“Thanks to the modular nature of the Hitachi Adaptable Modular Storage 2500 system, we now have a flexible, cost-effective system with easy tiering. This allows us to intermix different types of drives, providing the right price to performance for each type of data and application.”

Roberto Lucentini
IT Manager
One Italia

ONE Italia

INDUSTRY  Telecommunications

SOLUTIONS  Modular Platform
Hardware — Hitachi Adaptable Modular Storage 2500
Software — Hitachi Storage Navigator Modular 2, Hitachi Device Manager, Hitachi Tuning Manager
Services — Configuration, migration and installation services provided by Hitachi TrueNorth™ Partner Atlantica Sistemi
One Italia Consolidates Company Data with Hitachi Modular Storage Solution

One Italia was formed in January 2007 from the merger of four companies working in the digital sector. It specializes in the management, development and production of multimedia content and services, mainly for mobile phones and the web. The rapid development of One Italia’s business led to a need to consolidate the company data, which was spread across a number of small and medium-sized storage systems. Hitachi Data Systems helped the company rein in its data with a solution based on Hitachi Adaptable Modular Storage 2500.

The Company
One Italia works in various regions of Europe and America as well as in Italy. The company’s specialist activities include:

- Mobile phone VAS (for example, premium content for 3G; it is one of the leading companies in the world in developing these technologies)
- Internet (management of Leonardo.it, the fifth largest Italian portal with over 12 million individual users a month)
- Digital advertising (selling advertising space, direct marketing, proximity advertising, performance consultancy)
- E-commerce (managing the sale of telephone and videophone top-ups on the Shoptre.it site)

One Italia has sites in Milan, Rome, Benevento (where the call center for the mobile telephone company 3 is based), as well as in Prague, New York, Mexico City and Sao Paulo.

“A substantial part of our business involves the delivery of multimedia content, which occupies considerable amounts of storage space. And, in about four to five years, we will have reached the point of having over 20TB of data,” reveals Roberto Lucentini, One Italia’s IT manager.

Requirements
This is why, during the summer of 2009, the company issued a call for tenders to select the best solution for consolidating all its data in a single center. The main need was the migration from a Sun storage system, managed by two Sun Solaris servers, to a modular storage configuration. This would allow One Italia to cope with larger volumes of data, which is increasing at a rate of more than 30% each year. Above all, the transfer needed to be done with the least possible impact on the company’s operations. The chosen project was that of Atlantica Sistemi, a systems integrator based in Rome and a Hitachi TrueNorth™ Partner. It fully convinced One Italia “both in regards to the offer itself and the type of solution it proposed,” emphasizes Lucentini.

The Solution
The solution is based on the Hitachi Adaptable Modular Storage (AMS) 2500 system, with a total capacity of 80TB of storage, thanks to a configuration of disk systems on various levels that also takes account of the different priority levels of the data. Specifically, the system today comprises twenty-eight 400GB 10K rpm SAS drives, twenty-four 450GB 15K rpm SAS drives and sixty-eight 1TB SATA drives. In addition, there are eight 4GB AMS 2000 family cache modules and four 4 x 4Gb/sec Fibre Channel interface adapters. The control software is Hitachi Storage Navigator Modular 2 for the AMS 2500, with Hitachi Device Manager and Hitachi Tuning Manager.

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**Migration**

One of One Italia’s main needs was to minimize the impact on operations during migration, limiting downtime to one or two hours at most. There was a small complication in that the Sun system managed the storage disk array using Symantec Veritas software. There was a need to ensure the consistency of the data during the transfer without having to purchase a Veritas license. This license would have been needed only for the time taken for the migration to the new Hitachi systems, which have their own controller. “So we worked it so that the control was no longer done by Veritas, but directly by the two Solaris servers copying the architecture of the Sun storage systems to the Hitachi system and mirroring the two storage systems so that they could be copied. Then, we removed the mirrors,” explains Lucentini. This process was completed in just over a day without causing any particular problems to the company’s operations and fully achieving the objectives.

Another of One Italia’s requirements was to have different levels of access to the data to take into account the different priority levels: “Thanks to the modular nature of the Hitachi AMS 2500 system, we now have a flexible, cost-effective system with easy tiering. This allows us to intermix different types of drives, providing the right price to performance for each type of data and application. Specifically, [this includes] 20TB with a SAS interface, 10TB at 15,000rpm, with a faster input/output rate, which is ideal for the more critical production data requiring maximum availability. The remaining 10TB are at 10,000rpm, for important information requiring less frequent access. In addition, there are SATA disks for backups, which do not need any particular performance levels,” comments Lucentini.

**Advantages and Future Developments**

As well as the abovementioned advantages, the Hitachi Data Systems solution, which has been fully operational since the start of 2010, provides One Italia with “centralized management of all our storage, with decidedly simpler handling and greater general efficiency. In addition, and of fundamental importance, there is full data redundancy in RAID-5 or RAID-1 architecture. If a controller breaks down, the system will have one in reserve, and the same applies for the switch, guaranteeing maximum reliability,” explains Lucentini. He underlines how the performance of the new solution is “excellent, totally in line with expectations and with what Atlantica Sistemi promised. We also received valuable support from them during the implementation and configuration stages.”

As far as future developments are concerned, One Italia plans to equip itself with a disaster recovery system. “Given the continuing growth of our data, the 80TB we have available now is enough for another full year; but, after that, we will have to expand the storage capacity. And we know that this will not be a problem, thanks to the modular nature of the Hitachi Data Systems solution,” concludes Lucentini.