We decided to turn to NetApp, who in our opinion are the best on the market, particularly for their SAN and NAS solutions. The partnership with Fujitsu also guarantees us the best in server technology.

Salvatore Petrucci, DTI - System Architect, Il Sole 24 ORE

The customer
The 24 ORE Group is the leading Italian multimedia publishing group operating in the economic, financial, professional, and cultural information sector and is a major benchmark in the world of economics and finance, with 140 publications and more than 2,000 employees. Today, the Group’s informative offerings include the news agency Radiocor, the radio station Radio 24, and the web portal www.ilsole24ore.com, which was completely redesigned in May 2010.

The Challenge
Spurred by the deployment of the new online portal, Il Sole 24 ORE found it needed to implement a new IT infrastructure in a short time frame – just two months – to be able to ensure a continuous supply of services to online and mobile users, as well as an efficient process for managing and backing up data. The new Il Sole 24 ORE portal consists of more than 120,000 pages and occupies 100 GB of space. It offers a variety of services: news, clearly arranged into five categories and nine in-depth topical channels; online newspaper referencing; data banks; newsletters, and public services such as weather and maps. It is also available in a mobile version and enables users to receive important news articles regarding economics, finance, and politics directly on their cell phone, via SMS or e-mail.

The solution
An infrastructure based on a Fujitsu server clustered with two NetApp FAS3040 storage units
The Benefits

- Flexibility
- Storage optimization
- Ease of use and simple installation
- Energy and cost savings
- Fast and secure backup

The solution

“The infrastructure adopted by Il Sole 24 ORE is based on a Fujitsu server cluster, whose main node consists of 6 PRIMERGY RX300 S6 units making a total of 48 cores, 864 GB of RAM, and 108 GHz. These systems are the best accompaniment to solutions which include virtualization environments and combine enhanced performance and reduced energy consumption. The cluster holds a VMware ESX virtual environment which, in terms of storage, is supported by a central NetApp system consisting of two FAS3040 units which manage a total of 99 volumes, used almost entirely for the supply of data via the NFS protocol", explains Petrucci. This protocol has been selected as the result of close analysis of the usage of stored data and, as stated by Salvatore Petrucci, “proved to be the best solution for our requirements and we are very pleased with it.” The company is now focusing on backup and disaster recovery solutions which, thanks to applications such as SnapManager for Oracle, guarantee a reduction in the time taken to supply new services. “We are considering increasing the ESX calculating power with other Fujitsu servers in the remote office, where we have a NetApp FAS3020C system with approximately 70 TB raw”, continues Petrucci.

The possibility of having different systems and/or configurations in the two locations is another big advantage of NetApp technology integrated with Fujitsu solutions, which promotes the recovery of investments and deployment flexibility. In short, thanks to the features of the file system, the exchange of data is focused only on the differences – which are generally small – so that the systems can be aligned daily with great advantages in terms of security and data recovery time.

The Benefits

- Fujitsu PRIMERGY RX300
- VMware ESX
- NetApp FAS3040 and FAS3020C storage
- NetApp SnapManager
- NFS and CIFS protocols

The flexibility offered by NetApp compared with other storage solutions currently on the market has been particularly well-received: the support of different protocols (NFS for Unix and CIFS for Windows) and the possibility of installation in mixed environments, has allowed II Sole 24 ORE to maximize on efficiency and investments. “We have also saved 70% of the space occupied by operating systems," says Petrucci. “thanks to the use of deduplication in a virtualized environment and the presence of a native file system which enables data to be backed up using the smallest amount of space. In this way we have met the storage requirements without having to buy additional drives." Using a cluster with volumes divided on 2 nodes enables immediate update and upgrade of the system, with no service interruption, and even without having to turn off the virtual machines during the cluster resource failover process. This is a feature which ensures that the final service is always 100% operational, even during the most demanding infrastructure maintenance operations. The PRIMERGY RX300 servers add high energy savings to the reliability of the VMware solution, thanks to innovative and patented Fujitsu Cool-safe technology. This, combined with updated ServerView Power Management functions, enables a further reduction in energy consumption of up to 45%, with obvious benefits to the electricity bill. Finally, it is important to note that the deployment of the new site infrastructure, which has been online since the end of May, has come about in a very short period of time: only a couple of months from development to operation. “It is a tangible result which demonstrates the great competence and overall willingness of Fujitsu and NetApp’s employees, two companies which have proved themselves extremely attentive to our needs as their client”, concludes Petrucci.