



## Support your perfect hybrid fit with HCI and integrated, full-stack lifecycle management

IT decision-makers understand the transformative potential of the cloud. However, many companies aren't able to adopt the cloud 100% due to data sovereignty concerns, latency shortcomings for edge applications and other challenges. Although hybrid cloud solutions are the obvious answer, finding the right hybrid cloud solution is elusive. Every organization has its own legacy infrastructure, its own industry niche and its own specific technology strategy. Yet all of these organizations want to build cloud-native apps quickly, scale up and down as needed, reduce complexity and expenses, increase visibility into their resource utilization, improve governance—and achieve their migration fast, affordably and smoothly.

Now, two industry leaders have joined together to meet all of these challenges and more, with Microsoft Azure Stack HCI from Tata Consultancy Services (TCS) and Dell Technologies. With this solution, companies can quickly leverage a just-right hybrid cloud that maximizes the best benefits of both Azure and on-premises solutions, or seamlessly engage a hosted private cloud that leverages Azure Stack HCI.

### An Integrated System for Azure Stack HCI: The just-right cloud solution

Azure Hybrid Cloud provides the best path forward for organizations looking to modernize their operations and slash operational costs. Add hyperconverged infrastructure (HCI) to the mix, and businesses can further reduce expenses, boost agility and streamline operations by meeting all

organizational compute and storage needs through server-based resources with integrated monitoring across Azure and Azure Stack.

TCS and Dell Technologies have partnered to bring Dell EMC Integrated System for Microsoft Azure Stack HCI to fulfill these needs. The solution delivers a cloud consumption experience on premises while maintaining data security and full-stack lifecycle management—enabling businesses to quickly build cloud-native apps, scale rapidly, reduce complexity, lower expenses, closely monitor resource utilization and improve governance. The unique integration of Azure Stack HCI helps businesses reduce the manual steps of complex operational tasks and shrink the maintenance window with Dell Technologies OpenManage Integration for Windows Admin Center, which significantly reduces the time required to complete common, complex tasks.

Unlike many typical HCI deployments, which contain at least three nodes per cluster, Azure Stack HCI enables deployment as a two-node cluster, with one-node cluster options coming soon. In a two-node cluster, each node contributes capacity, memory and compute into a common pool of resources used for both application-centric and storage-centric workloads.

Only Azure Stack HCI from TCS and Dell Technologies permits orchestration of full-stack lifecycle management. It does so by leveraging the TCS Cloud Managed Services Platform,



of new digital workloads deployed will be on cloud-native platforms by 2025.<sup>1</sup>



of Fortune 500 companies use Microsoft Azure.<sup>2</sup>



reduction in manual steps of complex tasks with Dell EMC's system for Azure; 40% reduction in required maintenance window.<sup>3</sup>

<sup>1</sup> "Gartner Says Cloud Will Be the Centerpiece of New Digital Experiences," Gartner, November 10, 2021, <https://www.gartner.com/en/newsroom/press-releases/2021-11-10-gartner-says-cloud-will-be-the-centerpiece-of-new-digital-experiences>

<sup>2</sup> "Azure vs. AWS," Microsoft, <https://azure.microsoft.com/en-us/overview/azure-vs-aws/>

<sup>3</sup> Internal Dell Technologies lab review of OpenManage integration with Windows Admin Center. Taken from "Dell EMC Solutions for Microsoft Azure Stack HCI: Life Cycle Management Approach Comparison Benefits of Automating the Azure Stack HCI Hardware Update Process," August 2020

with flexible payment models available to suit any budget. Dell Technologies offers a wide range of payment options such as custom, technology rotation and technology ownership options, and our Master Lease Agreement streamlines transactions to simplify acquisitions. Dell Technologies' flexible, on-demand (FOD) options allow you to scale up or down as needed, enabling HCI-as-a-service. Unforeseen bursts of growth, fluctuating workloads or evolving IT infrastructure requirements—all are easily managed with flexible consumption models provided by Dell Technologies, designed to accommodate your need to scale to meet demand.









### More unique benefits of implementing Azure Stack HCI from TCS and Dell Technologies

TCS provides the glue for Azure Hybrid Cloud, including the services and tools designed for Azure Stack in a hybrid cloud operating model. For example, our unique TCS Cloud Counsel tool is a complete toolkit for cloud migration assessment, which

can help reduce the cost of cloud migration and ensure continued operations. Similarly, TCS Cloud Exponence is an operations service model that provides frictionless, rapid onboarding, and is equipped with the required intelligence and scripts to enhance operational efficiency and address the governance and security challenges faced by modern infrastructures.

The solution's close integration with Azure enables optimal use of the Azure Arc bridge, which extends the Azure platform. With Azure Arc, you can build applications and services and run them across datacenters, at the edge and in multicloud environments. Included with all Azure Stack HCI implementations, Azure Arc assures that Azure security and cloud-native services are available to all customers. With Azure Arc, you can quickly build cloud-native apps to run on any Kubernetes platform, on virtual machines and through the Windows Admin Center, enabling you to bring almost any Azure service on premises and open the door to application modernization.

