Thanks to Hitachi, CDLAN has developed and manages a cloud computing platform for the provision of fully scalable infrastructure-as-a-service offerings, in which storage plays a key role. The solution involved the combined use of both block storage, which Hitachi, with its Hitachi Unified Storage 150, is the heart of, and object storage, based on a distributed and redundant cluster that uses disc space on its servers to store content.

CDLAN Chooses Hitachi Storage Technologies to Support and Expand Cloud-Platform-Based Telecommunications Solutions

Milan-based telecommunications operator CDLAN specializes in providing broadband telecommunications solutions and services to both national and international operators. When the company determined it needed to differentiate itself with highly innovative and value-added services for medium-to-large customers, it focused on fiber optic access solution proposals. Through the solutions offered by Hitachi Data Systems, CDLAN has developed and manages a cloud computing platform for the provision of fully scalable infrastructure-as-a-service (IaaS) offerings.

Hitachi Unified Storage (HUS) 150 plays a key role in the HDS solution. With HUS 150, data set capacity can be increased, thousands of snapshots can be acquired for finer granularity of recovery, and remote copies of all data can be made, without limits. In particular, the typical features of high-end storage, such as automatic load balancing and auto-tiering, ensure predictable system performance, even in environments with rapidly changing workloads. For this reason, the HUS 150 based solution proved to be ideal for integrating the services offered by CDLAN's data center. It enabled the company to achieve the required performance.

About CDLAN
CDLAN has been operating in the information and communication technologies (ICT) sector since 2000. The company focuses exclusively on the enterprise market and on providing broadband telecommunications services to both national and international operators, Internet service providers (ISPs) and application service providers (ASPs). CDLAN specializes in providing flexible access solutions on fiber optics, wireless (Wi-Fi and HiperLAN) and copper (xDSL), IaaS data center services, IP telephony and messaging.

INDUSTRY
Telecommunications

SOLUTIONS
Modular Storage, Storage Consolidation

HARDWARE
Hitachi Unified Storage 150

SOFTWARE
Hitachi Base Operating System V

Corrado Del Po
CEO
CDLAN
In order to differentiate itself and to gain a share of a market dominated by large operators, CDLAN has concentrated its efforts on providing highly innovative and value-added services for medium-to-large customers, mainly focusing on offering fiber optic access solutions. CDLAN’s fiber optic solutions allow for large amounts of data to be carried at extremely high speeds (up to 40Gb/sec and 100Gb/sec in the very near future). They even allow for various storage systems to be connected remotely, without compromising performance, through native Fibre Channel protocol transport.

CDLAN’s customers include very demanding companies that are usually required to ensure consistent service to hundreds of different end users. It also serves medium-to-small companies that, thanks to the opportunities offered by fiber optics, want to adopt innovative IT models. CDLAN transfers their servers to a CDLAN data center or to another reliable provider of IaaS that is capable of guaranteeing the same on-premises solution performance for both servers and storage. This strategy allows the companies to avoid the costs and risks of local management.

**CDLAN Moves to the Cloud**

During 2012, CDLAN decided to offer “in the cloud” data center services alongside its network access services. The company would provide its customers with the opportunity to outsource their IT infrastructures and deliver critical services, while guaranteeing security and reliability. In order to achieve this goal, CDLAN decided to create 2 new state-of-the-art data centers that would meet the requirements of its own reference customers. The data centers would respond to strict safety requirements and business continuity, thanks to the latest technologies in the field of information technology and telecommunications equipment.

Until its new data centers were set up, CDLAN would make use of storage solutions based on simple and fragmented SCSI protocols, which would be purchased on demand from various suppliers and set up on site.

**Steps Toward Supporting Cloud**

In order to set up an adequate infrastructure for the new service and to be able to offer high standards of storage to its customers, a quantum leap in terms of capacity and performance was required. CDLAN therefore had to consider adopting enterprise-class storage systems. The company turned to Hitachi Data Systems to identify the ideal solution for its infrastructure and to make the most of the opportunities offered by the Fibre Channel protocol. As an ICT market operator, CDLAN had already used its research and development department to test the quality of storage systems offered by HDS, as well as the expertise of its consultants and technicians.

“In comparison with other competitors, we discovered that the main advantage of Hitachi Data Systems is its inclination toward greater flexibility in deploying solutions in each single context. HDS enables highly customized and easily scalable configurations, while taking into account the specific requirements and integration with infrastructures and the experience of an innovative company, such as CDLAN,” stated Corrado Del Po, CEO of CDLAN. “This is due to both the special features of HDS’ solutions and proposals, as well as to a more open approach and a willingness to negotiate compared with other competitors.”

Hitachi has implemented Hitachi Unified Storage 150 at CDLAN’s data centers. This top-of-the-range solution is from the HUS 100 family, which provides a balanced approach that is able to obtain a linear increase, up to industry-leading heights, in performance. The HUS family groups the only enterprise storage virtualization systems capable of consolidating file data, block data and object data on one centralized platform.

Another element that we were pleasantly surprised by was the efficiency of the service offered by Hitachi Data Systems, which conceives supply and post-sales service as a single element, in order to best meet all customer requirements and to optimize the
Innovation is the engine of change, and information is its fuel. Innovate intelligently to lead your market, grow your company, and change the world. Manage your information with Hitachi Data Systems.

management of potential problems,” stated Del Po. “The proficiency and speed of responses from HDS indicate an approach that does not focus on the individual trans-
action, but on long-term relationships.”

Future Prospects
Collaboration between HDS and CDLAN is destined to grow stronger in the future: CDLAN’s objective is to also offer enterprise-class storage services to medium-to-small companies, which can benefit from the advantages of cloud architecture better than others. CDLAN’s data center services enable medium-to-small companies to outsource computational and storage infrastructures, and therefore also the associated risks and costs. These services help the companies to reduce fixed costs, guarantee data availability, and increase resource flexibility and scalability.

In order to meet the challenges of offering enterprise-class services, CDLAN is already oriented toward adopting Hitachi Unified Storage VM. This storage virtualization solution can improve efficiency and, at the same time, reduce costs through a well-balanced information infrastructure. HUS VM is the first unified system with enterprise storage virtualization and centralized consolidation of file, block and object data. HUS VM manages storage centrally, making it available to all critical applications and providing shared services for all storage systems through a single management interface. This system of storage virtualization, with a central point of control, provides equivalent services to all users, and allows better alignment of data on storage systems. Administrators are, in fact, able to efficiently match storage attributes with the service-level requirements of individual management applications.

“The aim is to achieve seamless integration between a storage virtualization solution such as HUS VM and our access solutions and fiber optic data transfer,” says Del Po. “In this way, we will be able to offer enterprise-class storage services to companies of all sizes, dedicating specific LUN or virtualized parts of our storage infrastructure to various customers, while guaranteeing service mode Fibre Channel access, with maximum flexibility and scalability.”