

Consolidate IT infrastructure Upgrade from Windows Server 2008 to Windows Server 2012 R2

**Create High Availability clustered** 

# BarCharts – Premier Publisher of Quick- Reference Materials, Consolidates Its IT

DataON Cluster-in-a-Box (CiB) Consolidates Their Storage Infrastructure While Being Cost Effective and Supporting

Case Study

#### **Customer Background**

BarCharts, founded in 1991, is global leader in academic study guides and quick reference materials. BarCharts offers reference guides over 500 guides on 27 subjects, ranging from anatomy, language, law and more. In addition to reference guides, BarCharts produces other educational materials such as flash cards, booklets, posters and digital learning offerings with partners like Intel, Vital Source, and Yuzu.

#### IT Challenge – Beefing up the backend, IOPS and Flash storage

BarCharts was an early adopter of Windows Server, starting eight years ago with the release of Windows Server 2008. After four years of growth, BarCharts sought to consolidate their IT and data storage infrastructure and upgrade to Windows Server 2012 R2. BarCharts was seeking scalable high availability cluster deployment to support their SQL and Exchange applications as well their virtual machine needs. For their next deployment BarCharts required:

- Cluster System
- Highly available storage
- Condensed foot print
- Cost effective

#### Making a Microsoft Storage decision

BarCharts was already a Windows shop prior to the release of Windows Server 2012, but it was the addition of numerous features, such as, a GUI, an updated Hyper-V, IP address management, new ReFS files system and its virtualized storage pooling with Storage Spaces, that drove BarCharts to upgrade.

#### Why DataON?

DataON is an industry leader in Hyper-Converged Clusters for storage and virtualization applications. Specializing in storage and virtualization deployments using Windows Server, DataON brings close technical ties and expertise in Windows Server to each deployment. For BarCharts, DataON recommended a Cluster in a Box appliance the CiB-9220. The CiB-9220 offers a dual node cluster server in a condense 2U form factor. The CiB-9220 as dual node cluster server is perfect for creating failover clusters. The CiB-9220 dual node cluster can be configured with Active/Active and Passive/Active high availability configurations, allowing enterprises the ability to maximize performance or favor redundancy. Tired SSD/HDD storage allows enterprises to customize their storage for performance, capacity and cost effectiveness.

#### Results

By utilizing Windows Server 2012 R2 and DataON CiB-9220, BarCharts was able to reduce data center footprint to a 2U appliance while increasing SQL, Exchange, and Hyper-V performance. With the dual nodes and shared storage of the CiB-9220, BarCharts has a highly available storage with the resilience of a fail over cluster. Thanks to the consolidating their datacenter infrastructure BarCharts saw 50% reduction in associated costs.

#### **The Solution**

**The Challenge** 

system

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DataON Cluster-in-a-Box 9220 provides a redundant clustered system for high availability systems. Single appliance cluster system reduces data center foot-print and capital expenditures.





- Upgraded from Windows Server
  2008 to 2012 R2
- Increases SQL, Exchange, and Hyper-V performance
- High availability clustered system



#### **Christian Ortiz, Systems Admin**

**BarCharts**, "My best advice is to do a test drive first. When we were considering Microsoft and DataON we bought a server with some SSD and HDDs and played with it in a dev environment to test the system prove it. This lets you start small and learn some of the ins and outs, as it's a different mindset." cheaper to, I don't need my team to also learn Linux and this lowers the learning curve and reduce chance of human error."

# dataOn

## Cluster-in-a-Box

### CiB-9220





1/10G E or 56G Infiniband 1/10G E or 56G Infiniband CiB-9220 x8 PCle x8 PCle Cluster #2 Cluster #1 00v2E5-E5-2600v2 CPU CPU x8 PCI N Clustring SAS Contro PCIe 3.0 x8 1 5 4 External SAS Por External SAS Po



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DataON™ is the industry leading provider for 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<sup>™</sup> is a division of Area Electronics Systems, Inc.