## A partnership that makes Azure Stack HCI the just-right solution for your organization

<b>Hybrid Cloud Adoption Approach</b>	<b>Assessment and Business Value</b> <ul style="list-style-type: none"> <li>Workload Assessment for Azure HCI</li> <li>Business Case</li> <li>Capacity Sizing</li> </ul>	<b>Architecture and Foundation</b> <ul style="list-style-type: none"> <li>Target State Architecture</li> <li>Partner Collaboration</li> <li>Migration Plan</li> <li>Foundation Plan</li> </ul>	<b>Migration and Modernization</b> <ul style="list-style-type: none"> <li>Migration Factory Approach Execution</li> <li>Azure Arc &amp; Native Tools Integration</li> </ul>	<b>Operations and Optimization</b> <ul style="list-style-type: none"> <li>Predictive Machine First Operations</li> <li>Azure Arc Enabled Services</li> <li>Cost Optimization</li> </ul>
<b>TCS Tools and Accelerators</b>				
<b>Dell EMC Integrated System for Microsoft Azure Stack HCI</b>	<b>Fully Productized and Integrated</b> <ul style="list-style-type: none"> <li>HCI solution with foundational AX nodes, network switches</li> <li>Support and deployment services</li> </ul>	<b>Complete Portfolio</b> <ul style="list-style-type: none"> <li>Broad portfolio and offerings</li> <li>Multiple use cases, app performance and dynamic capacity needs supported</li> </ul>	<b>Automation and Orchestration</b> <ul style="list-style-type: none"> <li>Deployment Automation</li> <li>Full stack updates</li> <li>Dell OpenManage Integration with Windows Admin Center</li> </ul>	<b>High Availability</b> <ul style="list-style-type: none"> <li>Native disaster recovery with stretch clustering</li> <li>Storage Replica sync and async volume replication</li> <li>Designed for 99.9999% availability</li> </ul>
<b>Flexible Factory Ready Configurations</b>				
	<b>intel</b> AX-640	<b>intel</b> AX-650	<b>intel</b> AX-740xd	<b>intel</b> AX-750



While Dell Technologies provides the foundational technology, TCS adds the services that transform Azure Stack HCI into a customized solution for any organization seeking to modernize by leveraging the best benefits of the cloud.

TCS provides the following four suites of services for organizations seeking to adopt a hybrid cloud approach. Specific to Azure Stack HCI, these assure the implementation of a hybrid cloud operating model that is designed and enabled specifically to meet individual organizations' needs:

- 1. Assessment and business-value services:** The proprietary Cloud Counsel by TCS is used to assess comprehensive data center workloads and develop insights into IT resource utilization. The results of the assessment will inform the roadmap design and recommendations regarding the target Azure Stack nodes, ensuring that sufficient capacity is available for migrating on-premises workloads to the Azure Stack HCI implementation.
- 2. Architecture and foundation services:** In partnership with Dell Technologies, TCS has designed and created a joint offering for delivering and implementing the HCI foundation to customers. The design framework leverages reusable scripts, codes and design templates to accelerate the design and build of each customer's Azure Stack HCI hybrid cloud foundation.
- 3. Migration and modernization services:** Migration rollouts involve streamlined, factory-based migration, designed within strong governance frameworks, for transitioning workloads to the Azure Stack HCI. Separate migration operations are designed and executed for infrastructure, application and database workload migrations.
- 4. Operations and optimization services:** TCS' proprietary Cloud Exponence, integrated with Azure Stack HCI and Azure Arc, is designed to automate all day-one and day-two activities, and delivers managed services for all prevalent cloud architecture patterns, including public and private clouds. The MachineFirst™ delivery model provides enterprise customers with fast and frictionless onboarding that features a substantially reduced transition time while providing a standardized delivery experience.

## **A collaboration between two industry-leading partners results in an industry-best solution**

Few companies are as qualified as Dell Technologies and TCS to help organizations tap into the benefits of Microsoft Azure hybrid cloud.

Dell Technologies has earned Partner of the Year recognition from Microsoft more than thirty times.<sup>4</sup> TCS is a Microsoft Global Alliance Partner, a Gold Certified Partner, a Key Technology Adoption Partner, a Key Launch Partner and has won several partner of the year awards in 2022. And, in a global ranking of hybrid infrastructure service providers, TCS has been recognized by Gartner as the best positioned of all providers for ability to execute.<sup>5</sup>

Azure Stack HCI from Dell Technologies and TCS modernizes the IT infrastructure paradigm, providing API-driven provisioning that provides new CPU, storage or networking capacity in mere minutes. Together, these two industry leaders provide the best-in-breed services and best-in-breed hardware that can help any enterprise modernize and transition to the future faster and more effectively than competitors.

---

### **About Tata Consultancy Services**

[Tata Consultancy Services](#) is a purpose-led transformation partner to many of the world's largest businesses. For more than 50 years, it has been collaborating with clients and communities to build a greater future through innovation and collective knowledge. TCS offers an integrated portfolio of cognitive powered business, technology, and engineering services and solutions. The company's 500,000 consultants in 46 countries help empower individuals, enterprises, and societies to build on belief.

### **About Dell Technologies**

[Dell Technologies](#) (NYSE:DELL) helps organizations and individuals build their digital future and transform how they work, live and play. The company provides customers with the industry's broadest and most innovative technology and services portfolio for the data era.

<sup>4</sup> Mark Cabot, "Leverage Dell Technologies Award-Winning Experience in Enabling Today's Modern, Mobile and Remote Workforce," Dell, September 21, 2021, <https://www.dell.com/en-us/blog/deploy-digital-workplace-solutions-microsoft-partner-award-2020/>

<sup>5</sup> "TCS Recognized as a Leader in Gartner® Magic Quadrant™ for Data Center Outsourcing & Hybrid Infrastructure Managed Services, Global," TCS, October 26, 2021, <https://www.tcs.com/leader-gartner-magic-quadrant-data-center-outsourcing-hybrid-infra-managed-services-global/#0>