



# Modernized, flexible infrastructure helps university stay ahead of data demands

Belgium's Ghent University relies on Dell PowerScale, Dell ECS and more to meet the growing needs of students, faculty and staff.

## Business needs

With academics and research being creative and unpredictable processes, Ghent wanted a better, more modern way to manage both the volume and diversity of its data. The university was looking for a highly scalable, flexible and cost-effective solution that could leverage automation and accommodate growth without disruptive migrations.

## Business results



Powers a user-friendly, self-service portal to automate file storage workload requests.



Provides the flexibility to easily increase capacity for data or storage performance.



Handles continuing increases in data volumes and sources, thanks to seamless scalability.



Enables researchers to access information from anywhere using S3 protocols.



Provides vital data protection and security against growing cyberthreats.



Saved an estimated 30–35% over other storage alternatives.

## Solutions at a glance

- [Dell PowerScale](#)
- [Dell ECS](#)
- [Dell PowerProtect DD series appliances](#)
- [Dell PowerEdge](#)
- [Dell ProDeploy Plus](#)
- [Integrated Dell Remote Access Controller \(iDRAC\)](#)
- [Dell SynclQ](#)



**Dell PowerScale and ECS help us keep pace with and consolidate not only increasing volumes, but also the diversity of types of data."**

**Johan Van Camp,**  
Head of ICT Infrastructure,  
Ghent University



**Ghent is widely known not only for its prestigious reputation across 11 faculties and 85 academic departments, but also for its innovative research in a variety of disciplines.**

Founded in 1817, Ghent University is a leading university in Belgium, and one of the top 100 in the world. The university's faculty and staff of around 15,000 serve a student body of approximately 47,000 in Ghent and surrounding communities, as well as at its global campus in Songdo, South Korea.

Ghent is widely known not only for its prestigious reputation across 11 faculties and 85 academic departments, but also for its innovative research in a variety of disciplines. Dell PowerScale offers a user-friendly, scale-out solution for file storage across wide-ranging workloads, while Dell ECS provides Ghent a high-performance platform with access from anywhere to its rapidly expanding unstructured storage.

"Dell PowerScale and ECS help us keep pace with and consolidate not only increasing volumes, but also the diversity of types of data," says Johan Van Camp, head of ICT infrastructure at Ghent University. "In addition, our storage allows us to meet FAIR principles — with information that's easily findable, accessible, interoperable and reusable."

## Creating a flexible self-service portal

Ghent has consolidated workloads campus-wide on PowerScale.

These include:

- 50TB of storage and more for individual projects
- Archival of high-performance computing (HPC) data
- Enormous volumes of storage created by rich media workflows

With PowerScale, the university has created a user-friendly, cloud-like, self-service portal to automate requests for handling file storage workloads — carried out at the most appropriate performance and priority levels. This virtually eliminates limitations on academic creativity or research — with PowerScale offering the ability to quickly and easily add capacity or boost performance as required.

"We were looking for a flexible solution to easily scale out and avoid migrations to meet changing needs," Van Camp remarks. "PowerScale really ticks all the boxes."

He continues, "We have the flexibility to provide whatever level of IOPS performance we need for various applications and workloads. Dell ProDeploy Plus also made our life easier, helping us get into production quickly, with fewer complications."

## Accommodating object storage

The university has also seen a rapid increase in its emerging, fast-growing object storage requirements.

Data comes from a diversity of sources such as imaging systems, microscopes, genomics, HPC applications, chemical modeling, artificial intelligence and more. These can produce enormous data sets — with each step in genomics modeling, for instance, producing up to 800GB of data.

"ECS object storage is the strategic platform of the future for us," asserts Van Camp. "Some older storage systems share data using 1980s protocols such as SMB. In a hybrid, multi-cloud world, ECS supports a wide range of applications. Plus, S3 compatibility and interoperability allows our researchers to access data from anywhere wherever it resides, including in the cloud."



**We were looking for a flexible solution to easily scale out and avoid migrations to meet changing needs. PowerScale really ticks all the boxes."**

**Johan Van Camp,**  
Head of ICT Infrastructure, Ghent University

## Protecting and recovering vital data

Ghent is in the knowledge business, and with IT as the driving engine behind any knowledge activity, data protection and cyber security are critical. The university uses Dell PowerProtect DD series appliances to effectively protect and recover data at scale.

The university wanted a solution that would ensure fast, efficient recovery when needed. Ghent also appreciates the functionality of retention lock, which effectively prevents modification or deletion of certain sets of files for a specified time.

To flexibly manage and automate data replication, Ghent relies on Dell PowerScale SyncIQ. In addition, Dell PowerScale Cyber Protection not only helps protect against cyberattacks, but also enables the university to maintain open access to data for researchers, while ensuring that individuals are working with information in appropriate ways.

“ **ECS object storage is the strategic platform of the future for us. In a hybrid, multi-cloud world, ECS supports a wide range of applications.**”

**Johan Van Camp,**  
Head of ICT Infrastructure,  
Ghent University



## A new way of teaching and learning

The university has implemented numerous Dell Technologies solutions as part of its digital modernization. Ghent counts on having compute power on-premises to drive HPC and other critical applications – and uses Dell PowerEdge servers for the performance it needs.

“Dell PowerEdge servers are extremely energy efficient and highly reliable,” Van Camp comments. “The Dell Integrated Remote Access Controller also allows us to easily manage the systems and keep the lights on, even remotely. This was especially helpful when team members couldn’t easily come onto campus.”

Ghent’s sweeping modernization efforts deliver the flexibility to significantly reduce ‘shadow IT,’ where users on campus find their own technology solutions – while providing a long list of benefits including higher performance, scalability and cost savings.

“The ability to mix and match storage solutions has probably saved us 30% to 35% over other alternatives,” concludes Van Camp. “The word ‘partnership’ gets used a lot in our industry. But I’ve been very impressed with Dell Technologies’ level of commitment to our requirements.”

“ **The word ‘partnership’ gets used a lot in our industry. But I’ve been very impressed with Dell Technologies’ level of commitment to our requirements.**”

**Johan Van Camp,**  
Head of ICT Infrastructure,  
Ghent University

[Learn More](#) About Dell Technologies Solutions.

Connect on Social.



**DELL**Technologies