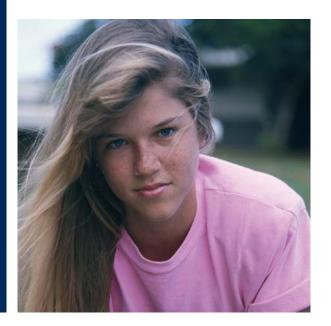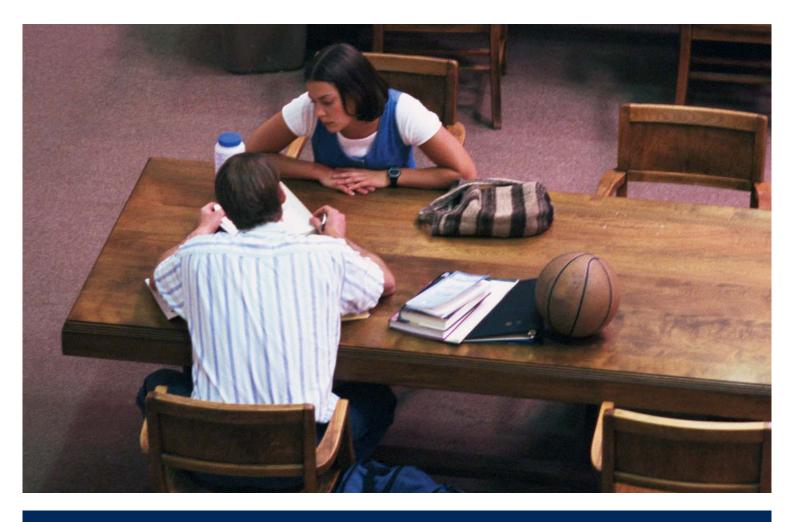# Students and staff now work undisturbed thanks to HP

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"With the introduction of the HP SAN we really hit the jackpot since we now store all user inventories centrally. In addition, all user data is kept in a clustered environment, so it always remains accessible to the users in the event of unexpected disturbances."
Richan Postmus, IT manager, Christelijke Hogeschool Ede

In The Netherlands, Ede Christian University (Christelijke Hogeschool Ede or CHE) provides the highest quality of teaching on its training courses. Its 3,000 students are required to work conscientiously, but the devotion is not one-sided because they can also count on positive commitment from the teachers.

Lengthy failure of the computer systems is just as disruptive for educational establishments as for commercial companies so management, staff and students of CHE require their IT managers to keep disturbances to a minimum. Now, with a new central storage, back-up and restore solution from HP, the IT management can more than meet these requirements.

Richan Postmus, IT manager at CHE can now go on holiday with confidence. Since the CHE decided to procure an HP Storage Area Network (SAN), the availability of the computer systems has increased considerably.

"With our previous infrastructure, we were running up against three problems," said Postmus. "The performance was unsatisfactory for the growing requirements of users, especially for ever more demanding multimedia applications, such as video streaming. Secondly, the availability of the systems no longer met the requirements which the management placed on us. Any minor fault could lead to a breakdown and data becoming no longer accessible.

"Finally, the infrastructure was increasingly difficult to manage with the manpower available. For almost every new application we had to install a server and that consequently led to a proliferation of servers. We already had 33 and we wanted to halve that number by separating server management from inventory management."

**New architecture**
The need for a SAN was obvious but the problems could not be solved by just purchasing the hardware. Together with IT supplier Centric and HP, the IT team at CHE designed a new architecture.

The high school based the choice of Centric and HP on the positive experiences enjoyed with both suppliers.

"We had already been working with Centric for some years with complete satisfaction and for our network and desktops we virtually always used HP hardware," added Postmus. "Thus both partners have long been a dependable choice. For an operationally-critical environment such as a SAN, you need to know what service and quality the supplier can offer you. In addition, HP's tender, when compared with other suppliers, turned out to be excellent value for money.

"Before we set to work, we mapped out the options and our future growth plans. We previously had a mixed environment with Novell Netware 5, Windows NT and Windows 2000. In order to achieve the highest possible

standardisation, we decided to upgrade the server platforms to Netware 6 and Windows 2000. We would thus be able to simplify the management considerably."

### Planning and availability
The implementation of the SAN was completed without complications and to avoid risks, the actual migration of the systems was carried out at weekends.

Added Postmus: "We were just a bit worried whether the replacement for the Novell environment would be made available on time, but HP kept us properly informed about the progress so that we were able to put everything in place within the agreed schedule."

Postmus and the end users have so far been very happy with the availability of the new system: "With the introduction of the HP SAN we really hit the jackpot, since we now store all user inventories centrally and can easily add capacity by the additional installation of hard disks, without systems needing to be restarted. In addition, all user data is kept in a clustered environment, so it always remains accessible to the users in the event of unexpected disturbances."

