



### Executive Summary



**Frédéric Malengreau, Head of User's Support Department at Université Catholique de Louvain.**

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- **Client name:** Université Catholique de Louvain
- **Sector:** Education
- **Number of students:** 37,000
- **Number of teachers & professors:** 900
- **PhDs:** 750
- **Administrative & service staff:** 1,500
- **Number of colleges and location:** 5 main locations: Louvain-la-Neuve, Brussels, Charleroi, Mons and Tournai.

### VDI with UDS Enterprise & OpenNebula

The [Université Catholique de Louvain](#) (Belgium) was looking for a solution capable of giving students access to virtual classrooms as if they were in the standard computer classrooms, so that they could access the same software from anywhere, anytime and using any device, without the need of installing any special tools. "Our IT Department needed a VDI solution compatible with OpenNebula and this task wasn't obvious. We discovered UDS Enterprise connection broker, which is Open Source-based and therefore can be fully customized. We suggested the UDS Enterprise team to add support for OpenNebula and they made the development really quickly", explains Frédéric Malengreau, Head of User's Support Department at Université Catholique de Louvain (UCLouvain).

UDS Enterprise is the only VDI connection broker certified as OpenNebula Ready, and capable of publishing virtual desktops on this cloud orchestrator. "When we discovered UDS Enterprise, apart from its potential support for OpenNebula,

we were attracted by the flexibility and the price, and when we started testing this connection broker we were delighted with the efficiency of the support team and their reactivity when any new updates and improvements were required", affirms the Support Department responsible.

After performing a test phase in 2016, the platform went into production in 2017 with a small group of students, and nowadays, around 300 students have access to virtual desktops through UDS Enterprise. Next September, the use of UDS Enterprise will be extended to the 37,000 students of the university.

"UDS Enterprise is now getting widely used in the computer classrooms, and students are also working from their home without a minimal need of moving out to the classrooms. They have now a flexibility to access the needed software, and do not overcrowd the computers classrooms", says Malengreau.

The IT Department is also enjoying great advantages, like "the ability to start with a new and clean virtual desktop whenever requested regardless of what has been installed on it during previous sessions. In fact, the virtual machines are really easy to modify and redeploy on demand with UDS Enterprise", tells the Head of User's Support.

In addition, "the IT staff is really satisfied because they can work with the Open Source KVM-based cloud orchestrator OpenNebula, which is really useful for them. Thanks to UDS Enterprise's flexibility they have been able to decide which authentication system and connection protocol they want to use", comments Malengreau.





### UDS Enterprise for remote applications

UCLouvain students use Windows 10, Windows 7, OS X and Linux devices to connect to Fedora, Ubuntu and Windows 10 virtual desktops. They authenticate through Active Directory, mainly using HTML5 and also through RDP. Both connection protocols are enabled simultaneously. All the VDI components are managed centrally and very easily through UDS Enterprise's administration dashboard.

"We are very happy to use this technology, especially because it is compatible with many technologies and the UDS Enterprise team is introducing new interesting functionalities in every new release. In fact, in the near future we will extend the use of the connection broker to remote applications, since UDS Enterprise 2.2 supports remote apps with macOS." explains Malengreau.

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UDS Enterprise 2.2 supports app virtualization through HTML5, which enables to access virtual apps with any web browser device supporting HTML5. This was a highly demanded feature by both customers and partners, and that's why it was included in the product roadmap. "We are really interested in the possibility of suggesting new features. Indeed, we have contacted the support team for new developments and have always had quick answers, the UDS Enterprise support service is excellent", assures the Head of Support.

The Université Catholique de Louvain is so satisfied with the UDS Enterprise VDI connection broker, and they strongly recommend it. "UDS Enterprise is perfect for academic environments which aren't homogeneous at all. It is able to work with many different hypervisors, authenticators and connection protocols simultaneously, making it easy to be implemented in existing infrastructures", concludes Frédéric Malengreau.

### VDI INFRASTRUCTURE

- ✓ **Broker:** UDS Enterprise
- ✓ **Hypervisor:** OpenNebula
- ✓ **Connection protocol:** HTML5 and RDP
- ✓ **Authenticator:** Active Directory
- ✓ **VDI OS:** Fedora, Ubuntu & Windows 10
- ✓ **Servers:** A cluster of HP servers: Hypervisors (BL460 blades) are located inside HP C7000 enclosure
- ✓ **Storage:** Ceph technology (SSD hard drives)
- ✓ **Network:** Redundant HP virtual connect switches inside each enclosure

### Support and professional services

VirtualCable markets UDS Enterprise through a subscription model, including support and updates, depending on the number of users.

In addition, VirtualCable offers professional services to install and configure UDS Enterprise and other virtualization technologies.

For more information, visit [www.udsenderprise.com](http://www.udsenderprise.com) or send us an email at [info@udsenderprise.com](mailto:info@udsenderprise.com)