



Innovation and Excellence Providing the Common Thread for a Modern University



LOCATION
Louvain-la-Neuve,
Belgium
Europe



SECTOR
Education

Founded in the year 1425, Université catholique de Louvain, in Belgium, has a long-standing history establishing it as a top private university, trusting students, researchers and professors with the tools to expand global knowledge and to provide explanations and interpretations to the broad base of inquiries posed by society. As a widely recognized educational institution, its ultimate goal is far-reaching enlightenment, yet with an anchored commitment to its immediate environment. And innovation has been the common thread across all of its activities.

HOW FLEXIBILITY BREEDS THE NEEDED STANDARDIZATION

Back in 2015, the university's governing bodies approved the strategic plan '*Louvain 2020*', a multi-dimensional project backed by the entire university to develop, strengthen and modernize the underlying infrastructure and overall education platform. Coincidentally, UCLouvain's established use of OpenNebula, since 2013, aligned very well. Their initial needs centered around having a centralized hypervisor and VM management system, as well as having effective storage management automation capabilities, including SAN volume creation, replication, and failover. With an established KVM environment and block storage, UCLouvain looked to OpenNebula for multi-platform administration capabilities, as well as having the flexibility to create hybrid clouds when needed.

"From a decision-making standpoint, the overall simplicity offered by OpenNebula as a complete solution was hard to ignore. It has made it easy to build and manage a robust solution at UCLouvain that serves our long-term needs. We run almost everything on it."

Laurent Grawet, IT Systems Engineer

When addressing the key factors in their decision-making, the overall simplicity offered by OpenNebula paramount. With the exception of large databases, they are running almost everything on their OpenNebula cloud platform. Here are a few names:

- Moodle (e-learning and exams)
- Drupal (main portal)
- Web Hosting
- UDS (virtual desktop)
- SAP
- OSIS (Open Student Information System)
- Load-balancing (Keepalived, HAProxy)
- Virtual Routing (VyOS)

With an infrastructure of 74 hypervisors, over 1000 VMs, and multiple PBs of data on Ceph, UCLouvain has with OpenNebula a robust and scalable platform that allows them to flex and grow with their rapidly evolving needs.

Not only has OpenNebula's simplicity been a key factor to their success, but the fact that OpenNebula is an open source solution with active participation and management has provided an additional dimension to its success. The published OpenNebula documentation has been a valuable and highly-exploited reference by the UCLouvain team, and the flexibility with which they have been able to work with the OpenNebula software and engage the community of users, has provided a resourcefulness that suits their continuous pursuit of a truly dynamic system. They were able to develop an IBM V7000 SAN driver to automate both volume management and multipath iSCSI setup.

"OpenNebula is now occupying a central position inside our data center."

Laurent Grawet, IT Systems Engineer

And as an OpenNebula enterprise customer, UCLouvain has also benefited from a long-standing and committed relationship with the OpenNebula Systems team, naming their privileged relationship and open communication channel, by way of their subscription, as a value-add that provides solidity and stability to their solution and to their strategy for the future.