Solutions at a glance

De Stroomlijn needed a reliable, scalable and cost-effective solution to modernize its IT environment.

Dell EMC Microsoft Storage Spaces Direct Ready Nodes with:

- Microsoft® Storage Spaces Direct software
- Dell EMC PowerEdge™ servers with Intel® Xeon® Scalable processors

Business needs

Growing company meets its availability and scalability requirements with Dell EMC Microsoft Storage Spaces Direct Ready Nodes.

NONSTOP SUPPORT

Business results

- High availability for mission-critical systems
- Easy scalability to accommodate growth

The Storage Spaces Direct Ready Nodes operate 24x7 with 0 downtime.

Reports that used to take 15 minutes to run now take just 2-3 minutes.
Expert support services

Founded in 2007, Belgium-based De Stroomlijn is a fast-growing company with three operational locations and multiple large clients in the energy and water sectors. De Stroomlijn provides the support services that allow its clients to stay in constant touch with their customers.

When those customers need expert assistance from their utility companies, De Stroomlijn is there with prompt, helpful answers to their questions on topics such as invoicing, meter readings, defects and work-related issues.

In addition, De Stroomlijn serves as the first point of contact for knowledgeable IT support at Eandis. When employees have problems with software, hardware or network connections, De Stroomlijn’s help desk operators are there to help them solve their IT problems quickly and efficiently.

Over the course of a year, the company’s contact center handles around 1.5 million calls and 80,000 email messages from utility customers, including both individual and industrial customers. Those numbers will rise by about 25 percent in 2019, when De Stroomlijn takes on the customer care services for the biggest unified utility company in Flanders, Fluvius. Fluvius is the result of a merger between Eandis (an existing business for De Stroomlijn) and Infrax. De Stroomlijn also serves the needs of Farys, a utility that distributes drinking water to hundreds of thousands of households.

Keeping pace with growth

Prior to a recent upgrade, De Stroomlijn operated a conventional IT environment that paired virtualized compute servers with a SAN disk array. In the course of a few years, the storage environment grew from 3 TB to 6 TB, pushing the capacity limits of the company’s disk array.

As they faced the prospect of even more growth in the coming year, De Stroomlijn’s IT leaders set their sights on a new, more agile and flexible IT environment. Key considerations in the company’s request for proposals from IT providers included total cost of ownership and the ability to meet the stringent service level agreements of a company that provides 24x7 customer support.

After a detailed competitive review process, De Stroomlijn selected a proposal from Ferranti Computer Systems, a Belgium-based company. Ferranti proposed a solution based on Dell EMC Microsoft Storage Spaces Direct Ready Nodes, which Ferranti uses in its own cloud environment, according to Thierry Demeire, who leads the IT team at De Stroomlijn.

“Ferranti Computer Systems came with an offer where they presented standard Dell EMC servers with a lot of memory and a lot of disk, and they can generate a lot of storage and compute at a good price,” he says. “We also saw that their solution was more reliable and less subject to defaults or to failures due to the setup than with the regular storage area network and separate server kind of design.”

A software-defined storage solution

Microsoft Storage Spaces Direct, known informally as S2D, changes the ground rules for conventional IT architectures built around SAN or NAS disk arrays. Storage Spaces Direct eliminates the need for separate storage arrays. It uses industry-standard servers with local-attached drives to create highly available, highly scalable software-defined storage (SDS) at a fraction of the cost of traditional SAN or NAS arrays. Its converged or hyper-converged architecture simplifies procurement and deployment, while features such as caching, storage tiers and erasure coding, together with hardware innovations such as RDMA networking and NVMe drives, deliver unrivaled efficiency and performance.

Dell EMC Microsoft Storage Spaces Direct Ready Nodes simplify and accelerate the deployment of S2D. The Ready Nodes are optimally configured with the required amount of CPU, memory, network, I/O controllers and storage (SSDs, HDDs or flash devices). The Ready Nodes model gives the IT team at De Stroomlijn the confidence and convenience that comes with preconfigured, tested and certified configurations designed for Storage Spaces Direct, managed by the IT professionals at Ferranti and backed by Dell EMC.

