DataON MUST™ (Management Utility Software Tool) provides a high level of infrastructure visibility, monitoring, and management for Windows Server-based hyper-converged systems, networking and storage. Built to support Microsoft’s suite of software-defined storage technologies, including Storage Spaces Direct, Storage Replica and Storage Quality-of-Service (QoS), MUST simplifies data center management and helps enterprise customers transition from traditional SANs to a Windows Server-based hyper-converged infrastructure.

MUST can be used through its standalone console or can be used within Windows Admin Center, allowing customers to use both Windows Admin Center and MUST through a single pane of glass.

MUST provides multiple tiers of storage visibility and monitoring:

- **Software-Defined Data Center & Hyper-Converged Infrastructure Tier** – Provides system-level information on performance, capacity, hardware inventory and faults/alerts. The dashboard-level view displays operations, analytics, infrastructure health management, storage systems metrics and event logging insights.
- **Systems and Storage Services Audit Log Tier** – Provides detailed logging-level visibility for events, so you can perform root cause analysis and export source data for analytics.
- **Hyper-Converged Cluster/Node Tier** – Provides pool, volume and device-level performance, health and operational analytics for your HCI cluster. This enables you to proactively perform systems maintenance and better understand requirements for workload migrations.
- **SAN-like Call Home Service Support** – Leverages the Health Services faults in Windows Server 2016 & 2019 to automatically email alerts to key contacts. You can also leverage third party SNMP monitoring traps to alert you when you need disk or hardware replacements.

**Datasheet Highlights**

- Integrates natively with Windows Admin Center (previously Project ‘Honolulu’) for a seamless experience from a central console.
- Enhances the Windows Admin Center experience by adding functionality such as historic data reporting, disk mapping, system alerts, and call-home service.
- Provides multiple tiers of storage visibility and monitoring.
- Dashboard-level metrics from a single pane of glass.
Windows Admin Center

Windows Admin Center is the modernized and simplified tool set for managing Windows Server – it’s server management reimagined. Evolving from familiar tools like Server Manager and MMC, Windows Admin Center is a lightweight, browser-based, customer-deployed solution with no agent installation required on target servers, and it comes at no extra cost beyond the Windows license.

MUST enhances the Windows Admin Center experience with expanded functionality:

- **Historic Data Reporting** – Provides real-time and monthly dashboards of your system performance data including IOPS, latency, throughput on your cluster, storage pool, volume and nodes.
- **Disk Mapping** – MUST displays the device types and components in each of the nodes, providing a clear disk map of your entire node. It shows the number of disks, disk type, location and slot of each drive, and disk health status.
- **System Alerts** – Leverages Windows Health Service faults to identify hardware failures, configuration issues and resource saturation. It also provides multi-level assessment with specific locations, fault descriptions and recovery actions. You can also leverage third party SNMP monitoring traps to alert you when you need disk or hardware replacements.
- **SAN-like Call Home Service Support** – Prompted by system alerts, administrators can have automated email alerts sent to key contacts.

Simplified Data Center Management

MUST monitors hardware and software storage infrastructure to identify potential problems. Using an event-driven model for rapid detection with minimal overhead, MUST also provides on-demand access to curated collections of hyper-converged clusters, storage performance, and capacity metrics. The MUST dashboard display is designed to efficiently and dynamically connect the dots to help provide root cause analysis.

Dashboard View

**Overview** - Displays the type of OS, number of server nodes, type of devices and number of virtual disks. Also displays the storage pool CPU and memory utilization, and volume capacity. Provides system performance data such as IOPS, latency and throughput.

**Alerts** - Displays three types of alerts: critical, warning, and information. Based on your settings, you will receive information on your enclosure, capacity, cluster, storage QoS, and virtual disks.
Cluster View

Pools - Summarizes the drive media within each storage pool, including usable volume, resilience, and capacity. It also displays an inventory of your SSDs and hard drives.

Volumes - Displays every volume in your cluster, showing the storage space utilization, IOPS, throughput, read/write percentage, and average I/O.

Nodes - Displays the device types and components in each of the nodes, including CPU, memory and capacity utilization. Most importantly it provides a clear disk map of your entire node. This is a unique feature of MUST that shows the number of disks, disk type, location and slot of each drive, and disk health status.

“MUST has been very valuable and was a big selling point. The inclusion of MUST with their S2D appliances is what completes the solution with Storage Spaces Direct as a viable SAN replacement.”

Benjamin Clements
President
Strategic Online Systems, Inc.
Settings

Setup MUST for your active directory, domain, SMTP server, and even leverage the SNMP feature for third party access.

You can automatically notify systems administrators of hardware failure, configuration issues, or resource saturation through MUST’s SAN-like call home service.

“I would recommend DataON S2D servers just to be able to get MUST to monitor your Storage Spaces Direct servers. The monitoring alone is worth a try.”

Jan-Tore Pedersen
Senior DevOps Manager
Infront