FUJITSU

Case Study
Lombardia Informatica

"Our organization is continually changing and the virtualized environments guarantee flexibility and fast development times impossible to obtain in other ways." Paolo Fornasari, Technologies and Services Director, Lombardia Informatica.

The customer

Country: Italy
Sector: Public Administration
Year of incorporation: 1981
Employees: 576
Website: www.lispa.it

The Challenge

In recent years, Lombardia Informatica has moved towards open systems; this must now be combined with a rationalization of environments. The consolidation and virtualization project includes requirements on regaining space, service continuity and cost savings on the acquisition and running of IT products

The solution

The call for tenders for the servers issued by Lombardia Informatica was won by Fujitsu, with a solution which combines high-performance open systems, capabilities extended to the connected software platforms (Red Hat Linux and VMware vSphere 4) and costs considered attractive. As well as a significant reduction in physical systems, it offers the possibility of redistributing workloads efficiently

The customer

Lombardia Informatica is the operating entity of the Lombardy Region which deals with all the region's IT demand and supply activities. The company plays a pivotal role between the demand of the public administration body, the supply of the information & communication technology market and the individuals/businesses using the services. In the last financial year (2010) it handled business worth approximately 200 million euros and, in terms of production and management capacity, this enabled it to become the leading "captive" IT company in Italy. About 60% of Lombardia Informatica's turnover comes from the market through public calls for tender.

The Challenge

Cost control and resource optimization requirements are pushing public administration bodies more and more towards the consolidation and virtualization of IT environments. In Lombardia Informatica, this trend is combined with the ever expanding use of open systems, based on x86 multicore architectures and the Linux operating system. One physical machine has the power and expandable memory to manage up to 15 virtual systems. More efficient workload distribution is combined with improved service reliability to provide business continuity.

The Solution

Lombardia Informatica's consolidation and virtualization project is leading to the migration to a single physical place of systems which used to be dispersed in various offices. In production areas, about fifteen physical machines now control approximately 180 virtual systems. Entire services, such as the Health and Social Services Information System, are now managed by the new environment. In addition, when activating new services, there is no longer a need to acquire dedicated servers as the services can be allocated to a virtual machine, making the decision-making process more efficient. Fujitsu won the bid "*for its ability to combine a technologically reliable solution with appropriate costs,*" emphasized Paolo Fornasari, Lombardia Informatica's Technologies and Services Director.

The Benefits

- Alignment with the overall reorganization of the information system.
- When fully operational, 80% of the physical servers in production areas will have been virtualized.
- The cost of acquiring new hardware and software is expected to fall by approximately 30%.

Products and services

- Fujitsu PRIMERGY RX300 S6 dual-processor rack server
- Fujitsu ETERNUS DX80-iSCSI SAN storage systems.
- Integrated delivery, commissioning and on-site maintenance services
- Integration of Red Hat Linux and VMware vSphere 4 platforms

The Benefits

Lombardia Informatica is carrying out a significant renewal of its information system infrastructure. This includes a primary data center based at the head office and a second environment not just for disaster recovery and business continuity but also for the delivery of certain services. The project managed by Fujitsu therefore arose out of the need to bring the environments in line with the new infrastructure configuration. "*When the work is complete,*" explains Fornasari, "*Approximately 80% of the physical servers in production areas will have been virtualized.*" The plan is for this to be achieved by the middle of 2012, when the new secondary data center is completed.
Overall, the organization manages approximately 200 services for the Lombardy Region.
As well as the reduction in physical space and resulting energy savings, another tangible advantage of the project is the fall in costs related to acquiring new hardware and software, estimated at around 30%. "*On top of this,*" adds Fornasari, "*We should underline the optimization of the time needed to identify malfunctions and the possibility of activating new services more quickly.*" A recent example is the introduction of the Regional Services Card - already distributed to 9.9 million residents giving them access, also online, to health and public administration services - as a means of obtaining fuel discounts in the municipalities closest to Switzerland. This operation involved more than a million residents. Overall, many services have already been virtualized, from portals for residents (for example to pay taxes) to internal procedures ranging from managing financing to sick notes. One of the first important changes occurred in early 2010 when the Health and Social Security Information System migrated from a peripheral site to the central site. This led to a consolidation from the original 1290 ft2 occupied by the servers to just 12 racks. "*The virtualization work which has already started,*" says Salvatore Bencivenni, Infrastructure Planning Manager, "*Has led in just a few months to the disposal of approximately 200 physical systems, as well as the optimized redistribution of workloads on the x86 machines. The operation has allowed us to speed up the plan to reduce proprietary systems in favor of open source platforms.*"

Generally speaking, a process such as this virtualization process does not merely offer benefits linked to simplifying IT environments, but also makes it possible, especially for public administration organizations, to respond more efficiently to its customers' requirements, "*The need to use calls for tenders to make new acquisitions,*" explains Bencivenni, "*Makes our procurement process longer than that used in private industry. Starting up a new service, therefore, has always been connected for us to the purchase of new, dedicated physical servers. Now, however, we can activate a virtual machine for the purpose.*"
Some major new consolidation projects for the future are now being examined and these might involve the information systems of all the regional organizations.

Conclusion

Consolidation of environments and a general move to open solutions are important elements of the current development of Lombardia Informatica's information system. Fujitsu won the tender linked to the system virtualization project thanks to its capacity to combine a technologically advanced and reliable solution with attractive costs and capabilities not just as regards the hardware platforms but also the software ones (Red Hat Linux and VMware vSphere 4) closely linked to them. The proposed solution, which is still in the implementation phase, has been integrated into the more comprehensive process of rationalizing the IT environments and has already led to tangible results in terms of the disposal of physical systems and the migration of services to virtual systems.

"*Our company is continually changing and the virtualized environments guarantee flexibility and fast development times impossible to obtain in other ways. This is combined with our requirements for efficiency in terms of service delivery and business continuity.*" Paolo Fornasari, Technologies and Services Director, Lombardia Informatica.