



HYPER-CONVERGENT INFRASTRUCTURES AT INFOCAMERE FOR HIGH-PERFORMANCE VDI SERVICES



CUSTOMER
INFOCAMERE

WEB SITE
WWW.INFOCAMERE.IT

INDUSTRY
PUBLIC SECTOR

LOCATION
Padua, Italy

CHALLENGES

- Increase VDI performance
- Keep systems management costs under control
- Reduce the workload of IT personnel

SOLUTION

InfoCamere chose to implement a data-center infrastructure that provides VDI services with a VMware hyper-convergent architecture, thereby maximizing their investment in new Fujitsu servers and taking advantage of software features for vSAN management.

BENEFITS

- Increase in VDI performance
- Reduction of consumption and hardware TCO
- Simplification and reduction of management activities

InfoCamere enhances its Virtual Desktop Infrastructure (VDI), selecting (by way of a tender process) hyper-convergent architecture by VMware and Fujitsu. After a two-day implementation, it took just two weeks to complete the migration of 600 users from the previous environment, all of whom now find themselves, almost without realizing it, in an environment that provides the high levels of performance of a physical workstation. By unifying computing and data, the new architecture significantly simplifies the work of IT personnel, who can now manage the infrastructure from a single, central console.

At the service of the chambers of commerce

InfoCamere is the technology arm of Italy's chambers of commerce, the organization that manages the system's technology assets and IT services and which supports the chambers of commerce in their mission to serve the general interests of enterprise while promoting competition. InfoCamere unites the various chambers in a network with the other actors of Italy's economy, including businesses, government, industry associations, professional boards, information providers, and the general public. The work of InfoCamere ranges from managing the technology assets of the various chambers and the simplification and digitalization of services to the development of back-office services and document storage.

The challenges

Raffaele di Gennaro is an information-systems veteran at InfoCamere. He leads a team of twenty in the Technology & Systems unit and has played a role in developing the organization's IT infrastructures over a nearly thirty-year period. One of the most significant aspects of this evolution he has experienced was the introduction of virtualization technologies at the InfoCamere data center in 2008, beginning with the server component. Today, he manages InfoCamere's infrastructure services.

His team manages a virtual desktop service provided to some 600 users in offices in Padua, Rome, Milan and Bari. The service was activated in 2012 on the VMware Horizon Enterprise platform, and users have learned to appreciate the benefits of working, wherever they may be, with a workstation configured and optimized for the job they do and the applications they use without the need to use a traditional PC.

"Over the years, we have seen an increase in demand for VDI services, and we have been able to confirm that these architectures require the support of highly efficient, high-performance hardware and software, in terms of both processing power and installed storage," explains Di Gennaro. "Furthermore, as the number

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VMWARE FOOTPRINT

- VMware Horizon Enterprise
- VMware vSphere
- VMware vSAN

PLATFORM

- Fujitsu

PARTNER

Fujitsu is one of the leading vendors of new scale-out solutions laying the groundwork for hyper-converged ICT infrastructure. With extensive experience implementing integrated systems, Fujitsu works with VMware to introduce entirely new technologies in order to transform the role played by data centers.



of users and resource intensity grow, we are noting more than proportionate growth in costs to manage the infrastructure.”

In order to improve service quality and performance, it became necessary to strengthen the supporting storage infrastructure—a “standard” upgrade that was expected to come at a high cost in order to purchase the hardware as well as further increase the workload for the IT team. Action needed to be taken fast, or VDI performance would no longer have been up to the standards required.

The answer is within you

When searching for a solution to optimizing the resources available at the InfoCamere data center, Di Gennaro’s team saw an opportunity in the virtualization of storage resources. “As a part of the VMware vSphere license we already had, the vSAN component allowed for extending virtualization to storage in order to create a hyper-convergent VDI,” explains Di Gennaro. In this way, it was still necessary to purchase new hardware, but the vSAN software was able to take best advantage of the storage and processing power for the VDI services within the scope of this hyper-convergent architecture.

Following the move to this configuration, one that was inspired by a software-defined vision for the data center, InfoCamere issued a call for tenders to select a partner to provide the systems, and Fujitsu’s bid rose above those of the other players in terms of both technical requirements and cost. As 2016 came to a close, project implementation was fully under way. “Implementation of the infrastructure based on VMware and Fujitsu technologies was truly very fast thanks to a series of automation components that greatly simplified the startup process,” recalls Di Gennaro.

“It took just two days and the platform was up and running within our environment and was fully integrated, controlled, and functioning.” The migration that followed took a couple of weeks for some 600 virtual desktops and had minimal impact on the users concerned. “Releasing an infrastructure of this sort normally takes a very long time and involves many different departments and individuals,” explains Di Gennaro. “In this case, releasing hyper-convergent technology enabled us to reduce the time and the money that needed to be invested in startup.”

Benefits

“The infrastructure we’ve built with VMware enables us to provide VDI services to an especially demanding user base at a minimal impact and absolutely with a noticeable increase in performance,” says Di Gennaro. “Our users are used to good service, but the platform’s response times are markedly better and are now entirely comparable to those of a physical PC.”

Along with this clear increase in performance came the simplification of managing the infrastructure and a reduction both in consumption and in the amount of space occupied. “We concentrated eight new systems in less than half the space previously occupied by eleven machines,” notes Di Gennaro. “By concentrating storage and processing capacity within a single platform, the capabilities of the people managing these systems are also now more integrated, as is management itself, which is controlled from a single console.”

Today, InfoCamere’s VDI services can be managed by just one person. Just ask Simone Tormen, the technician who closely followed implementation in collaboration with the VMware and Fujitsu technicians. “Simplification of

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platform management is the most significant change,” Tormen says. “We replaced a traditional organization, which called for both system and storage administrators, with a more streamlined one that takes just one person, because management activities are either automated or simplified, and the time required has been reduced to a minimum.”

The hyper-convergent architecture combines two traditionally separate environments in that the servers use the processing power and storage capacity within a single machine. “The real change is the integration of computing and data within the same platform,” Di Gennaro explains. “This is a very important change because it transforms the data center in terms of both technology resources and people because it enables us to overcome the traditional separation between system and storage administrators and will, in the future, eliminate many of the silos that make up an IT organization such as ours.”

Next steps

“This project is an important opportunity for growth for us in that it has enabled us to see the potential of hyper-convergent architectures, not only for relatively isolated areas such as VDI services, but also in managing InfoCamere’s entire data center infrastructure,” Di Gennaro concludes. “The approach towards a software-defined data center that VMware technology makes possible has shown us the way forward to overcome many of the silos that our organizations are normally bound to, in the same way that vertical skills characterize many of our specialists. The evolution of technology is motivating us to seize these opportunities and to update the skills of our people, who are always the most important part of any organization.”