“Everything is code-based, so deploying a new physical host is very easy. Just plug it in, run the script and add it to the stack.”

Mark Van Giel
IT professional, Ferranti
Storage Spaces Direct Ready Nodes are built on Dell EMC PowerEdge™ servers with Intel® Xeon® Scalable processors. These servers provide the compute power and the storage density that De Stroomlijn needs to take full advantage of the benefits of Storage Spaces Direct and the advanced features in Windows Server 2016.

An agile IT environment

De Stroomlijn's upgraded IT environment spans two data centers, each with five virtualized physical servers that run the Microsoft Hyper-V hypervisor. All of the servers run Windows Server 2016 and Storage Spaces Direct software, along with various business applications. In addition, a couple of the systems run the Microsoft SQL Server relational database management system.

With the Ready Nodes approach, deploying additional servers or scaling servers is a fast and easy process, Thierry Demeire says.

"When we ask for a new virtual server, we never have someone from Ferranti telling us we'll have to wait a week or that it's a bit of a tedious job or that it takes a while," he says. "They basically just do it. It's really easy and we don't notice any downtime. At that moment in time, sometimes we need changes to be done within hours or days, and they're able to follow our requests, which was something that was more difficult with our previous service provider and IT environment."

Mark Van Giel, an IT professional from Ferranti, seconds those thoughts. "The big benefit is the deployment of physical systems," he says. "Everything is code based, so deploying a new physical host is very easy. Just plug it in, run the script and add it to the stack."

In another step forward, the Storage Spaces Direct Ready Nodes have a smaller footprint than that of the company's previous SAN-based infrastructure. That compact footprint has effectively opened up space for additional nodes in De Stroomlijn's data center racks.

"It's not such a big problem now that I know I have to grow by 25 percent," Thierry Demeire says. "I am not worried about having enough space or capacity at a great cost, or that I will have to rerack stuff, or that I have to do some other things. It's one less worry."

Realizing the benefits

For a company that operates contact centers that are always open, system availability is essential. De Stroomlijn can't tolerate any downtime, and so far it hasn't experienced any downtime with its new Storage Spaces Direct Ready Nodes environment, according to Thierry Demeire. The only significant issues the company has encountered stem from the SQL Server databases, which don't fail over smoothly from one physical host to another.

"We are open 24x7, so for us availability and stability are the most important considerations," he says. "We need to be available 24x7, and we haven't been unavailable since we moved to the new infrastructure, except for the minor glitches in the SQL databases. That's the only consideration that we have for the moment."

The IT team is also reaping the benefits of faster system performance, especially when it comes to database reporting. Periodic year-to-date reports that used to take 15 minutes to run now take just 2 to 3 minutes, and reporting and operations don't impact each other anymore. That makes the whole reporting process faster and easier, especially when it comes to scheduling multiple reports that run in a sequential manner.

"That's a hassle we don't have anymore," Thierry Demeire says. "I don't have to worry about when I'm going to run a report. I just run it."

“I am not worried about having enough space or capacity at a great cost, or that I will have to rerack stuff, or that I have to do some other things. It’s one less worry.”

Thierry Demeire
IT Team Lead, De Stroomlijn
The bottom line

All things considered, Thierry Demeire says his IT team is “very satisfied” with their Storage Spaces Direct Ready Nodes solution.

“It scales easily and it is flexible, and the availability is there,” he says. “If I look at the old implementation, with virtualized hardware servers and SAN nodes, every major upgrade kept us awake. We had to do it by night and have people ready and have emergency procedures ready. On this environment, the updates run smoothly. We don’t have to plan for it anymore. I don’t have to have people onsite. It’s very reliable.”

The bottom line? “We’re happy customers,” he says.