

Modernize Your Data Infrastructure with Azure™ Stack HCI Solutions using Ultrastar® and DataON™



Challenges

- Replacing and consolidating aging server and storage infrastructures
- Cost effectively managing exponential data growth
- Running virtualized applications on-premises and connecting to Azure for cloud services
- Simplifying the integration and management of hybrid cloud environments

Highlights

- Consolidates legacy applications on an efficient Microsoft Azure Stack HCI infrastructure
- Streamlines access to cloud management and security services in Azure, including off-site backup, site recovery, cloud-based monitoring, and more
- Maximizes data storage capacity and efficiency and enables simple scalability in the future at a fraction of the cost of competing solutions

Solution

- DataON high-capacity converged storage solution for Microsoft Azure Stack HCI
- Microsoft Azure Stack HCI with a Windows Server 2019 hyper-converged infrastructure
- Western Digital's Ultrastar Serv60+8 storage server
- Western Digital's Ultrastar Data60/102 storage Platform (optional)
- 40GbE RDMA Ethernet adapters and switches for ultra-low latency networking

Digital transformation marks a radical rethinking of how an organization uses technology and data to change the way they operate and compete. In this new age of data, organizations are racing to modernize their aging data infrastructure. While many are adopting public cloud services, they understand there are workloads that must remain on-premises.

Many organizations also face challenges with scalability. SAN infrastructures are limited in their ability to scale out. When faced with increased workloads, these "maxed out" storage systems decline in performance, forcing IT administrators to buy yet another isolated island of storage to manage and maintain.

DataON™ leverages the powerful technology provided by Western Digital to deliver a hybrid cloud solution that works for every workload. A converged software-defined storage solution that provides what you need where you need it, delivering cloud innovation for workloads wherever they reside and is easily scalable in both compute and capacity when needed.

DataON Delivers a Converged Hybrid Storage Solution with the Help of Western Digital

DataON's converged hybrid storage solution for Microsoft™ Azure Stack HCI is designed to manage demanding workflows by leveraging the performance, capacity and features of Western Digital's Ultrastar® Serv60+8 hybrid storage server. The Ultrastar Serv60+8 hybrid storage server uses high-performance Intel® Xeon® Scalable processors to deliver the performance to manage demanding workloads. High-capacity, HelioSeal® heliumfilled hard drives, lightning-fast SSDs and high-performance RDMA networking provide scalable capacity to handle rapidly growing amounts of data. An optional flash-based data acceleration tier ensures maximum performance. With a choice of CPUs, memory and drives, customers can balance performance with cost to meet their specific workloads.

Advanced Technologies Only Available from Western Digital Increase Performance and Reliability

DataON also leverages innovative technologies from Western Digital like IsoVibe™ and ArcticFlow™. IsoVibe reduces performance degradation in traditional platforms due to induced vibration from busy adjacent drives. ArcticFlow overcomes cooling issues in a conventional dense chassis by introducing cool air into the middle of the enclosure. Both these technologies contribute to long-term reliability enabling a five-year limited warranty on the entire DataON solution.

Simplified Scalability and Increased Fault Tolerance for Microsoft Azure Stack HCI

With DataON converged hybrid storage solutions for Microsoft Azure Stack HCI, adding storage is simplified. Administrators can simply add more HDDs for capacity or SSDs for cache, depending on the need. The new storage media will automatically be detected and rebalanced in the storage pool.

For additional capacity, you can scale up and scale out by adding JBOD storage. Western Digital Ultrastar Data60/102 Hybrid Storage Platforms provide the perfect direct-attached storage (DAS) solution. This family of "just a bunch of disks" (JBOD) platforms combines excellent density, strong performance, and flexible capacity in a simple, affordable solution.

Added Resiliency with Microsoft Azure **Hybrid Cloud Services**

Built-in integration with Microsoft Azure makes it easy for organizations to start using Azure for infrastructure management and security, including off-site backup, site recovery, and cloud-based monitoring. With simplified management through Windows Admin Center, Administrators can easily integrate on-premises workloads with services such as Azure Site Recovery, Azure Backup, Cloud Witness and Auzre Monitor.

Conclusion

DataON has you covered with converged hybrid storage solutions for Microsoft Azure Stack HCI that can handle every workload—whether you need public, private or hybrid. An integrated solution that delivers compute power and storage capacity to meet increasing workloads, while simplifying storage, group and user management and lowering overall costs.

For more information on DataON solutions for Azure Stack HCI, visit dataonstorage.com. For more information on Western Digital's powerful lineup of storage servers, visit our website at www.westerndigital.com/platforms.



IsoVibe™ Vibration Isolation Technology

Precise cuts in the baseboard provide a suspension for the drives in the chassis, isolating them from transmitted vibration. The result is that consistent performance is maintained, even when all the drivers are working hard.



ArcticFlow™ Thermal Zone Cooling Technology

By Introducing cool air into the center of the chassis, drives operate at lower and more consistent temperatures than conventional systems. This results in lower fan speeds, reduced vibration, lower power consumption, quieter operation and ultimately higher reliability.







Western Digital's Ultrastar Serv60+8 Hybrid Storage Server, Ultrastar Data60 Hybrid Storage Platform and Ultrastar Data102 Hybrid Storage Platform

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