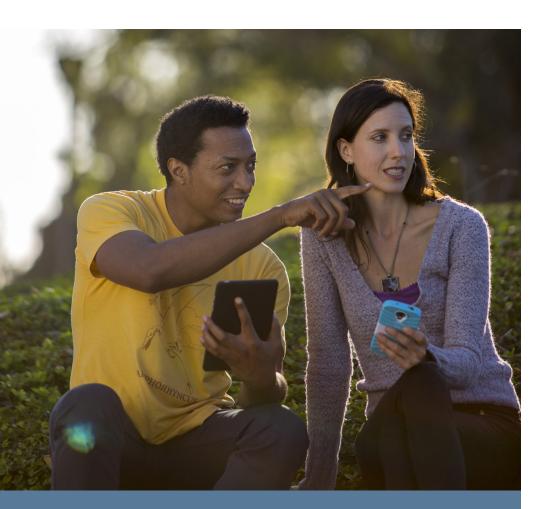
# Education leader speeds backups by 61%, restores files 96x faster

In addition to significant time savings on backups and restores, CACI reduces data storage footprint by 93 percent



"The most important benefit of our new solution is that our data and systems are always available. And it's more cost-effective than the other enterprise software and hardware solutions

### out there."

Robert van der Linden, Systems Administrator, CACI

# Quest



#### **BUSINESS NEED**

CACI needed a backup solution that could provide comprehensive, everyday protection of business-critical information and enough storage to manage an everincreasing amount of data.

#### SOLUTION

The market leader in education software implemented a Quest backup and recovery solution that enabled the IT team to quickly and seamlessly back up all programming, testing and production data as needed.

#### BENEFITS

- Accelerated full server backup speeds by 61 percent
- Improved file restore speed by up to 96 times
- Reduced data storage footprint by 93 percent

#### SOLUTIONS AT A GLANCE

Data Protection

With 10 percent year-over-year data growth, the Netherlands' premier higher education software developer takes each bit of its data seriously. CACI produces Osiris, a complete software package that supports administration and student services for most colleges and universities throughout the country. CACI also manages Studielink, the application that every student uses to register for college-level courses.

For a company serving 24 higher education institutions with more than 250,000 students working with its Osiris product, business continuity and data protection are critical. Customers expect round-the-clock access to up-to-date cloud-based products that make it easy to do their jobs or register for classes. Data protection is critical to CACI not only for maintaining day-today business but also to support the programming, testing and production of its software products. If a server fails, the risk of programming data being lost increases dramatically, which could mean days - or weeks - of lost work.

The IT team has been challenged to keep up with data growth and stay prepared with enough storage space and a disaster recovery plan that can back up and restore critical company resources efficiently.

CACI has 20 Windows-based servers, primarily used for running its business applications, including Active Directory, Exchange and so on. For programming, the company uses 150 Linux-based servers. About 150 of the company's servers are virtualized with VMware. And CACI's most mission-critical data is on Oracle databases. All of that amounts to about 8TB of data that needs to be backed up on a daily basis and 15TB on the weekends.

Robert van der Linden, systems administrator for the local servers and workstations at the company's two offices in Amsterdam and Oosterhout, located approximately 60 miles apart, says the company was running out of backup windows at both locations. "Previously, we were using Symantec Backup Exec. We could only back up a selection of our servers at a time, and some 'overnight' backups were taking more than 24 hours." This meant that much of CACI's data remained at risk.

Van der Linden and his small team had to choose which data to back up each night, so not everything was protected at all times. "It's a risk when you have to decide to back up only a selection of servers or to back up servers on an every-two-week schedule," van der Linden says. And it was a risk that CACI became more and more unwilling to take.

To reduce that risk, CACI implemented NetVault Backup software, along with two DR4100 disk backup appliances. Compared with the other options out there, says van der Linden, the Quest solution could handle a lot more data at a more reasonable cost. The simple administration of an appliance with

#### **PRODUCTS & SERVICES**

#### HARDWARE

DR4100 Disk Backup Appliance

#### SOFTWARE

NetVault Backup

# "With NetVault Backup and the DR4100s, we now can do weekly backups of all our servers, as well as nightly incremental backups of targeted servers."

Robert van der Linden Systems Administrator CACI built-in deduplication capabilities was key for the CACI team.

"With NetVault Backup and the DR4100s, we now can do weekly backups of all our servers, as well as nightly incremental backups of targeted servers," van der Linden said.

#### MORE COST-EFFECTIVE THAN OTHER SOFTWARE/HARDWARE SOLUTIONS

"The most important benefit of our new solution is that our data and systems are always available," van der Linden says. CACI uses NetVault Backup to protect a number of the company's applications, including Oracle, Exchange Server, MySQL, PostreSQL and Microsoft SQL Server.

NetVault Backup enables faster backups, and data is always available for restores. The DR4100 disk backup appliances can be expanded with extra storage, so the solution will meet CACI's needs over the next few years.

"And it is much more cost-effective than the other enterprise software and hardware solutions out there," van der Linden said. In addition, van der Linden and his team can feel confident knowing that everything is backed up at all times.

#### BACKUPS OF FULL SERVER ARE 61 PERCENT FASTER

The NetVault Backup and DR4100 combination has greatly improved backup and restore times for CACI. "Symantec Backup Exec was very slow backing up to tape," van der Linden says. Previously, a full back up of the file server in Oosterhout, which was approximately 2.2TB of data, took about 36 hours. Now, this same job takes only 14 hours to back up — an acceleration of 61 percent and another five hours to replicate the data to Amsterdam.

"Restoring a file from a backup like this used to take up to four hours using Backup Exec," van der Linden said. "With NetVault Backup, it takes about two minutes to create the job and 30 seconds to restore," an improvement of 96 times.

#### DEDUPLICATION REDUCED STORAGE FOOTPRINT BY 93 PERCENT

Using the two DR4100 disk backup appliances, one in each location, CACI has at its fingertips advanced deduplication and compression technology to significantly reduce the amount of data that needs to be stored. All backup jobs automatically replicate to the other location over the company's WAN, so all data is present in two physical locations at all times. The company now deduplicates all of its data every week and gets the entire job accomplished in one weekend.

With NetVault Backup and the DR4100 appliances, CACI is seeing significant storage savings and is able to back up more data than ever before. The Quest solution offers a dramatic reduction in necessary storage space for CACI's critical data. With NetVault Backup and the DR4100 appliances, 226TB can be deduplicated down to 14.7TB – a reduction of 93 percent.

"We are backing up much more data than in the past, and we generally manage to get the entire system backed up in one weekend," van der Linden says. "And most important: NetVault Backup and the DR4100 allows us to back up all of our data instead of small portions."

Today van der Linden and his team now feel more confident, knowing that regardless of how much data growth CACI experiences, business continuity will be preserved with a solid backup and recovery system in place. And students and school administrators can continue to rely on the leading education software to keep them in business too.





#### **ABOUT QUEST**

Quest helps our customers reduce tedious administration tasks so they can focus on the innovation necessary for their businesses to grow. Quest® solutions are scalable, affordable and simple-to-use, and they deliver unmatched efficiency and productivity. Combined with Quest's invitation to the global community to be a part of its innovation, as well as our firm commitment to ensuring customer satisfaction, Quest will continue to accelerate the delivery of the most comprehensive solutions for Azure cloud management, SaaS, security, workforce mobility and data-driven insight.

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4