



“The storage platform from Hitachi Data Systems offers us maximum flexibility in supporting the organization, which is essential in the dynamic telecom market.”

*Peter de Boer
 Manager of Core Systems
 Ziggo*



Ziggo

INDUSTRY Telecommunications, Information Technology

SOLUTIONS Enterprise Platform, Modular Platform, Storage Management, Business Continuity/Replication

Hardware — Hitachi Universal Storage Platform® V (2); Hitachi Universal Storage Platform (2); Hitachi Adaptable Modular Storage 2300 (4), as well as 1000 (3) and 500 (1) systems; and Hitachi NAS Platform 3200, powered by BlueArc®

Software — Hitachi Device Manager, Hitachi Tuning Manager, Hitachi Tiered Storage Manager, Hitachi Virtual Partition Manager, Hitachi Universal Replicator, Hitachi TrueCopy® Synchronous and Hitachi Replication Manager software

Services — Data migration from NAS to Hitachi NAS Platform 3200, as well as quarterly performance and capacity analysis, and reporting services provided by Hitachi Data Systems Global Solution Services

Telecommunications Provider Ziggo Supports Merged IT Infrastructures with Hitachi Data Systems Solution

Founded in 2007 as a result of a merger between the providers Casema, @Home and Multikabel, Ziggo provides 3.2 million connections of television, radio, Internet and telecommunications and reaches 7.8 million people. The large-scale and complex merger that made Ziggo the largest cable company of the Netherlands also required the merging of various infrastructures. To support the new IT environment with the ability to handle massive capacity and future growth, Ziggo chose a solution based on Hitachi enterprise and modular storage.

The newly founded IT organization at Ziggo had the task to integrate all IT facilities of the three companies. Since during the initial setup of the new IT infrastructure there was no absolute clarity on the total (future) scope of the new organization, Ziggo at first decided to design a new data center infrastructure with sufficient functionality and capacity until the end of 2008. However, it soon became clear that the actual growth and the success of the young organization required a substantial expansion of the previously determined storage capacity.

An important issue was the implementation of a completely new storage and backup architecture. For this requirement, Ziggo arranged for two new data centers in Groningen and Emmen (the Netherlands), based on Hitachi Universal Storage Platform® and Universal Storage Platform V enterprise storage platforms and Hitachi Adaptable Modular Storage to take care of

all storage related services. This virtualized storage solution with various data classes initially consisted of a Universal Storage Platform and an Adaptable Modular Storage 1000 per data center and offered sufficient storage capacity for the expected growth until the end of 2008. By mid-2008 new arrangements for the storage and backup architecture turned out to be necessary in order to support further growth and success of the organization. Hitachi Data Systems offered, in conjunction with the initial design of the storage and backup architecture, a suitable solution with which Ziggo can keep growing over the next few years.

More than Expansion of Capacity

“Maximum flexibility in supporting the organization is essential in the dynamic telecom market in which Ziggo operates. In order to act quickly and decisively, high availability is, for instance, crucial. Expansion of the storage capacity was necessary in order to grow along with the rest of the organization,” says Manager of Core Systems at Ziggo, Peter de Boer. “This is because as an IT organization we aim to be a real ‘enabler’. We wanted to be able to offer ‘storage as a service’ to the various departments. We had a number of extra demands for this, not just the expansion of the storage capacity.”

Although the initial data environment was designed in such a way that in case of a breakdown one data center could take over the role of the other, the company wanted to obtain a better insight into the status of data management. “Because of the many storage components, the environment became so huge and complex that we



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opted for as many centrally arranged management tools as possible,” explains de Boer. “Furthermore, we wanted to research the applicability of dynamic provisioning in order to test whether an efficiency turn could be made with regard to storage overcapacity. The review of the SAN design and a data migration into a more efficient and better manageable NAS infrastructure were on our wish list as well.”

A specific work group mapped all technical and functional requirements in order to subsequently determine the correct configuration. The next step was looking for the right partner for the project. According to De Boer, that choice was made quickly: “During the construction of the new data centers we gained positive experiences with Hitachi Data Systems. Apart from the fact that the first storage environment functions to our full satisfaction at both Casema and Ziggo, the flexible and professional operating procedure of Hitachi Data Systems connects well with the pragmatic culture of Ziggo. During a demanding project with tight deadlines, reliability and commitment are very important to us. Therefore, it soon became clear that we would choose Hitachi Data Systems once again for the second phase,” he recalls.

The Necessities

Based on experience with data and reservations of future implementations for which data storage is required, Ziggo calculated the necessary capacity. In order to realize the extra capacity that was needed, a Universal Storage Platform V was added to both data centers in September 2008. With this, Ziggo’s storage capacity can safely keep growing over the next few years. In October of 2008, a start was made with the implementation of a NAS environment in Groningen, in order to be able to write specific parts of the data to disk more quickly. The data center in Emmen followed in December 2008. Hitachi Data Systems assisted at the migration of the data from the existing NAS to the Hitachi NAS Platform, powered by BlueArc®, after which the previous system was gradually phased out.

Subsequently, a revision of the SAN environment took place. The new setup asked for a scaling up of the Cisco directors. Several ports were needed to this means. With the updated SAN setup, the necessary port optimization was realized.

Synchronization

With a Universal Storage Platform and a Universal Storage Platform V in each data center, the need arose for a central tool that makes the synchronization between both platforms more manageable. With the Hitachi Replication Manager software, Ziggo has more insight into the status of data management and can therefore react faster and more flexibly to changing situations.

Scalable Backup Environment

The primary task of the central backup environment is to secure all data from both the IT systems and the storage platform. With the expansion of the storage capacity, the backup environment should also grow. With three Virtual Tape Libraries from Hitachi Data Systems per data center behind an Adaptable Modular Storage 2300, an extra optimization turn was made. The Virtual Tape Libraries have an inline reduplication at their disposal.

The First Experiences

“After the initial implementation, our employees had to get accustomed to the new organizational structure during the first months. A central IT storage system for the Microsoft® Windows® and UNIX environments meant the end of little islands. Suddenly everyone had to take everyone into account. Sound mutual agreements and the preparedness to work together closely as various teams have contributed to a successful transformation,” says de Boer. “The recent expansion also asked for a different approach from a management point of view. The backup environment is managed centrally with regard to main issues, but it also offers the option to have specific restore requests carried out by the various management teams themselves.”

In order to properly inform all managers, Hitachi Data Systems arranged for an extensive transfer of knowledge. By means of various courses, the managers were trained. Apart from that, Hitachi Data Systems offers the managers access to all necessary documentation, so that sufficient knowledge is available internally in order to carry out operational management.

“We have been ‘live’ now with the updated infrastructure for a couple of months, and the first reactions are positive. We found out rather soon that the system is fast and the GUI (graphical user interface) has greatly improved. Within the foreseeable future, we also expect a higher I/O throughput,” says de Boer. “However, this is currently hard to establish since we cannot use the latest expansion to its full capacity yet. All together, we are of the opinion that we now have the next generation of storage with which we can grow along with the rest of the organization in the coming years. As a real IT enabler, we can offer storage as a service to our internal clients.”

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