



Virtual Education Environment Secured with Trend Micro Deep Security

Large Belgium University protects virtual desktops while preserving performance and consolidation ratios

Overview

KHLeuven is the largest university college in the Leuven region, with its renowned knowledge institutes. It was created in 1995 from a merger between several Catholic university colleges in Leuven and Diest. Currently, the college has 650 staff members and more than 8,500 students enrolled in professional bachelor's programs in education, commercial, and business sciences, healthcare, industrial science and technology, and social work. KHLeuven also runs advanced bachelor's and postgraduate programs, as well as continuing training. As a knowledge institution, it also engages in research and service provision. As part of its strategic priorities, the university initiated the blended learning working group in 2012.

The working group's goal is to make education independent of the place, time, and speed of learning. To achieve this, KHLeuven has opted for a virtual desktop (VDI) environment, including a solution for management and security that uses vShield from VMware combined with Trend Micro Deep Security.

Challenges

A VDI environment was chosen as a solution to a number of challenges the college faced. Wouter Mignon, ICT infrastructure and support coordinator at KHLeuven explained, "At the IT department, providing software packages for students involved an enormous amount of work for us. This previously had to be done physically. The VDI environment now allows us to make various packages available for all of our students via a single central point at one time. This can be done wherever they happen to be at the time—in a classroom or in their lodgings, for example. This means that students no longer have to physically come to the course."

This decision also ties in with the whole Bring Your Own Device (BYOD) trend which is very much in evidence in the education world at present. "Students increasingly prefer to use their own laptop or tablet for study purposes, and this means that it is convenient for them to use the educational program's applications via their own device. Thanks to our VDI environment, they are no longer tied to the program's desktop. The experience of remote working thus becomes the same as local working. In addition, the lecturers like working in a standard environment. For them too, all of the tools are now ready to use, in one and the same environment," said Mignon.

However, making a VDI environment available also involved various challenges. In particular, there was the impact on security and performance to consider. Mignon said, "You have to realise that an educational environment is very different from that of a business. With a business environment, it's common to have people logging in one by one; with us, the opposite happens. Suppose a lecturer sets an assignment for thirty students during his or her class. You then get all thirty performing the same action at the same time on our network. As you can imagine, high performance specifications are necessary in order not to slow down."

During the pilot phase, KHLeuven discovered that one virtual desktop per student—and hence one security scanner per student—requires enormous capacity. However, the university was clear that performance should not be an obstacle to a secure, individual user experience for students. The problem of the previous security solution with respect to performance needed to be solved as quickly as possible.

Why Trend Micro

Security needed to be done differently, so that it is simple and centrally manageable with a small footprint. After comparing the different options and having the advice of IT partner ePact, KHLeuven found the right solution in Trend Micro Deep Security.

"The solution guarantees the level of security and flexibility we needed for our virtual desktop environment, without interfering with performance. Combine these advantages with the expertise of ePact implementing this solution, and our decision was made. That meant one less task for us—and above all, one less worry," said Mignon.

>> KHLeuven

Region

EMEA, Belgium

Sector

Education

Trend Solutions

- Deep Security
- Trend Micro™ Smart Protection Network™

IT Environment

- VMware
- 250 virtual desktops

Business Results

- Simplifies and centralizes management of security on a large scale
- Provides students with secure access to the KHLeuven virtual environment anytime and anywhere
- Increases the level of protection and blocks the latest and most sophisticated threats in the cloud
- Ensures zero impact on speed and performance

“KHLeuven can now rely on a flexible and secure environment to offer students unprecedented freedom, now and in the future.”

Wouter Mignon,
ICT infrastructure and support coordinator at KHLeuven



“The combination of Trend Micro Deep Security and VMware View is our guarantee for better protection and performance.”

Wouter Mignon,
ICT infrastructure and support
coordinator at KHLeuven

Solution

ePact is a systems integrator specialising in virtualization. The company has built a successful strategic partnership with Trend Micro for the past several years, and offers customized solutions for customers. “With the implementation of the VMware View solution for KHLeuven, we quickly realized there was a need for an integrated security approach. The combination of Trend Micro Deep Security with the current VMware View solution guarantees KHLeuven a high-performance and secure desktop environment,” said Bart Van Praet of ePact.

Results

This new security solution has other advantages too. “Because the security software doesn’t run directly on the desktops, the (sometimes very creative) students cannot circumvent it. The consolidation of the scan engine also delivers significantly better performance as well as providing simpler management for both administrators and students. KHLeuven now has a flexible and scalable environment that offers students unprecedented freedom for now and for the future,” said Praet.

What's next?

KHLeuven continues to think about the future, while facing a huge challenge and massive growth, thanks to an upcoming merger with Groep T and KHLim. By January 2016, this should make it the largest university in Flanders, but also one that is ready for the challenges and expectations of tomorrow.

As part of this growth, the VDI project will also continue to grow. Currently the VDI environment is being further expanded with Deep Security to provide the necessary security and flexibility. The new desktops are easy to implement because the Deep Security solution is also automatically present in the event of an extension.

“Due to the high performance of Deep Security, we are now able to simultaneously offer 250 virtual desktops. At present, that is a capacity that is not yet fully utilized. But it was essential for us to see if Deep Security was capable of taking this on. It turned out that it definitely was!” said Mignon.

For More Information

For more information, please go to:
[Trend Micro Deep Security](#)