Hewlett Packard Enterprise

DCO datacenter

Datacenter Oostkamp optimises costs for its growing business

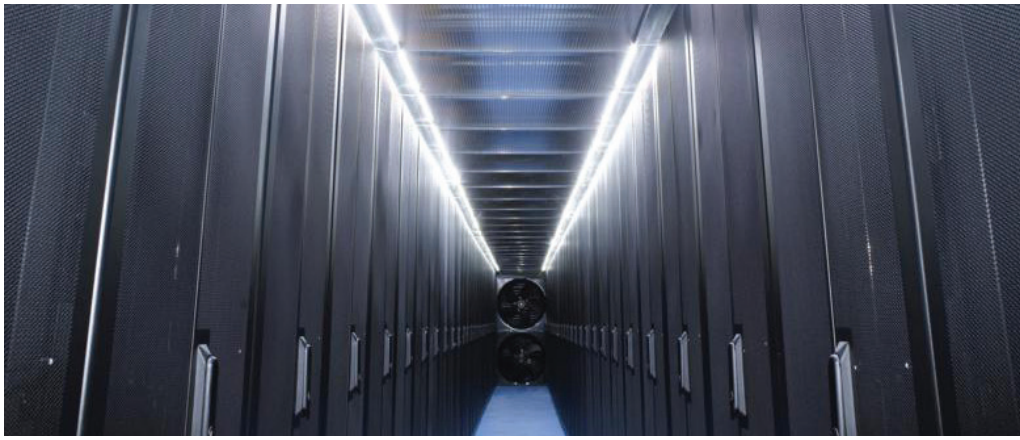
HPE FlexFabric solution delivers a resilient, cost efficient next generation data centre

Objective
Achieve the reliability and cost efficiencies demanded by the growing number of customers who rely on Datacenter Oostkamp's commodity co-location services

Approach
Met with three leading networking vendors; after extensive evaluation, confirmed that the mature HP Networking solution could deliver the reliability, cost efficiencies and simplified network management required for DCO²

IT Matters
- Reduced the time required for managing the network by 90 per cent, saving time and money, and enabling resources to be redeployed on higher-value tasks
- Simplified network configuration, reducing network configuration errors by 90 per cent and network problems to zero

Business Matters
- Reduced operational costs, allowing competitive pricing for the growing number of customers of commodity services
- Ensured delivery of robust and reliable customer services, increasing customer satisfaction, protecting revenue
- Enabled the 100 per cent year-on-year business growth to be achieved organically, safeguarding profits



Datacenter Oostkamp needed a networking solution for its new data centre. Robust, high-performance HPE 12508 and HPE 5820 switches, and HPE SR8805 routers provided a reliable, cost efficient network that was simple to manage. The solution has led to a doubling of annual revenues, and happier customers.

State-of-the-art data centre

Data centres are in the midst of a period of significant change. Once providers of speciality services for large enterprises, within the next decade they will transform into providers of commodity services for SMEs. This transformation, while bringing unprecedented growth, is forcing data centres to drive down production costs.

"In the coming years the services that data centres offer will move from a speciality product to a commodity product," explains Janjoris van der Lei, CEO, Datacenter Oostkamp. "Data centres are growing and are moving down into the SME market.

"The network in DCO² is running well – the support team haven't received any network-related tickets since we went live six months ago. We are very happy that we took the decision to purchase this strong HP Networking solution; we are a very happy customer."

— Janjoris van der Lei, CEO, Datacenter Oostkamp

We expect to see a reduction in square metres for larger companies – within ten years they will make up only ten per cent of data centre usage; the other 90 per cent will be SMEs. Because of this, data centres are focusing on cost-cutting."

Datacenter Oostkamp's new state-of-the-art data centre, DCO², replaced its outmoded traditional data centre. DCO² was designed and located with cost efficiencies in mind. Unlike conventional data centres, which are situated in large cities, DCO² lies in the Belgian countryside, but close to the crossroads of the networks running between London and Frankfurt, and between Paris and Amsterdam.

"The environment is pollution-free so we can use free outside air for cooling, reducing cooling costs to a maximum of two per cent of our energy budget," van der Lei reveals. "The out of town location also ensures that building and maintenance costs are lower."

Today Datacenter Oostkamp offers customers co-location services and Hardware-as-a-Service; in the future it is looking to offer Infrastructure-as-a-Service. With co-location services it is impossible to predict how customers will use the facilities provided by the data centre, or what growth customers will have. This means forecasting is almost impossible for Datacenter Oostkamp.

"When we designed DCO² we had no indication of how it would actually be used, making forecasting networking demands impossible," conveys van der Lei. "Today we have customers who use the network for storage or cloud environments and demand high capacity, and we have customers who use the network for VoIP and demand quality of service. Customers are demanding a great deal from the network: they are demanding that the network be free of jitter, fallout and packet loss because, for example, this would prevent their game server environment working properly."

Providing the flexibility and scalability customers demand

A Hewlett Packard Enterprise (HPE) Networking solution that includes two HPE 12508 series switches and two HPE 8800 series routers allows Datacenter Oostkamp to achieve the flexibility and scalability that is vital for delivery of a high level of customer service in an unpredictable and demanding environment.

