

Dimension Data Implements Switzerland's first production of UCS solution for Naxoo, a cable network provider

Naxoo

industry:

Service Providers and Telecommunications

country:

Switzerland

business challenge:

Requiring a long-term solution that would enable ambitious expansion plans while keeping power consumption and administrative costs to a minimum

solution:

Migration to a unified platform contained server growth, addressed storage problems and eliminated the need to invest in additional space

services:

Planning and deployment services for the data centre

results:

- Lower operational costs due to: decreased time to administer and service IT equipment; lower energy consumption; and eliminating the need to recruit additional staff to operate the service
- Optimised capacity of existing IT infrastructure and a scalable solution ensures a solid foundation for future growth and expansion

Executive Summary

By **migrating its production environment to Cisco's Unified Computing System (UCS), Naxoo has succeeded in containing server growth, addressing storage problems and has eliminated the need to invest in additional space, power and IT resources.** Moreover, Cisco UCS has radically simplified IT management and enabled more efficient use of the company's existing IT equipment. Today, **expansion projects can be pursued without fear of them being hindered by capacity issues or budget overruns.**

Client Overview

022 Télégenève SA, better known as Naxoo, is a Geneva-based telecommunications provider. The company was established in 1986 with the aim of providing residents with access to television and radio via a cable network. In 1999, Naxoo was the first Swiss provider to launch digital television and, in 2003, the company commissioned one of the first IP-based call centres in Switzerland. Today, Naxoo is the second largest cable network provider in Switzerland and a recognised pioneer in advanced technologies.

Naxoo's network comprises 440 kilometres of coaxial cable and 129 kilometres of fibre cable and serves 90,000 subscribers. Of these, over 43,000 are digital television subscribers. Naxoo also provides telephony and Internet services, through a partnership with Cablecom.

Business Challenge

In March 2007, Naxoo embarked on an extensive network upgrade initiative to facilitate the provision of new multimedia services, including Internet, high definition (HD) television and video on demand (VoD). The success of the initiative was dependent on adequate server capacity – a potential problem, given that since 2005, the company had been experiencing a steady rise in data volumes and server numbers.

The network upgrade project would place additional strain on the infrastructure in terms of storage requirements, not to mention increased time to administer and service IT equipment, increased energy consumption and the need to recruit additional staff to operate the service.

Naxoo recognised the wisdom in enlisting the expertise of a seasoned technology partner to identify a long-term, sustainable solution to these challenges – one which would enable, rather than stifle, the company's plans for future growth.

Relationship History

Naxoo's association with Dimension Data dates back to 2002 and over the years, the companies have forged a sound relationship based on respect and mutual trust.

Solution Provided

Around 90% of Naxoo's IT infrastructure is virtualised. This translates into a hundred servers and about 16 terabytes of data that needs to be available to employees round the clock. To secure all information, Naxoo uses Avamar from EMC.

Naxoo describes the process of weighing up the various options available to it

“I have been working in the IT sector for almost **25 years** and in all that time **I have never come across any insurmountable problems.** In the end, **it always comes down to time and money.** In the case of **UCS, we managed to migrate our IT equipment in less than a week and achieve sustained success with regard to optimisation.** ”

Serge Ivanovic, IT Manager Naxoo

as ‘both simple and complicated’. For example, the evaluation of the solutions available represented a significant challenge, requiring a thorough analysis of all the technologies, testing and benchmarking. However, following a demonstration of the capabilities of Cisco’s UCS data centre architecture and an explanation of the advantages it would offer if deployed within Naxoo’s IT environment, it quickly became clear that this was the solution would best map to the company’s requirements.

Simplified administration, lower energy consumption, cabling optimisation and seamless integration with VMware as well as the option to install 300 MB of main memory per blade, all contributed towards a compelling argument in favour of Cisco UCS. The solution that was deployed within Naxoo’s environment comprises two chassis with four blades per chassis, i.e. a total of eight blades. These are complemented by two Nexus fabrics and a high-performance EMC SAN system.

How We Delivered

By leveraging Dimension Data’s expertise, Naxoo became the first Swiss company to implement Cisco UCS data centre solution in its production environment. Upon completion of the design phase, the migration was effected within a few days, followed by fine-tuning of the solution and technical training.

The deployment proceeded without any compatibility problems amongst the various components of the configuration arising. Today, the solution is operating effectively in the company’s production environment.

Naxoo is proud to have taken this pioneering step in technological

innovation, and attributes this achievement in no small part to Dimension Data’s unwavering support.

Value Derived

Cisco’s UCS solution unifies blade servers, VMware virtualisation technology and SAN and Ethernet connections in one uniformly administered system. Due to the fact that a single UCS chassis can accommodate up to several hundred physical servers and several thousand virtual machines, Naxoo is afforded a hugely scalable solution.

From a technology point of view, UCS leverages the concept of ‘unified fabric’ which enables storage traffic to be delivered directly to the server rack. This is made possible by standard extensions for 10 gigabit Ethernet which can be used to virtually encapsulate fibre channel storage data for Ethernet transport.

In this way, the border between IP and fibre channel networks disappears and both ‘worlds’ effectively merge into a common fabric. This results in a radical I/O consolidation, so far fewer adapters are required for the SAN server connection and consequently, the savings in cabling costs that may be realised are significant.

In addition to reduced capex requirements, having fewer adapters and cables facilitates scalability and drastically reduces Naxoo’s installation and maintenance spend. Additional benefits flow from the high blade density of UCS, which results in the company’s data centre requiring far less space and power, without compromising on performance.

Conclusion and Outlook

Since implementation, all Naxoo’s virtual machines are running on UCS and the company is currently testing applications on the system with a view to future deployment. Looking ahead, business applications will be automated and migrated to the UCS platform with the goal of ultimately centralising all applications and services for the development and production departments ‘in one box’, at a single location.

To ensure it has a robust disaster recovery plan in place, Naxoo will install an almost identical copy of its primary environment at a second site. In the event of a large-scale catastrophe at the main site, it is projected that over 80% of IT services would be available within four hours.

This solution has not only refreshed Murray & Roberts’ technology, but future-proofed its technology needs for the next ten years.