ACCELERATE HCI ADOPTION THROUGH DELL TECHNOLOGIES AND MICROSOFT AZURE STACK HCI

Hyperconverged Infrastructure (HCI) provides the choice, convenience, and confidence that business demands

Hyper Value with Hyperconverged Infrastructure

Benefits:

- **Simplified** operations with a cloud-like hybrid datacenter experience
- **Choice** of flexible configuration options let you choose the best fit for your specific use case or environment
- **Convenience** with a simple to manage solution that can be rapidly deployed without lengthy design or build times and integrates seamlessly with select Azure services
- **Confidence** that there is global availability backed by Dell Technologies trained technical support, deployment and consulting services professionals
- Solution level, one-call customer support provides peace of mind
- Windows Server 2019-based HCI improves performance, scalability, and resiliency
- SAN-like capabilities delivered at lower cost and with reduced risk

Demand for hyperconverged infrastructure explodes

HCI has been one of the hottest IT segments for several years – and there's no sign of it slowing down. By end of 2023, IDC predicts the HCI market will be at $16.5B with a Compound Annual Growth Rate (CAGR) of 17% between fiscal years 2021 – 2023.

Why the continued excitement? Globally, enterprises realize HCI allows them to shift away from do-it-yourself hodgepodge infrastructures that often require massive staff resources, long deployment times, and multiple vendors to resolve issues.

Those enterprises are now taking advantage of pre-validated HCIs integrating x86 servers, local storage, and high-speed interconnects that result in better performance, increased efficiency, and easier deployment at a lower cost.

For Hyper-V customers, the shift to HCI is now included in their migration to Windows Server 2019, thanks to Dell EMC Solutions for Microsoft Azure Stack HCI, of which include the AX nodes. These AX nodes, built on industry-leading PowerEdge servers, provide scalability, resiliency, single pane of glass management, and more, along with networking technologies that deliver significant speed and efficiency improvements.

Together, Dell Technologies and Microsoft create a smooth, cost-effective pathway for enterprises to achieve hybrid on-premises environments with connections to cloud services and capture the high business value of a software-defined data center (SDDC). Plus, Dell EMC Solutions for Microsoft Azure Stack HCI provide customers with confidence since nodes arrive pre-configured, pre-validated, and pre-certified. They also deliver the convenience of fast, simplified deployments; and solution-level, one-call customer support for peace of mind.

Dell EMC Solutions for Microsoft Azure Stack HCI power use cases based on business demands

The beauty of Dell EMC Solutions for Microsoft Azure Stack HCI is the flexibility to support nearly any use case across virtualized and physical environments, such as data center consolidation, remote or branch office (ROBO), backup, disaster recovery, archiving, Microsoft SQL Server migration, VDI, and others based on your needs.

Running on the latest generation of Dell EMC PowerEdge servers, with local storage and integrated networking, AX Nodes offer an expanded range of capabilities:

- **Storage and compute for every use case**—scale from entry-level to larger capacity hybrid configurations to satisfy the need for storage hungry use cases and all flash configurations with millions of IOPS. Moreover, Dell Technologies offers three integrated AX nodes to meet a broad spectrum of performance and capacity requirements.

- **Simple to manage and scale**—Integrated compute, storage, and networking combined in the same cluster makes the AX Nodes easier to deploy, manage, and scale.

- **Lightning-fast networking**—Another way to boost performance of your AX Nodes is to choose the 25GbE switches, as well as qualified Dell EMC networking switches with switching speeds up to 100GbE. At similar price per port to 10GbE, our expanded networking options provide the east-west traffic that drives super performance, high IOPS, and low latency.

Windows Server 2019: Cloud-ready OS drives new levels of scalability, performance, and manageability for HCI customers

Together, Dell Technologies and Microsoft Azure Stack HCI allow you to run infrastructure as a service and a software-defined data center at a lower cost and risk compared to integrating and deploying your own three-tiered infrastructure.

