data centre and introduces new technologies to boost performance. With this in mind, Sandvikens Kommun looked to replace an ageing tape library, which provided the backbone for disaster recovery. It had come to the end of its life cycle and could no longer be supported. But rather than simply replace the solution, the authority wanted to move to a new way of backing up and storing data. Fredrik Ehrling, Infrastructure Manager at Sandvikens Kommun, explains: "We wanted to move away from manually backing up tapes. One of our IT teams could spend five hours a week managing the process. We wanted to use this time for answering user enquiries."

Sandvikens Kommun chooses deduplication solution that maximises performance
The authority kick started a review of potential disk-based backup solutions to replace the tape process. Key contenders were Dell and NetApp solutions, both of which could provide

Complete backups in about half the time of our tape solution with the Dell DR4000

the capacity that Sandvikens Kommun needed. However, Ehrling chose Dell because it offered greater functionality, particularly around data deduplication. While Ehrling didn't know exactly how much backed up data was deduplicated, he estimated that it was a sizeable proportion and wanted to do something about it. "We focused our attention on the Dell DR4000 high-performance disk-based backup and recovery appliance. It offered the capacity and management simplicity we wanted, but most importantly the deduplication. It was simple. The more data we could deduplicate, the less storage we needed to pay for," says Ehrling.

The IT Infrastructure Manager saw a number of additional benefits with the Dell solution. The server and storage infrastructure were already based on 12th-generation Dell PowerEdge R720 servers running VMware, along with Dell Compellent storage arrays. Both solutions worked well together and Ehrling wanted to ensure he gained the same kind of performance with a Dell-based backup solution. He says: "Besides the features of the
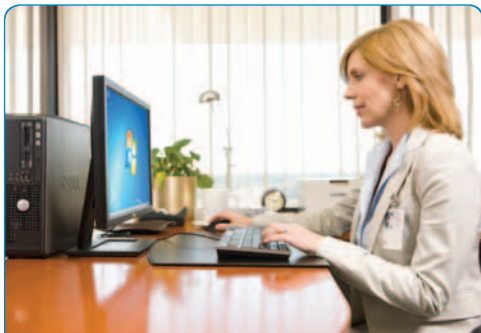
Technology at work

Services
Dell Support Services – Dell ProSupport with Mission Critical

Hardware
Dell DR4000 appliances

Dell DR4000, we knew it would integrate tightly with our existing Dell infrastructure and deliver maximum performance. With everything running on Dell, we were confident we couldn't go wrong."

Customer gets solution up and running in a couple of hours

At first, Sandvikens Kommun asked Dell to install the backup system, but after seeing a demo of the solution, Ehrling and his colleagues were keen to complete the deployment without any help. "It's better to deploy solutions yourself where possible because it gives you great insight into working with the technology," says Ehrling. "Installing the Dell DR4000 appliance was incredibly quick and easy. It took just a couple of hours." The only support that the team needed was on selecting the correct data compression settings on the system. "We called Dell and were immediately told what the settings should be. It was really simple," says Ehrling.

The authority has four Dell DR4000 appliances deployed. Each has 12 2-terabyte (TB) disks, giving a total raw data capacity of 96TB. At present, the DR4000 appliances are connected to two backup servers, which take copies of the data from the Dell Compellent storage array and the virtualized Dell PowerEdge servers. In the future, Ehrling plans to retire these backup servers so that the DR4000 takes data directly from the storage and the virtual servers.

Users receive faster service with IT team saving up to five hours a week on admin

Today, employees at Sandvikens Kommun are receiving enhanced support from the IT team because administrators spend significantly less time managing backups. They no longer spend up to five hours a week administering taped copies of the authority's data. According to Ehrling, the IT team can go weeks without having to perform any work on the

Dell DR4000 solution at all. He says: "With our Dell DR4000 in place, IT staff spend at least five hours more each week giving support to our users. This includes answering help-desk calls or working on the environment to deliver better services. We can focus more resources on improving our IT for the benefit of staff and the local community. There's no day-to-day management with the Dell DR4000. You set it up and let it get on with things. It's great because our IT staff can stay focused on users."

Employees maximise productivity with lost data returned in minutes not hours

Staff can work more efficiently and deliver better service to colleagues and residents because lost data can be restored that much quicker. In the past, it could take hours to restore accidentally deleted or lost files depending on how old the data was. An administrator had to go to the tape library, locate the tape with the saved copy of the data and then restore the file or files. But today, administrators use a web-based console to restore data directly from the Dell DR4000.

Ehrling says: "Employees could wait a couple of hours or more for data to be restored. But with our Dell DR4000, we can restore a file in minutes. Often users call us to say a file has been lost and we return it to them while they're still on the line. This extra speed means staff face less disruption when files go missing and can deliver better services to their colleagues and residents."

IT team boosts efficiency with backups completed 50 per cent faster

As a result of the high automation and speed of the solution, the IT team has seen backup times fall significantly. In addition, they no longer have to go into the data centre at weekends to change tapes when they see that space could be an issue. Ehrling says: "We can complete backups in about half the time of our tape solution with the Dell DR4000. If you ask our staff what

they like about it, they'll say that they no longer have to change tapes out of hours. They have a better work/life balance now."

Authority reduces costs with deduplication, consolidating data backups
Sandvikens Kommun is now in a better position to deliver a more cost-effective service to residents. This is because the IT team can reduce expenditure as a result of the backup solution from Dell. At the heart of the Dell DR4000 is software that deduplicates data and cuts the amount of information that's saved. For Sandvikens Kommun, this means it can save money by spending less on physical devices to store data. Ehrling says: "We're achieving a deduplication ratio of at least 15:1. This is great news for the IT team because in the long run we won't need to buy so many storage devices or face the additional cost of powering and cooling these devices. By helping us lower the cost of our IT, the Dell DR4000 will ultimately enable the authority to deliver greater value to local taxpayers."

Sandvikens Kommun increases value of its IT with responsive support
Ehrling has confidence that he will gain maximum performance from the Dell solution over its entire life cycle, thanks to the authority's long-standing relationship with Dell and particularly support received from Dell ProSupport experts. Ehrling says: "We know that Dell ProSupport engineers are there to help us gain the best performance possible from our IT. It's a proactive service where the people know our business and the importance of our systems. It's like an extra member of the team." With the Dell DR4000, the authority has Dell ProSupport with Mission Critical support for four-hour on-site response. "We get an additional level of security with Dell ProSupport that benefits both our users and our residents," says Ehrling.

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