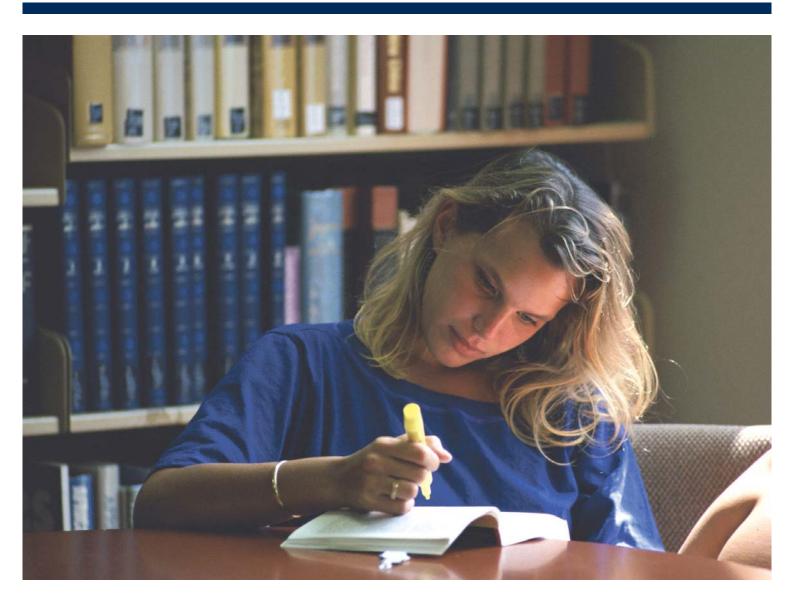Following the installation, the availability of the systems rose to such a standard that the IT management of the high school is able to support service level agreements of a very high level.

"We work with ten staff and were previously at a point where every fault immediately led to overload," said Postmus. "Calculating cost savings is complicated in this situation, but we generally notice that we have time left for more important matters as a result of the system having become much more stable."

### More flexibility
For students, the automatic software distribution has already been in place for some time and now, through the introduction of the SAN, the high school is noting a substantial time gain in these processes too.

Postmus concluded: "The speed of the network and the accessibility of the data, which we need for the distribution of images to the desktops of students, has risen considerably. The addition of a new user barely costs us time any more. We can easily, for example, add new students, study programmes and evening classes into the new ICT infrastructure. In the future, we will also be able to easily link homework stations to partner systems in joint-working associations. In brief, we have become much more flexible."

## Challenge

- At Christelijke Hogeschool Ede (CHE) in The Netherlands, IT performance was unsatisfactory for the growing requirements of users, especially for ever more demanding multimedia applications, such as video streaming.

- The availability of the systems no longer met the requirements of the management and students because any minor fault could lead to a breakdown and data becoming no longer accessible.

- Also, the infrastructure was increasingly difficult to manage with the manpower available. The university has 33 servers and wanted to halve that number by separating server management from inventory management.

## Solution

- CHE previously had a mixed environment with Novell Netware 5, Windows NT and Windows 2000. To standardise and simplify management, it decided to upgrade the server platforms to Netware 6 and Windows 2000.

- Working with HP and Centric, it implemented a central storage and back-up and restore solution.

- This included an HP Enterprise Virtual Array (EVA) 3000 with net disk capacity of 1Tb, HP OpenView Dataprotector back-up software for complete back-up of the Novell and Windows environments and an HP MSL 5030 LTO tape library.

## Results

- CHE can now store all user inventories centrally and can easily add capacity by the additional installation of hard disks, without systems needing to be restarted.

- Availability of the systems has risen to such a level that the IT management of the university is able to meet service level agreements of a very high level and IT staff have time for more important duties.

- The speed of the network and the accessibility of the data needed for the distribution of images to the desktops of students has risen considerably.

## Customer at a glance

- **Industry sector:** Education
- **Company:** Christelijke Hogeschool Ede
- **Headquarters:** Ede, The Netherlands
- **Telephone:** +31 318 696300
- **URL:** www.che.nl

## Why HP?

- CHE based the choice of Centric and HP on the positive experiences it had previously enjoyed with both suppliers.
- HP's tender, when compared with other suppliers, turned out to be excellent value for money.
- The proposed solution exactly met the educational and business needs of the university.

## Hardware

- HP Enterprise Virtual Array (EVA) 3000 with net disk capacity of 1Tb
- HP MSL 5030 LTO tape library
- 2 x HP FC switches, 16-ports

## Software

- HP OpenView DataProtector back-up software for complete back-up of the Novell and Windows environments
- HP SAN management module

## For more information on how working with HP can benefit you, please contact your local HP sales representative or reseller, or visit www.hp.com.

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