

**ESSEC Business School** was an early adopter of virtualization. The highest standards are at the core of the ESSEC brand, and this includes its technology choices. When ESSEC decided to virtualize workstations in 2014, the business school quickly realized that hard drives were a bottleneck. Today with Pure Storage, over 1,200 desktops are virtualized, using only 4TB of flash instead of the 40 TB previously required from the hard drives, all with much greater speed and simplicity for technical operations.



#### BUSINESS TRANSFORMATION

The solution has improved virtual infrastructure performance and simplified management. It saved almost three years of budget investments. The time saved allows students and teachers to focus on top quality education.

#### GEO

EMEA

#### INDUSTRY

Education

“With Pure Storage, we had guarantees in terms of performance, compression and data deduplication.”

Olivier Le Mao, *Systems Manager*

#### PIONEERING SPIRIT APPLIED TO DESKTOP VIRTUALIZATION WITH PURE STORAGE

ESSEC Business School, created in 1907, is a leader in higher education internationally renowned and among the first in Europe. With 4,558 students, a wide range of management programs, partnerships with leading universities in the world, a network of 46,000 graduates, and a teaching staff composed of 151 permanent professors in France and Singapore, including 18 professors emeritus recognized for the quality and influence of their research, ESSEC is perpetrating a tradition of academic excellence and cultivating a spirit of openness at the service of economic, social and innovation.

True to its motto of “The pioneering spirit,” ESSEC was an early adopter of virtualization: first in 2007 for the servers and then in 2011 for the desktops. In September 2012, ESSEC selected VMware View and began upgrading the IT in the teaching department, transforming 600 computers into 600 virtual desktops. In addition, ESSEC integrated 15,000 rpm hard drives into the storage array, which was pooled with the array of the servers. In 2014, the school decided to upgrade its administrative section, which had workstations that were almost ten years old on Windows XP, and make the transition to Windows 7.

An internal audit conducted on this occasion gave an assessment for a requirement of 18TB very fast hard drives. The plan was then to virtualize the administrative department on a 1:1 basis with an aim to ensure a simple and fluid user experience.

However, ESSEC was facing a potential problem: their existing spinning disk array was not only limited at the software level (it had no data deduplication and compression function), but it was also a severe bottleneck on VMs performance.

#### IMPROVING PERFORMANCE, SIMPLIFYING MANAGEMENT

To find a reliable and robust technical solution, ESSEC decided to call on the expertise of its integrator, AntemetA. They encouraged the business school to test the Pure Storage FlashArray™.

“With Pure Storage, we had guarantees in terms of performance, data deduplication and compression and it helped us avoid adding ten classic disk shelves. That dramatically reduced the footprint of our data centers,” said Olivier Le Mao, Systems Manager at ESSEC.

**COMPANY:**

ESSEC Business School  
[www.essec.edu](http://www.essec.edu)

**USE CASE:**

- Virtualization – VMware® View

**CHALLENGES:**

- Support rapid student and business growth.
- Spinning disk array was a severe bottleneck on virtual machine performance.

**IT TRANSFORMATION:**

- ESSEC achieved a data reduction rate of 10:1.
- 40TB of storage is now in 4TB of flash.
- Speed and simplicity improved for technical operations.

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“It would have taken us almost three years of budget investments to achieve this if we hadn’t had data deduplication and compression.”

Olivier Le Mao, *Systems Manager*

In May 2014, ESSEC tested, approved and bought a Pure Storage array. “We deployed 600 desktops between October and December 2014, and virtualized the entire administrative section on all-flash arrays,” Le Mao noted. “We transformed 600 PCs running under XP into virtual desktops under Windows 7 with roaming profiles. Another advantage here is that the data is now being secured, as it no longer sits on the hard drives but on the storage system centralized in the server room.”

In January 2015, 600 self-service workstations were also switched over to the Pure Storage array. In May 2015, ESSEC deployed a second Pure Storage array to enable a 50/50 load balancing charge. “Today we have 1,200 virtual machines: 600 on one array and 600 on another,” said Le Mao “Furthermore, for the self-service machines, every time a student logs out of the system, the virtual machine is removed and set back to zero. We do it in half the time we needed before. We recovered 3TB of storage and we also gain time in setting up the virtual desktops for the teachers.”

**PLEASING END-USERS, SAVING MONEY**

Users are very happy. Making the student population happy was an especially important challenge because, on the one hand, there is a wide variety of high-tech equipment they bring in, and on the other, their computer knowledge levels also widely vary.

The IT team is also satisfied. Le Mao explained: “As the administration is now so easy, I don’t feel wary of integrating a different hardware brand anymore. The graphical interface is also extremely simple, which meant that the second array was implemented in less than an hour.”

Over the last year and a half, ESSEC has had no problems. “In the light of this first experience, we are now planning to transfer the database servers (accounting, finance, and reporting) over to Pure Storage,” Le Mao reported. Today, ESSEC uses only 4TB to meet its needs, where they would have had to use 40TB in the past. With these two Pure Storage arrays in service, ESSEC has experienced a data reduction rate of 10: 1.

“It would have taken us almost three years of budget investments to achieve this if we hadn’t had data deduplication and compression,” said Le Mao. More importantly, the time saved for students and teachers allows them to focus on the most important priority for one of the best business schools worldwide: top quality education.



[info@purestorage.com](mailto:info@purestorage.com)  
[www.purestorage.com/customers](http://www.purestorage.com/customers)