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Bradley

National Law Firm Looks to the Future, Replacing its SAN with a Microsoft Hyper-Converged Infrastructure
Bradley decides Storage Spaces Direct has the innovative features they need for their growing data center

The Challenge

Bradley's goals in updating its primary data center included:

- Moving from a traditional SAN to a hyper-converged infrastructure
- Finding a new solution with innovative features that sets them up to utilize hybrid cloud in the future
- Improving performance and reducing latency
- Reducing maintenance and virtual server annual licensing fees

The Solution

- Windows Server 2016 Storage Spaces Direct for software-defined storage at a fraction of the cost of traditional SAN or NAS arrays
- DataON S2D hyper-converged infrastructure, optimized for IOPS & performance
- All-flash solution with Intel® Optane™ NVMe SSDs for the breakthrough performance
- 100GbE RDMA networking to plan ahead for faster server, faster storage, and greater bandwidth needs in the future
- Windows Admin Center & DataON MUST for streamlined intelligent management of Windows Server environments

Company Overview

Bradley is a national law firm that provides business clients around the world with a full suite of legal services in dozens of industries and practice areas. Bradley has offices in Alabama, Florida, Mississippi, North Carolina, Tennessee, Texas, and the District of Columbia.

IT Challenge: Replace SAN and VMware with Microsoft hyper-converged infrastructure in its main data center

Bradley had been using VMware and a traditional storage area network (SAN) in its main data center. However, after seeing how transformative the hyper-converged model has been for other companies, Bradley started looking into alternative options for virtualization, storage, and compute.

Jeff Chase, Senior Enterprise Architect at Bradley, started looking at software-defined storage offerings. With the introduction of Windows Server 2016, Chase started to think now would be the right time to move to a hyper-converged infrastructure.

Bradley's initial goals in updating its IT infrastructure included:

- Moving from a traditional SAN to a hyper-converged infrastructure
- Finding the best technology with innovative features that would enable them to utilize hybrid cloud in the future
- Eliminating expensive SAN maintenance and virtual server annual licensing fees
- Improving performance and reducing latency

The Solution: DataON S2D family of hyper-converged infrastructure with Windows Server 2016 Storage Spaces Direct

Chase is a regular follower of tech news and first heard about Windows Server and DataON from Aidan Finn, a long-time Microsoft MVP. He monitored the evolution of Windows Server for several years and when Microsoft announced Windows Server 2016, he felt it might be the right time to try something different.

"I really liked the features that were included with Storage Spaces Direct and the pace of innovation from Microsoft in storage was impressive," said Chase. "In addition, the roadmap for Microsoft's solution lines up perfectly with where the industry is going with hybrid cloud." Another advantage with a Microsoft solution is that Bradley is already a Microsoft shop. It already uses SQL Server, SharePoint, and Office so integration would not be an issue.

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Jeff Chase, Senior Enterprise Architect at Bradley

From his research, he knew that there were very few vendors that specialized in Microsoft solutions. With endorsements from Finn and Microsoft, DataON was Chase's recommendation for a vendor.

Chase did an initial small HCI deployment with Storage Spaces Direct in a firm office and was very happy with the performance and how well it performed. As a result, he was very comfortable with recommending the change, and Bradley purchased a DataON S2D-5224i hyper-converged infrastructure with all-flash Intel NVMe SSDs and Intel Optane™ SSDs. The firm also purchased 100GbE Mellanox networking switches to plan for faster servers, faster storage and greater bandwidth needs in the future.

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"The DataON hyper-converged solution with Intel® Optane™ NVMe SSDs has delivered a vast performance improvement in both latency and IOPS."

Jeff Chase
Senior Enterprise Architect
Bradley

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The Results

"Storage Spaces Direct is a really good product and I really like the DataON hardware. I'm glad we went down this path," said Chase.

Bradley is already seeing the increased performance of their new hyper-converged infrastructure over their previous all-flash NAS. "Everything is so much faster. Reboots are almost instantaneous. Latency has dropped to less than one millisecond," said Chase.

Chase continued, "The hyper-converged solution with Intel® Optane™ NVMe SSDs has delivered a vast performance improvement in both latency and IOPS."

"Storage Spaces Direct is a really good product and I really like the DataON hardware. I'm glad we went down this path."

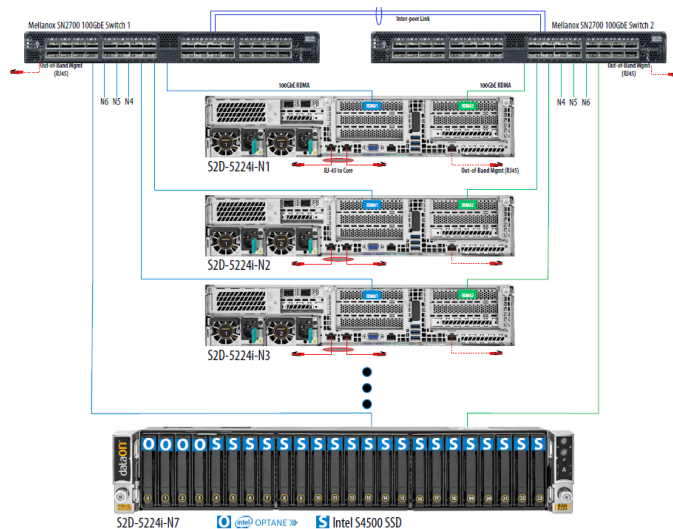*Jeff Chase, Senior Enterprise Architect at Bradley*

Bradley is also very happy with the cost savings from the Storage Spaces Direct and DataON solution. "Storage Spaces Direct is a breath of fresh air from a cost perspective," said Chase.

"In addition, DataON was very competitive on their hardware price compared to our previous blades and racks. It was a no-brainer to switch to DataON," said Chase.

The Bradley team is also using Windows Admin Center, Microsoft's new browser-based management tool. It complements System Center and Operations Management Suite and allows users to monitor and manage Hyper-V, Azure and Storage Spaces Direct from a single console. "It works really well, and we're very happy with it," said Chase.

In addition, the team is also using DataON's MUST management and utility tool extension for Windows Admin Center to monitor and manage their Windows Server cluster. MUST fully integrates with Windows Admin Center and provides historical data reporting, disk mapping, system alerts, and a call home service for when problems arise.

Bradley plans to continue their push into software-defined data centers and purchase additional nodes for the firm's other sites.

About DataON

DataON™ is the leader in Microsoft® Windows Server software-defined solutions. 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. DataON is a division of Area Electronics Systems, Inc.