FUJITSU

# Case Study
# ENAC

"Blade technology takes up less space and offers the ability to use virtualization to manage the migration from an old to a new infrastructure."

Giampaolo Parisini, Director of Information Systems, ENAC



## The Customer

Country: Italy
Sector: Public Administration
Year of incorporation: 1997
Employees: 980
Website: www.enac.gov.it

ENAC
ENTE NAZIONALE PER L'AVIAZIONE CIVILE

## The Challenge

In 2010, ENAC (Italian Civil Aviation Authority) published a tender for the replacement of the whole of its network equipment, from its data center to its workstations. The tender specifications set out the precise technical features required of the systems to be implemented, a solution that combined a lease purchase agreement for the servers and a lease agreement for micro-computing equipment, as well as an expertise in integration solutions.

## The Solution

Fujitsu won the tender thanks to the full range of products it offers and its compliance with regulations governing environmental protection, which was clearly expressed in the tender documents. Strategic applications for ENAC were put on to the PRIMERGY BX920 blade server, such as the Empic technical data management system.

## The Customer

The Ente Nazionale per l'Aviazione Civile (ENAC) is the only authority that oversees technical regulation, certification, monitoring and control in the civil aviation sector in Italy. The organization deals with the various aspects of civil aviation regulation, of the control and monitoring of the application of regulations adopted nationally and internationally, and of the rules and regulations governing the administrative and financial aspects of the air transport system. ENAC has its head office in Rome, is represented in the major Italian airports by the Direzioni Aeroportuali (Airport Management Companies), and has 31 branch offices throughout Italy.

## The Challenge

Every three years, ENAC publishes a tender for the replacement of its network equipment, both at its head office and at the branch offices across the country. The latest tender, published in 2010, was extended to the whole central and national IT infrastructure, including the lease of around one thousand PCs and 300 notebooks and the purchase of about 40 blade, rack or tower servers. In addition to the obsolescence of the devices, updating their technology is of strategic importance for a national authority like ENAC, which is called upon to adopt regulations issued by the European Union governing, for example, the construction and maintenance of airplanes, licenses or qualifications.

## The Solution

The tender drawn up by ENAC was designed to award the contract to a company that was capable of supplying equipment from the same vendor so that they could enjoy the intrinsic benefits of using only one vendor's management and support services. Through the Top SELECT Expert Partner, Italware, Fujitsu was able to expand their presence from workstations to the data center, thanks to an offer consisting of their LIFEBOOK, ESPRIMO and PRIMERGY ranges, which not only meet the technical (processors, RAM, mass storage) and commercial (lease and lease purchase agreements) requirements set out in the specifications, but also the environmental protection requirements, guaranteed by their compliance with regulations governing the subject. The delivery and installation of the products was completed in 60 days, with the focus then turning to the migration from the old to the new infrastructure, with the associated migration of applications under conditions that guaranteed functional continuity.

## The Benefits

- Total replacement of network equipment at low costs
- Space savings, environmental protection and better computation capacity guaranteed by blade technology
- Reduction in server maintenance costs
- Time taken to use strategic applications on workstations halved

## Products and Services

- PRIMERGY BX920 and Dynamic Cube PRIMERGY BX900 blade servers
- PRIMERGY TX300 S5 server
- PC ESPRIMO P7936 0-Watt with B19W and B22W 5-ECO monitors
- LIFEBOOK S760 notebook

## The Benefits

The regular replacement of their network equipment is dictated at ENAC by the need to continually update their application environments so that they can guarantee they can regularly adopt air transport regulations introduced in Italy and the EU and check that they are applied at airports correctly. The decision as to where to strategically locate workstations, already taken in the past, in this case facilitated and rendered the update processes more economical, like the migration to the Microsoft Windows 7 operating system. The transition was prepared carefully and did not cause any particular problems to the staff involved. "In the data center, which had not been replaced during the previous three-year period, it had become absolutely essential to increase the service capacity of the systems," adds Giampaolo Parisini, Director of Information Systems at ENAC, "and this was achieved through the change to blade technology, which combines space savings with the ability to use virtualization to manage the gradual migration from the old to the new infrastructure". Many applications of institutional importance have already been loaded onto the new Fujitsu PRIMERGY BX920. The migration of Empic was of undoubtedly enormous strategic importance, a complex modular system for the management of technical data that are dealt with by the civil aviation authorities (type of certificate, airworthiness certificates or company approvals, licenses, etc.).

"The migration to machines with higher performance has wiped away the slow operation and access we were experiencing before," explains Mr Parisini. "Changing our network of workstations has halved the time we used to take to access strategic applications". Today Empic, which manages the organization's whole technical data bank, is hosted on six physical blades and the modules that make them up (about twenty) are still undergoing a phase of gradual implementation. Updating the technology has also been the first step in a process of analyzing the physical and logical organization of ENAC's information system, which will prove practical for potential future developments, especially towards virtualization: "Soon we will add more to the eighteen blades we have already purchased, at least to complete the processes of backing up and evaluating the redundancy of our current systems," explains Mr Parisini. "At the same time, we shall start monitoring the active systems and the installed applications in order to understand what we should migrate to machines with higher

performance and what we should delete from the physical machines and transfer to a virtual environment".

In strictly economic terms, the replacement process begun in the data center is already having a positive impact on maintenance costs, today integrated in the lease installments, whereas before the costs were incurred for obsolete equipment that needed frequent interventions. Increased efficiency has also been achieved in the collaboration with the 31 branch offices across the country where Fujitsu PRIMERGY TX 300 S5 rack servers have been installed. The image of the head office domain was replicated on each of these servers, making access to and management of applications more efficient.

## The Partner's Role

Italware, the Top SELECT Expert Partner of Fujitsu Technology Solutions, dealt with the supply and installation of systems, as well as launching the maintenance and help desk services. Given the requirements detailed in the tender document, the company identified the best solution to meet ENAC's needs and be supplied in the times indicated. "During the implementation phase, we were able to use our expertise in multi-vendor integration," explains Giuseppe Piccione, Government Sales Manager of Italware, "also dealing with storage products and printers as set out in the tender document and managing the temporary coexistence of the new and the old infrastructures".

## Conclusions

ENAC's status as the only national authority in the monitoring and control of the civil aviation sector requires them to replace their technological equipment regularly and makes IT the engine that drives change, which reaches every section of the organization. The implementation of powerful and up-to-date blade servers in the data center has already triggered innovative processes that involve, for example, the identification of a new accounting system and the modification of the Oracle database.

"*In our organization, the development of new services and projects goes hand-in-hand with the adoption of international regulations on air transport. The power of computation requested must be linked to functional IT management solutions that meet our needs*". Giampaolo Parisini, Director of Information Systems, ENAC

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In collaboration with

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