Leading Pontoon Boat Manufacturer Updates Storage with a Windows Server 2016 Solution

Bennington replaces legacy HPE StorageWorks iSCSI SANs and Buffalo iSCSI NAS with Windows Server 2016 Storage Spaces Direct and DataON.

The Challenge

Bennington's goals in updating their storage infrastructure included:

- Streamlining the data center with a more affordable HCI primary storage solution
- Eliminating an expensive and legacy HPE iSCSI SAN network
- Reducing IT management costs
- Increasing performance

The Solution

- DataON S2D-5212i with a hybrid storage solution with Intel NVMe for cache tier, SATA SSDs for performance tier, and 10TB HDDs for capacity tier
- Windows Server 2016 Storage Spaces Direct
- Mellanox 40GbE RDMA network and Spectrum-based 16-port 40GbE switches
- DataON MUST visibility monitoring and management tool

The Result

- Up to 20x read/write performance increase
- Eliminated legacy SANs and future-proofed data center with substantial projected cost savings over next five to seven years
- Simplified hardware and software management, allowing administrators to focus on QoS, while reducing IT management costs

Customer Background

Pontoon Boat, LLC DBA Bennington, manufactures pontoon boats and its products are sold through a network of dealers in the United States, Canada, Australia, Mexico, Europe, and South Africa. The company was founded in 1997 and is based in Elkhart, Indiana.

IT Challenge: Replace HPE StorageWorks iSCSI storage area network (SAN) and Buffalo iSCSI network attached storage (NAS) with a Windows Server 2016 Storage Spaces Direct hyper-converged infrastructure (HCI)

Bennington has a growing business and their data center was already at ninety percent capacity of its physical storage. The pontoon manufacturer no longer wanted to continue to buy more HPE SANs seemingly in a piece-meal add-on approach to updating an aging infrastructure.

Ed Short, Systems Engineer, Bennington, said "We needed a completely new solution that could serve our needs for the next several years without having to constantly build on legacy SANs."

Satisfied with Windows Server Hyper-V performance, Bennington took interest in a Storage Spaces Direct hyper-converged infrastructure (HCI). For Bennington, Storage Spaces Direct was a far cheaper, consolidated and easier to manage storage solution than a SAN.

"Since we have a smaller data center," Short said, "HCI was the right choice because the hardware is consolidated. There are less moving parts. And with Storage Spaces Direct, it's much easier to manage. We have several new projects on the horizon such as document imaging, which drove us to implement a HCI solution more quickly than we had been previously thinking."

"HCI was the right choice because the hardware is consolidated. There are less moving parts. And with Storage Spaces Direct, it's much easier to manage." Ed Short, Systems Engineer, Bennington

Bennington's goals in updating its IT infrastructure included:

- Streamlining the data center with a more affordable HCI primary storage solution
- Eliminating an expensive and legacy HPE iSCSI SAN network
- Reducing IT management costs
- Increasing performance

The Solution: DataON S2D-5212i HCI with Storage Spaces Direct

Bennington considered other vendors like Nutanix. However, the IT team had previous experience using Hyper-V with SoFS and SMB3. Ed Short said, "I've used DataON on other projects in the past with good success. After attending Microsoft Ignite 2017, my view of DataON as a vendor solidified and we felt they were the perfect fit."

"After attending Microsoft Ignite 2017, my view of DataON as a vendor solidified and we felt they were the perfect fit."
Ed Short, Systems Engineer, Bennington

After talking with DataON, Bennington opted to go with a Storage Spaces Direct and DataON hyper-converged solution and purchased:
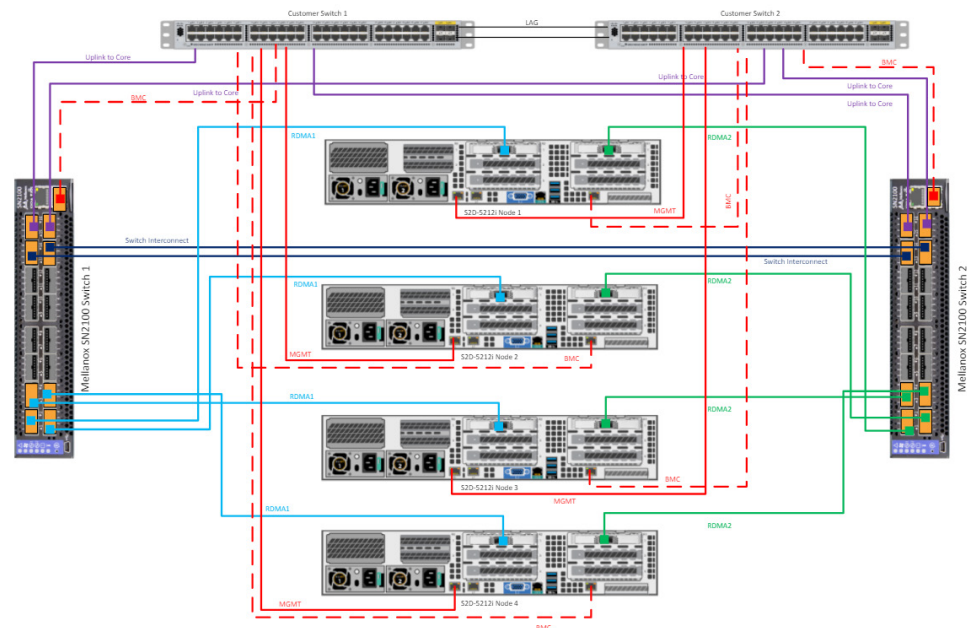
- DataON S2D-5212i with a mixed storage solution of Intel NVMe and NAND solid state drives (SSDs) and traditional 7200 RPM HGST hard disk drives (HDDs)
- Mellanox 40GbE RDMA network adapters
- Mellanox Spectrum-based 16-port 40GbE Ethernet switches

Results

The hardware migration and Storage Spaces Direct configuration went straightforward without any major issues. "The man hour savings is huge since our server administration is managed by one person," Short said. "After switching to HCI, we now have the ability to focus on our quality of service (QoS) without spending the extra time required to manage a normal physical infrastructure."

"We have about thirty virtual machines (VMs) running at this point," Short elaborated. "We expect to at least double that over the next year or two. As we are growing, the ability to be agile and change direction, if needed, is huge for us. We haven't seen the full impact, yet. But we expect the new DataON solution will deliver huge cost savings over the next five to seven years."

Bennington now sees a 10x to 20x increase in copy/write speed with their new storage systems. They are looking to deploy a disaster recovery (DR) site in the future and will look to DataON again for that need when the time comes.

About HGST

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 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.

HGST
a Western Digital brand

www.dataonstorage.com

dataon_sales@dataonstorage.com

1.714.441.8820