Finis Terrae University Achieves Unified Management Thanks to Red Hat OpenShift Virtualization

UNIVERSIDAD Finis Terrae

Customer name
Finis Terrae University

Industry
Education

Country
Chile

Project Overview
University with over 10,000 undergraduate and graduate students.

Software and Services
Red Hat® OpenShift® Virtualization

Red Hat Enterprise Linux®

Kubernetes

Red Hat Consulting Team

In 2024, Finis Terrae University faced a historic challenge when it was forced to switch virtualization software providers due to various economic and technological obstacles. The crisis, which seemed to be unfolding, threatened to disrupt both the administrative and academic processes at the institution.

In this context, the University's technicians turned to Red Hat technologies to address the impending challenges. By implementing Red Hat OpenShift Virtualization, they were able to provide effective solutions for demanding academic and administrative processes. Migrating to virtual environments allowed the University to make necessary changes without upgrading its existing hardware, thereby reducing both investment and operational costs.

Benefits

▸ Unified software management and automation of administrative and educational processes.

▸ More consistent operations: The technological stack was simplified.

▸ Improved performance and stability due to streamlined operations.

▸ Red Hat OpenShift Virtualization enabled the migration from physical to virtual machines.

▸ Access to the open-source community and partner ecosystem.

▸ 24/7 support.

▸ ROI of 17.68%.

Great crises, great opportunities:
Finis Terrae and its commitment to automation

In 2024, a significant crisis struck Chile's Finis Terrae University. Its software provider, without prior notice, decided to increase its service fees by 300%. The University's budget had not accounted for this unexpected expense, causing considerable disruption to the IT department's planning. Faced with no other choice, the University had to renew its contract and accept the provider's terms to ensure the continuity of its academic services. This situation created an urgent need: change providers and gradually migrate physical servers to the cloud using a more efficient and cost-effective program.

In this complex scenario, Finis Terrae University found a key ally in Red Hat technologies to implement an ambitious automation program and facilitate the migration to virtual environments by April 31, 2025. Starting from that date, Red Hat OpenShift Virtualization met the University's needs without interrupting its strategic activities, such as enrolling 10,000 students in undergraduate and graduate courses.

Red Hat Innovators in the Open

About Red Hat Innovators in the Open

Innovation is the core of open source. Red Hat customers use open source technologies to change not only their own organizations, but also entire industries and markets. Red Hat Innovators in the Open proudly showcases how our customers use enterprise open source solutions to solve their toughest business challenges. Want to share your story? Learn more.

The opportunity presented by Red Hat OpenShift Virtualization also allowed the University to explore new areas, such as containerization, and initiate a project to leverage security tools available through subscriptions.

Moreover, with Red Hat technologies, Finis Terrae was able to respond to security alerts raised in Chile following several cybersecurity breaches at other institutions. The automation of processes, coupled with access to the open-source community and partner ecosystem, enabled the University to address security threats and safeguard its confidential data.

Red Hat's services demonstrated that great opportunities can arise from major crises. As a result, Finis Terrae University was able to access more efficient, flexible, and cost-effective technological support.

Efficient and profitable transformations:
Finis Terrae University migrates to virtualization with existing hardware

One of the main challenges when changing software providers is the uncertainty regarding their operation and performance. However, Finis Terrae University was able to mitigate these risks after evaluating and testing Red Hat services, which were tailored to meet the institution's needs for continuous and automated operations.

The most significant challenge in the migration process was related to the use and acquisition of hardware. The University received quotes from multiple companies offering their services in exchange for purchasing expensive new equipment. This proposal was contrary to the University's goals, which were focused on preserving its recently acquired hardware through a substantial investment.

Red Hat met this need by enabling the University to continue its operations without disrupting academic activities. The company provided the necessary resources and support to execute a migration that was compatible with the University's existing equipment.

Finis Terrae University had invested in new infrastructure and could not afford to discard it. As a result, they explored various technologies, all of which required either purchasing new hardware or migrating directly to the cloud, both of which were costly. Red Hat OpenShift Virtualization enabled the University to utilize its server farm and storage without purchasing additional hardware. Part of the project included adapting to new models and technologies, and training staff in containerization processes. This was not just an infrastructure solution—it became a holistic solution that opened up new possibilities within IT management.

Once the migration was completed, the results were immediate. In early September, Finis Terrae University migrated its first physical machine to a virtual environment. This initial migration took 15 hours because the previous service had not been optimized. After optimizations were made, the next migration only took 15 minutes.

The win-win of multidisciplinary automation:
developers and programs at the service of education

The migration to new technological systems had an additional benefit for the University. It wasn't enough to simply automate processes or maximize platform operability; advancements in containerization and development had to be integrated into educational programs. The IT department at Finis Terrae University engaged with the Red Hat team to discuss ideas for promoting multidisciplinary programs with the services provided. With the support of the Red Hat ecosystem, an ambitious program was launched to integrate Red Hat OpenShift's flexibility into academic curricula.

"When we migrated the first virtual machine to Red Hat OpenShift, we compared it with a machine running on VMWare. The results showed that Red Hat OpenShift's response times were noticeably shorter, storage access was faster and more efficient, and CPU usage decreased—all while using the same hardware."

—

Pablo Lancellotti
IT Operations Manager
at Finis Terrae University

This opportunity allowed the University to explore new areas. It has already started leveraging containers and is working to implement artificial intelligence tools. The institution aims to ensure that, in the future, faculties can conduct research simulations using Red Hat platforms in their spare time. The University also hopes to integrate Red Hat platforms into cutting-edge programs like Virtual Reality Engineering and Video Game Development.

The support provided by Red Hat OpenShift Virtualization allowed the IT department to accelerate the migration process. With the help of Red Hat developers, the transition, which was initially planned for April 2025, was completed by mid-December 2024. In the medium term, the University expects to fully optimize Red Hat technologies, ensuring efficient and high-quality administrative and educational processes.

About Red Hat

Red Hat is the world's leading provider of open-source enterprise solutions for businesses and organizations. With a community-driven approach, Red Hat delivers highly reliable, high-performance technologies such as Linux, hybrid cloud, containers, and Kubernetes. Red Hat helps customers integrate new and existing IT applications and automate and manage complex environments. A trusted advisor to Fortune 500 companies, Red Hat offers award-winning support, training, and consulting services that bring the benefits of open innovation to any industry. Red Hat is a hub for a global network of companies, partners, and communities, helping organizations grow, transform, and prepare for the digital future.

About Finis Terrae University

Finis Terrae University is a private, non-profit higher education institution. Rooted in Christian values, it aims to seek truth, goodness, and beauty to contribute to the transformation of society. Founded in 1981 and starting academic activities in 1988, the University initially offered degrees in law and commercial engineering. Today, Finis Terrae University leads a project based on excellence, comprehensive training, knowledge generation, artistic creation, and social transformation through a wide range of undergraduate and postgraduate programs designed to meet the demands of an increasingly competitive society.

About Red Hat

Red Hat is the world's leading provider of enterprise open source software solutions, using a community-powered approach to deliver reliable and high-performing Linux, hybrid cloud, container, and Kubernetes technologies. Red Hat helps customers develop cloud-native applications, integrate existing and new IT applications, and automate and manage complex environments. A trusted adviser to the Fortune 500, Red Hat provides award-winning support, training, and consulting services that bring the benefits of open innovation to any industry. Red Hat is a connective hub in a global network of enterprises, partners, and communities, helping organizations grow, transform, and prepare for the digital future.

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