



“The platform created as a result of this project puts the Mediterranean University at the cutting edge in terms of facilities and infrastructure for food and agriculture research.”

Santo Marcello Zimbone  
Director General  
Mediterranean University of Reggio Calabria

## FUJITSU Integrated System PRIMEFLEX for VMware vSAN meets requirements for speed of implementation and flexibility for Mediterranean University of Reggio Calabria.

### At a glance

Country: Italy  
Industry: Education  
Employees: 500  
Website: [www.unirc.it/](http://www.unirc.it/)

### Challenge

Meet the communications, data processing and results sharing requirements from the Saf@med research project and the futuristic laboratory set up for its completion. Instead of allocating new resources to the project, there was an opportunity to exploit the scope for optimization and flexibility of virtualization.

### Solution

FUJITSU Integrated System PRIMEFLEX® for VMware vSAN based on two FUJITSU PRIMERGY CX400 systems with eight FUJITSU PRIMERGY CX2550 server nodes with Intel® Xeon® E5 processors and latest-generation DDR4 memory, VMware software stack including vSAN, about 30TB of storage capacity, and Horizon View.

### Benefit

- Satisfy the essential requirements to support the Saf@med research project
- System consolidation and drastic reduction in man-hours dedicated to maintenance
- Significant energy savings on consumption and cooling

## Customer

The Mediterranean University of Reggio Calabria was founded in 1967 and now has six departments and more than eight thousand students. The university aims to foster growth in Calabria and Italy through research, training and the quality of the services offered to students and the local area. It promotes the ethical and civil development of the community, innovation, the transfer of technologies and skills in partnership with business and social entities, cooperation with research institutions and national and international institutions.

## Products and services

- FUJITSU Integrated System PRIMEFLEX® for VMware vSAN
- VMware ESXi 6.x, vCenter, vSAN, Horizon View
- 2 x FUJITSU Server PRIMERGY CX400
- On-site consulting and technical support
- 8 x FUJITSU Server PRIMERGY CX2550 nodes with Intel® Xeon® E5
- Guarantee covering the products' excellent reliability

## Challenge

In recent years, the university has focused on new areas of research, especially surrounding farming technologies. Following on from the themes addressed by Expo 2015, it created a research unit based on the European model, called Saf@med, whose main area of concentration concerns the influence of climate change on agricultural and agri-food products, as well as the effect on production security. The expected impact of the new structure, both on the local area and the international scientific community, called for a huge commitment from the university's IT department, which responded by rationalizing data center resources and adapting them to the new unit's requirements.

## Solution

The integrated components of FUJITSU Integrated System PRIMEFLEX for VMware vSAN met the requirements for speed of implementation and flexibility. "It took three months from the decision to go ahead with the project until its completion," says Prof. Domenico Ursino, Deputy Chancellor for IT. He adds: "We decided on the virtualization route to consolidate existing IT resources and provide rapid support for the important research project."

Melchiorre Monaca, Head of the University IT Service says: "A dozen servers were consolidated into a single unit with immediate savings in terms of man-hours dedicated to the systems and energy consumption. For more than a year now we are extremely satisfied with running a completely hyper-converged IT infrastructure as the foundation of our multi-purpose virtualization and virtual desktop environment."

## Benefit

The Saf@med project led to the creation of a Research Infrastructure built across five platforms, coordinated by as many lead scientists and dedicated to: sustainability in primary production in the Mediterranean; monitoring, protection, enhancement and sustainable management of Mediterranean agricultural land and forests; agri-food processes and development of sub-products; food safety; and the economy of sustainable development. According to Santo Marcello Zimbone, Saf@med Coordinator and General Director: "The research platform created as part of this project puts the Mediterranean University at the cutting edge. The results of the research and innovative services will definitely have an impact, both in the academic sphere and, above all, in industry."

The contribution of the IT department to the project involved readying processes for data communication, storage and processing, and also for sharing results. "The previous system was characterized by extreme hardware fragmentation, with servers dedicated to every single activity or service," Monaca explains. "For us it was essential to consolidate the infrastructure to make it more flexible and better suited to the demands of the new laboratory."

Virtualization seemed to be the most natural way to achieve IT infrastructure objectives and to meet the short timeframe to create the Saf@med laboratory. "The decision to use FUJITSU Integrated System PRIMEFLEX for VMware vSAN stems from our previous good experiences with the two suppliers, but above all from the limited number of man-hours required for implementation and management, simplicity of use and ease of provisioning," Monaca says.

It took about three months from the decision to go ahead with the project to its completion. During this period, the process moved on from the initial identification of requirements to the consolidation of IT services, which range from the university's administration and communication needs, to managing the activities of more than 8,000 current students and 500 teaching or technical staff, to the needs of the 120,000 users in the database. From the initial set-up of a dozen dedicated servers, everything has now been consolidated into a single system with obvious and immediate savings in terms of maintenance staff and energy costs. "Our infrastructure is without doubt more stable and efficient now," says Monaca, "but we have also already seen positive effects in terms of data availability and security. Fujitsu worked with us in all phases of the process and we appreciated the joint effort with VMware and Gruppomega, especially for the initial activation procedure, which was performed with specialist technicians on-site."

The successful outcome of the infrastructure consolidation project relating to the launch of the Saf@med research infrastructure has led the university to deploy the same solution for desktop virtualization.

"Fujitsu and Gruppomega were able to understand our needs and meet our requirements, offering us a solution that was quick and easy to implement," concludes Monaca.

## FUJITSU

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