Here are some of the Windows Server 2019 capabilities available to Dell EMC Solutions for Microsoft Azure Stack HCI customers:

- **Storage Spaces Direct**—Software-defined storage abstracts your storage from locally attached flash and hard drives into one, large, easy-to-manage pool. While double- or triple mirroring continues to be available, Windows 2019 has added more efficient, higher performance resiliency options, such as mirror-accelerated parity. You also can save space with deduplication, compression, and intelligent storage tiering. Because Storage Spaces Direct is software-defined via the operating system, you're getting SAN-like capabilities at a lower price point.

- **Dell EMC OpenManage Integration for Windows Admin Center**—From a browser-based application, with a few clicks you can tier storage, implement resiliency, provision VMs and storage, configure networking, monitor health and performance, and install updates. Managing each server individually through traditional stand-alone applications from each host is a thing of the past.

- **Hyper-V**—Instead of buying a separate hypervisor license for your VMs, your Windows Server 2019 Datacenter license includes Hyper-V. With Datacenter edition, you can create unlimited VMs, achieve high availability clustering, and secure your tenants or applications with shielded VMs.

- **Software-Defined Networking**—With a software-defined network, you gain the utmost agility, efficiency and security. Increase performance with remote direct memory access, a high-speed data plane, and a virtual switch in the host infrastructure layer and RDMA.

Dell EMC: Making hyperconverged infrastructure easy

As every IT person knows, enterprise technology, no matter how great, is only part of the equation. By choosing Dell EMC Solutions for Microsoft Azure Stack HCI, you get confidence that everything will work well, the convenience of fast, pain-free deployments, and peace of mind with single call support.

- **Choice**—Meet the needs of your business by choosing from three different models of AX nodes with many configuration options, offering a choice to right size your infrastructure for application performance, capacity or deployment location requirements.

- **Convenience**—Dell EMC Solutions for Microsoft Azure Stack HCI are convenient and fast to implement without lengthy design and build time, including seamless integration with Azure Services. Dell EMC provides customers and partners with deployment guides, order guides, hardware compatibility lists, reference architectures, and engineering white papers to streamline deployment even more. Dell EMC also offers sizer tools to help you better determine and deliver configurations from the start.

- **Confidence**—Dell Technologies provides solution level support, unlike other HCI vendors, which may only provide single-server support. By delivering multi-node, cluster-aware support to validated configurations, Dell Technologies can more quickly identify and resolve issues and understand the entire scope of the solution whether the issues are software- or hardware-driven. That gives you more time to focus on getting your most pressing work completed.

Get to hyperconverged even quicker with Dell EMC Services

Dell Technologies offers a range of professional and consulting services to assist customers with deployments of Microsoft Azure Stack HCI. With Dell Technologies Services, certified deployment engineers can help speed deployments, ensure success, reduce risk and downtime, and free IT staff to focus on high-value projects.

- **Deployment services**—Dell Technologies offers the options of ProDeploy or ProDeploy Plus. Skip the hassle, let Dell EMC experts deploy your new HCI solution while you focus on running your business. After working with Dell EMC for one or two clusters, customers may choose to deploy on their own.

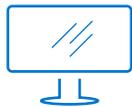- **Support**—Dell Technologies offers solution level, contextual support right from first call. All customer support calls get routed to experts who are trained on Windows Server, Hyper-V and Storage Spaces Direct, regardless of whether it's a hardware or software issue.

- **Consulting**—Dell Technologies offers consulting services for customers that want to better understand how HCI and software-defined data centers can best add value to their environment and use cases, as well as how these initiatives fit into their overall IT strategy.

Jumpstart your software-defined data center today

It's never been easier and more cost-effective to transition to the cloud and software-defined data centers with the Dell EMC Solutions for Microsoft Azure Stack HCI. By offering our trademark customer experience of choice, convenience and confidence. We make configurations, sizing and deployment painless, while providing multi-node, cluster-aware support. With Dell Technologies, you get peace of mind, single-call solution support, and reduced risk for less cost that give you a competitive advantage.

Ready to get started? Learn more at Dell EMC Solutions for Azure Stack HCI and contact a Dell EMC expert.

Learn more about Dell EMC Solutions for Microsoft Azure Stack HCI

Contact a Dell Expert

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