



Managed Service Provider Deploys Microsoft HCI for Private Cloud and On-premise EHR Management

Wagamon deploys turnkey DataON and Storage Spaces Direct solution for behavioral health organizations

The Challenge



- Find an on-premise HCI solution for the behavioral health organizations' EHR management software, accounting and managed payment systems, storage, and more
- Find a similar high performance and scalable HCI solution for Wagamon's data center

The Solution



- Windows Server 2016 Storage Spaces Direct
- DataON S2D-5212i three-node three-tier storage
- DataON MUST visibility, monitoring, and management tool with Windows Admin Center

The Result



- Replaced Wagamon and behavioral health organizations' SANs with a DataON and Storage Spaces Direct HCI
- Increased performance for EHR management software, RDS, accounting and managed payment systems
- Increased Wagamon data center performance and added scalability
- Saved time and money by utilizing DataON's experience with Storage Spaces Direct

Company Overview

Wagamon Technology Group is a solutions-based technology firm providing the latest technologies and support to small and medium-sized healthcare providers throughout Delaware and the Mid-Atlantic region. Wagamon is committed to making sure its customers have the most reliable and professional IT services and technology.

IT Challenge: Replace customers' and its own old SANs with a hyper-converged infrastructure

Allan Wagamon, President, Wagamon Technology Group, started looking into hyper-converged infrastructure (HCI) several years ago and tried a Linux-based HCI deployment with limited success. He felt hyper-converged technology wasn't reliable enough for his customers' workloads at the time. Five years later, Wagamon needed to refresh his customers' and his own data centers. He looked at purchasing another storage area network (SAN), but wasn't impressed with its price/performance ratio. He decided to look into HCI again, hoping the technology would be more mature now.

Wagamon had two projects planned:

1. Replace an on-premise SAN cluster shared by two nonprofit behavioral health organizations. The clinics had maxed out their storage and were experiencing poor performance
2. Replace his company's private SAN, used for managed services, including hybrid cloud, off-premise hosting, and backup. Wagamon needed a scalable solution that he could easily add more storage and compute as needed

Wagamon's goals in updating its and its customer's infrastructure included:

- Finding an on-premise HCI solution to power the behavioral health organizations' electronic health records (EHR) management software, accounting and managed payment systems, and storage
- Finding a similar high performance and scalable HCI solution for Wagamon's private data center

The Solution: DataON S2D-5212 solution supporting Microsoft Azure Stack HCI

After the launch of Windows Server 2016, many people in forums Wagamon followed began to talk about the success they were having with Storage Spaces Direct, a feature available in Windows Server 2016 and now 2019. "They talked about the scalability of Storage Spaces Direct and how easy it is to add storage and compute," said Wagamon. "All you have to do is add another node. It's a game changer."

Wagamon's company was a Microsoft shop. He wanted to stay with a Microsoft solution, as he had used Hyper-V for a long time. He liked that Storage Spaces Direct is included with a Windows Server Datacenter license. He and his customers already had the Datacenter license, as they were using Hyper-V for virtualization.

"With Storage Spaces Direct hyper-converged infrastructure, it's easy to add storage and compute. All you have to do is add another node. It's a game changer."

Allan Wagamon, President, Wagamon Technology Group

Initially, he planned to build a Storage Spaces Direct environment with his team but realized it would take him a long time to do it himself. He'd have to go through a learning curve, ensure all the hardware was certified, and correctly configure the software.



"DataON's obviously the leader in this [Storage Spaces Direct] environment. They have experience in-house and it's tremendous to have their support resource on the backend. They saved us so much time and money."

Allan Wagamon
President
Wagamon Technology Group

Deployment Tips from Allen Wagamon

1. Choose DataON. They're obviously the leader in Storage Spaces Direct, with in-house experience. They saved us so much time and money.
2. Use DataON's pre-configured deployment scripts for simple and fast deployment.
3. Remove the health check scripts once the system is implemented to make sure it doesn't wipe out the clusters.

Wagamon began looking on Microsoft's website for a vendor who provided certified Storage Spaces Direct solutions and came across DataON. He talked with DataON's technical sales team and did more research into Storage Spaces Direct, looking at I/O performance numbers and watching DataON's webinars.

Wagamon chose a three-node S2D-5212i with three-tiered storage for the joint behavioral health organizations' data center and another similarly configured S2D-5212i for his company.

The Results

Wagamon was able to deploy his customers' and his own HCIs with relative ease. "Within eight hours, I was moving virtual machines (VMs)," Wagamon said. "DataON's installation scripts and support team were tremendous."

"Normally, I spend two to three weeks beating up a system, but with DataON, I didn't have to do that. I felt pretty confident in DataON's pre-testing and validation, so we only needed three to four days of our own testing before moving VMs to the new environment."

For better management of his data center and his customers', Wagamon uses DataON's MUST monitoring and management tool to manage Storage Spaces Direct clusters and DataON hardware in real time. "It's a good way to look at and benchmark the system. And to be able to use MUST as a plugin with Windows Admin Center is pretty nice."

"After our initial success, we're finding that Storage Spaces Direct and hyper-converged Infrastructure are an ideal solution for health care clinics."

Allan Wagamon, President, Wagamon Technology Group

"Performance gains were substantial", said Wagamon. Workloads such as Claimtrack, an on-premise EHR management software, several SQL databases for accounting and a managed payment system, and remote desktop systems (RDS) performed much faster. "For our customers' HCI, once we deployed, the difference was night and day. Users came up to me and said thank you for the improvement." Wagamon also saw a reduction in power consumption and heat in both data centers, benefits that he didn't think about.

Wagamon offered tips to other managed service providers (MSPs) and customers interested in HCI. "Go with a provider like DataON and use their resources. DataON really knows Storage Spaces Direct, they're obviously the leader in this environment. They have experience in-house and it's tremendous to have their support resource on the backend. They saved us so much time and money. It's amazing how fast it was to spin this up."

Wagamon also offered a warning during the setup process. "Once the system is implemented, make sure you remove the health check scripts and wipe out the volume from the deployment scripts. Unfortunately, I didn't remove the scripts and it wiped everything."

Wagamon plans to purchase certified Windows Server 2019 solutions from DataON for future upgrades. Many of his customers are still running Windows Server 2008, which will end-of-life in January 2020. These customers will need to upgrade their hardware to run newer versions of Windows Server. "After our initial success, we're finding that Storage Spaces Direct and hyper-converged Infrastructure are an ideal solution for health care clinics."



www.dataonstorage.com

dataon_sales@dataonstorage.com

1.714.441.8820

Copyright © 2019 DataON. All Rights Reserved.
Specifications may change without notice. DataON is not responsible for photographic or typographical errors. DataON, the DataON logo, MUST, and the MUST logo are trademarks of DataON in the United States and certain other countries. Other company, product, or services names may be trademarks or service marks of others.

About DataON

DataON is the industry-leading provider of solutions for Microsoft Azure Stack HCI, and hyper-converged infrastructure and storage systems optimized for Microsoft Windows Server environments. It has been named to CIO Review's '20 Most Promising Microsoft Solution Providers 2018.' Our company is focused on customers who have made the "Microsoft choice" to deploy Microsoft applications, virtualization, data protection, and hybrid cloud services. Our enterprise-level solutions, delivered as a complete, turnkey experience, are designed to provide the highest level of performance, manageability, and security offered.