




Global Financial Data Services Company Modernizes with Windows SDS for Performance, Scalability and Manageability

Infront upgrades their Hyper-V and storage environment to a DataON and Storage Spaces Direct solution

Company Overview

Financial professionals rely on Infront for global real-time market data, trading, news, and analytics to help them do their jobs. They are the leading financial information provider in the Nordics and have clients in over 27 countries. Infront provides financial information to over 10,000 traders, analysts and financial providers every day.

IT Challenge: Upgrade their storage and Hyper-V environment to support growing VM demands while staying within budget

Infront was facing many challenges with its traditional storage area network (SAN). The system was aging rapidly, with an 10G iSCSI SAN that was over 6 years old. They had surpassed the maximum IOPS throughput on the current configuration, which caused virtual machine performance to be very slow. Their SAN had become a huge bottleneck, slowing down everything from Skype meetings to production systems that clients were connected to.

Infront was already a Microsoft customer, having migrated to a Windows Server solution in 2012. All of their systems run Microsoft software so it was important that the new solution be fully compatible.

Infront's goals in updating their IT infrastructure, included:

- Find a cost-effective solution that wouldn't exceed their budget
- Find a scalable solution that they could grow into for the future
- Provide a performance boost for their virtual machines and storage
- Find a solution that is easy to use and setup
- Include a good monitoring system

In the end, Infront decided to deploy a Windows Server 2016 Storage Spaces Direct solution with DataON storage that was cost-effective, while providing increased performance and room to grow. By replacing their old Fibre Channel SAN, their new Window SDS solution saves them both CAPEX and OPEX while being more efficient without all the management hassles and extra root commands.

The Solution: DataON S2D-3212 with Microsoft Window Server 2016 and Storage Spaces Direct

Infront originally looked at traditional SANs from Dell and HP but felt the pricing was really high for just the storage server and they also needed to replace their Hyper-V servers. They heard about a new Storage Spaces Direct feature in Windows Server 2016 and started to do research on it. There were positive reviews from initial industry testing and Infront started looking for a supplier. A Google search led Infront to DataON. They heard about many positive experiences from other customers with DataON solutions and they found DataON to be very knowledgeable about designing and deploying Microsoft-based storage solutions.

DataON was able to provide a proof of concept with their new S2D hyper-converged cluster appliance for testing with Storage Spaces Direct. Infront was thrilled with the S2D's speeds, functionality, and scalability but what really set it apart was the overall price compared to a traditional SAN/server solution.

"The speeds we were seeing convinced us to go with DataON S2D, and the functionality and scalability was so awesome," said Jan-Tore Pedersen, Senior DevOps Manager, Infront. "And after getting the hardware I am quite pleased with what we got."

The Challenge



Infront needed to upgrade their Hyper-V and storage servers in a Windows environment that is:

- Cost effective
- Scalable
- High-performing
- Easy to use and setup
- Includes a good monitoring system

The Solution



- Cost-effective Windows SDS solution that is scalable and flexible
- Windows Server 2016 Storage Spaces Direct
- DataON S2D-3212 Hyper-Converged Cluster Appliance
- DataON MUST visibility and management tool

The Result



- Simplified Windows SDS management compared to traditional SANs
- Fully compatible, Hyper-V cluster solution in a Microsoft Windows Server 2016 environment
- 500x IOPS performance, increasing to over 900K IOPS
- Hyper-V and storage replacement for the price of mid-level SAN

DataON S2D-3212



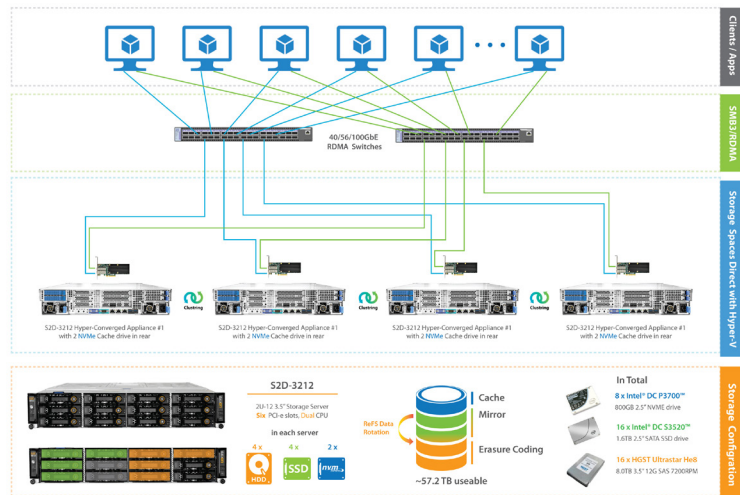
- High Performance** – Hybrid SSDs/HDDs achieving over 1.5M IOPS in a 4-node cluster
- Supports more VMs** – Supports 40+ Hyper-V VMs per node, with up to 16 nodes per cluster
- Highly Scalable** – Delivers compute, networking and storage resources with near-linear scalability
- Easy to Deploy**– Simple out-of-the-box setup and installation
- Easy to Manage** –DataON's exclusive MUST software is pre-installed for infrastructure visibility and management

Infront was also looking for a good monitoring system to manage their new hyper-converged cluster. DataON was able to respond to that requirement with their exclusive MUST (Management Utility Software Tool) visibility and management software, which is pre-configured with their S2D storage solutions. Infront was impressed with its powerful features, such as:

- Dashboard-level metrics from a single pane of glass
- System alerts based on Windows Health Service faults with built-in root cause analysis
- Call-home support that alert system administrators based on fault settings and severity levels

The Solution – Hardware Configuration and Deployment

Infront purchased one DataON S2D-3212 cluster for each of its two data centers. They added two Dell-branded 40GbE switches for their main data center for the DataON S2D solution running on RDMA. For their second data center, they leveraged an existing Dell-branded 10GbE switch stack for RDMA. Infront found their new S2D-3212 storage solution easy to setup and configure with Storage Spaces Direct and using DataON's MUST (visibility and management software).



“The reason for choosing DataON was simple, the price could not be beaten. I liked what I was seeing and hearing about DataON. After getting the hardware, I am quite pleased with what we got.”

Jan-Tore Pedersen
Senior DevOps Manager
Infront

Results

After setup and migration, Infront saw a significant performance improvement in their new virtualized environment. “With our previous SAN, we were getting about 1700 IOPS. Now we are able to achieve over 900,000 IOPS on our main Hyper-V solution,” said Pedersen. “Client systems are running faster, Web calls take only milliseconds, reports are generated faster, and the overall feel of everything is so much better.”

“The performance gain for us is about 500 times more IOPS”
Jan-Tore Pedersen, Senior DevOps, Infront

In addition, users reported an overall better user experience and IT administrators are enjoying a more flexible and scalable storage solution. Their new DataON storage solution is allowing Infront to continue to grow and provide outstanding service to their clients.



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HGST is a wholly owned and independently operated subsidiary of Western Digital Corporation, marketing and selling its leading storage portfolio around the world. HGST strategically invests in high-growth and emerging technology segments, with expanding research and innovative product development.

About DataON

DataON is the industry leading provider of hyper-converged cluster appliances (HCCA) and storage systems optimized for Microsoft® Windows Server environments. Our solutions are built with the single purpose of rapidly and seamlessly deploying Microsoft applications, virtualization, data protection, and hybrid cloud services. Our company is exclusively focused on customers who have made the “Microsoft choice” and we provide the ultimate platform for the Microsoft software-defined data center (SDDC). DataON is a division of Area Electronics Systems, Inc.

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