

"We embarked upon a process of technological innovation, the final stage of which is the adoption of virtual servers and thin clients. These technologies, used by students and lecturers, have provided major advantages in terms of efficiency, maintenance, security, ease of use, and energy conservation."

Vincenzo Lezzi Chief Information Officer Libera Università Maria Santissima Assunta

LUMSA selects Fujitsu to implement PRIMEFLEX for VMware vSAN hyper-converged IT infrastructure, increasing flexibility and scalability.

## At a glance

Country: Italy Industry: Education Founded: 1939 Lecturers: 300 Students: 6,000

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### Challenge

LUMSA – Libera Università Maria Santissima Assunta – is a non-state Italian university established on Catholic principles. LUMSA decided to consolidate its existing information systems and virtualize end-point clients, seeking simpler management and greater flexibility. This increases the level of service for lecturers and students and enhances data and access security.

#### Solution

Fujitsu SELECT Partner, PCS Group, worked with LUMSA to implement the FUJITSU Integrated System PRIMEFLEX for VMware vSAN, a hyperconverged architecture based on the FUJITSU Server PRIMERGY system, which supports more than 60 Fujitsu FUTRO Thin Clients, set to increase up to 200 in the near future.

#### Benefit

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Simpler management of IT resources

LUMSA

LIBERA UNIVERSITA'

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- Greater scalability for future developments
- Faster deployment and client configuration
- Enhanced data and access security



# Customer

Libera Università Maria Santissima Assunta (LUMSA) is a prestigious, internationally-recognized academic institution with 300 lecturers and approximately 6,000 students. It is the second oldest university in Rome after Sapienza. At the heart of LUMSA lies the close bond between humanistic tradition, with the university's Catholic roots, and technological innovation. In addition to providing specialized education for young people, it also offers professional development programs for mature students.

## **Products and Services**

- FUJITSU Integrated System PRIMEFLEX for VMware vSAN
- FUJITSU Server PRIMERGY RX2540
- FUJITSU Thin Client FUTRO L420
- VMware vSAN storage virtualization software
- Maintenance and system services

## Virtualize for growth

Constantly in search of simplified IT infrastructure management and improved service for teaching staff and students, LUMSA embarked on a process of virtualization a number of years ago. The architecture implemented at the end of 2017 used a SAN with hard disks as storage. Following subsequent technological developments, the university decided to switch to a more efficient, hyper-converged architecture better able to support virtual clients.

The intervention involved both server implementation, selecting the FUJITSU Integrated System PRIMEFLEX for VMware vSAN solution and increasing the existing client inventory. Some of these clients were allocated to the offices of teaching staff, while others were designed for use as electronic library catalog terminals, making a total of 60 FUTRO L420 thin clients.

The virtual servers running on PRIMERGY RX2540 systems however, were intended to host the university's new e-learning portal elearning.lumsa.it, based on Moodle LMS and jointly developed by PCS Group and Fujitsu.

"The decision to undertake client virtualization with the new Fujitsu solution," recalls Luca Gammelli, CTO, PCS Group - the Fujitsu SELECT Circle and Expert Partner that supported the project - "made it possible for the university to continue to benefit from centralized management of the terminals distributed throughout the university campus, thereby improving performance in comparison with the previous virtualized infrastructure."

Drawing on previous experience (the university had already activated a few hundred virtualized terminals), LUMSA turned its attention to thin clients, as these can be managed completely and remotely from a single, centralized console. Thin clients are more cost effective, flexible, and easy to manage in comparison with a standard desktop computer, helping enhance the level of security across the entire information system, as well as maintaining, or rather improving, the versatility and dynamism required by the university's teaching staff and students.

### Efficient and cost effective

The tender issued by the university was won by Fujitsu and the PCS Group, with the solution being the most consistent with LUMSA's specific requirements, as well as the most cost effective and simple to manage.

"The availability of brand new hyper-converged technologies on the market," explains Vincenzo Lezzi, CIO, LUMSA, "persuaded us to continue with this process, improving, and optimizing several aspects of the previous virtualization technologies, such as storage consumption.

"For this reason, after careful research into the technology solutions available on the market and a test phase, we opted for FUJITSU Integrated System PRIMEFLEX for VMware vSAN based on Fujitsu PRIMERGY servers, entrusting their development to PCS Group and Fujitsu."

"The project was designed to enhance, as well as improve, the university's previous server and client virtualization system," adds Gammelli, "and it included an initial supply of 60 Fujitsu FUTRO Thin Clients with the associated system software. The architecture dimensions were however established with an immediate increase in the number of terminals in mind, offering scope for further, subsequent developments."

The new FUJITSU Integrated System PRIMEFLEX for VMware vSAN infrastructure immediately demonstrated benefits in relation to management. LUMSA's IT department manages all activity on the virtual terminals from a single, central console, including configuration, updating software, and implementation of IT security policies, which is remarkably simple with virtualized thin clients.

## The future is "thin"

The thin client formula worked so well, in combination with the hyper-converged architecture and virtualized VMware platform, that LUMSA is considering extending the project, ultimately managing more than 200 new thin client terminals. The scalability achieved by means of virtualization and the new terminals, along with simpler management, is exactly what the CIO of LUMSA was hoping to achieve.

"The tangible benefits," explains Gammelli, "are evident in terms of the speed of deployment, flexibility with configurations that can be adapted to suit the various professionals who work within the university, and finally, agility regarding the centralized management of clients."

LUMSA's new philosophy, characterized by flexibility, security, and mobility (which refers to the users' mobility around campus, rather than the use of mobile devices) is part of a broader digital transformation strategy to exploit technology as a competitive factor. As such, the project implemented by LUMSA, Fujitsu, and PCS is an example of how co-creation can offer clear benefits, both in terms of improved IT management and an enhanced, more attractive service offering for end-users.

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