"The network is the backbone of the data centre and the HPE switches and routers allow us to provide a robust and cost efficient network that can handle the complex and ever-changing demands of our customers," notes van der Lei. "We used to

have a lot of small switches in a multi-tier environment. Now we have large switches from HPE where two switches that are clustered as if they are one – increasing flexibility, simplifying management and increasing capacity."

Simplification cuts configuration errors by 90 per cent, reducing issues to zero

Datacenter Oostkamp has cut the number of configuration errors by 90 per cent, significantly reducing the risk of network issues arising.

This significant reduction in errors has been made possible by the HPE Intelligent Resilient Framework (IRF) that is natively built into the HPE 12508 switching platforms – a technology that allows networks to be flattened, making them easier to set up and manage, and reducing the likelihood of configuration errors. IRF also saves costs and simplifies network management; IT no longer needs to laboriously connect to, configure and manage switches individually.

"To meet the increasingly complex demands of our customers we needed to simplify the management of the network," van der Lei recalls. "We did this by reducing the number of layers; it was IRF that allowed us to do this.

"Reducing the amount of management required is very important because it has reduced the likelihood of mistakes by about 90 per cent. Fewer mistakes are also an important cost-cutting factor, reducing the costs associated with people running around and checking everything."

Network management time cut by 90 per cent

Network management simplification has reduced the amount of time required for managing and configuring the network by 90 per cent. With more time on their hands, van der Lei's team now also get involved in other tasks, including product development – vital to the future success of DCO².

"The way IRF is implemented by HPE means there are fewer configurations to set up – about 90 per cent less," discloses van der Lei. "The two switching platforms can be used as if they were one single large switch, reducing the number of network components that need to be configured. Additionally we don't have to worry about failovers, about making multiple connections to one switch or about interoperability between switches.

"Not only can we continue to manage our network with the same small team, but our team has the time available to get involved in other tasks. You need a lot of time to develop new products and our team is getting more involved in this area, ensuring that our future services will not compromise the network stability."

A tried and tested networking solution

HPE came relatively late to the procurement process. Datacenter Oostkamp had already held discussions with Cisco and Force10 when it was introduced to the HPE Networking portfolio.

From holding open, envisioning discussions with HPE Networking consultants, and diving deep into the product documentation, van der Lei could clearly see how he could build the network that Datacenter Oostkamp wanted for DCO² using HPE Networking products.

"We chose HPE primarily because we were impressed with the functionality and capability of the HPE Networking portfolio," reveals van der Lei. "But there are several factors that influenced our decision: one is the maturity of these tried and tested products; another is the high quality of the documentation. HPE was the only vendor able to provide these things."

Van der Lei's experience told him that HPE's mature products, with their native implementation of IRF, would be the most robust solution and less likely to require upgrades. "With Cisco, the capabilities we wanted were going to be made available in the next version of the product, but experience told us that we would need to wait until about the fourth version of this feature before it was enterprise-ready. Another advantage of the HPE solution is that IRF was natively implemented from the day they were conceived some time ago," notes van der Lei. "Other vendors are now catching up, but don't have the experience."

Tracking down the history of HPE's switches and routers on the internet showed them to be capable, mature and reliable. Datacenter Oostkamp was assured that HPE was the right networking partner for its new data centre.

Understanding the specific needs of DCO²

Datacenter Oostkamp chose an HPE Networking solution not only because of the maturity and capabilities of HPE's products, but because of HPE's wide portfolio of products and willingness to listen. "HPE has a wide portfolio of products and something to fit all needs," says van der Lei. "HPE worked closely with us to understand our individual requirements, listening and asking questions about what we were trying to achieve. We were confident that HPE would provide the right solution for DCO²."

Case study
Oostkamp

Industry
Computer services

Customer at a glance

Hardware
- HPE 12508 Switch Series
- HPE 5820 Switch Series
- HPE SR8805 Router
- HPE BladeSystem c7000 Enclosure

Software
- HPE Intelligent Management Center

HPE services
- HPE Education Services

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Maturity and good documentation ensures success

Van der Lei's focus turned to implementation with one vital constraint in mind: no downtime. The implementation of and migration to the new data centre network would have to take place while the network was fully operational; any network disruption would hurt Datacenter Oostkamp's business and reputation.

Having found HPE Networking products mature, reliable and simple to set up and configure, and the documentation to be of an exceptionally high quality, van der Lei was confident that his team could successfully implement the new network themselves. Prior to implementation HPE provided five days of training to get the team acquainted with the products and the tasks that they would need to undertake.

After training and before implementation, van der Lei's team spent six months simulating any possible type of breakdown in a proof-of-concept environment. The implementation itself took just six months, with a further six months for migration from the old data centre.

A network for life

Datacenter Oostkamp also purchased four HPE 5820 series switches, an HPE BladeSystem c7000 Enclosure and HPE Intelligent Management Center (IMC) software for DCO². The switching platforms have been implemented in remote data centres.
"If we have a connection to another data centre where we rent a space, we implement the HPE 5820 switches in that data centre," van der Lei explains. The blade enclosures are heavily utilised by customers who have a cloud environment.

"We are happy with the way the network is running; we have the network under control. We will use this way of working to manage the network for the lifetime of the data centre," concludes van der Lei.

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4AA4-6139EEW, November 2015, Rev. 1