The hybrid cloud built for your workloads

Extend your business to the cloud with
Lenovo ThinkAgile MX for Azure Stack HCI

Microsoft Azure

Enabling hybrid cloud

Most enterprises today are planning to use hybrid cloud to improve agility, speed up innovation, and achieve efficiencies by integrating cloud and on-premises workloads.

Modern hyperconverged infrastructure (HCI) solutions can offer a simple, proven path to realising hybrid cloud strategies, by providing tight integration with public cloud platforms.

72%
of enterprises are taking a hybrid approach by combining public and private clouds.[1]

87%
of enterprises have a multicloud strategy.[1]

Hybrid cloud-enabled HCI places workloads and data wherever you need them, helping you to meet the requirements of a wide range of use cases. You can operate in locations with intermittent connectivity, meet regulations such as data locality laws, improve IT agility, and more.
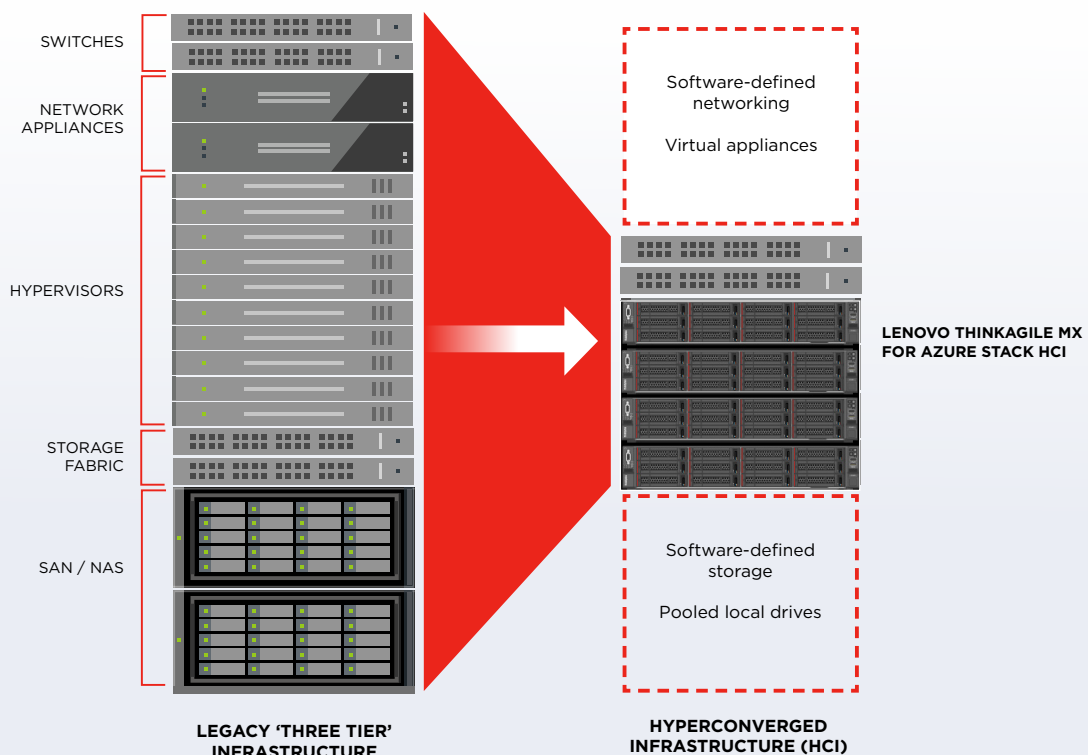
In this guide, learn more about HCI for hybrid cloud and the solutions designed for your workloads.

What is Azure Stack HCI?

Microsoft Azure Stack HCI is a hybrid cloud-ready operating system that is delivered as an Azure subscription. It's a secure platform for storage and virtualization with tightly integrated Azure Services such as Azure Kubernetes Services. With Azure Stack HCI you have one hybrid infrastructure that helps you to:

- **Deliver Azure Services** easily and flexibly.
- **Modernise and migrate** workloads incrementally, while continuing to run critical apps on premises.
- **Scale cost-efficiently** in terms of performance and capacity.
- **Run workloads at edge locations** with high performance and low latency.

HCI simplicity, scale, and savings

SWITCHES

NETWORK APPLIANCES

HYPERVISORS

STORAGE FABRIC

SAN / NAS

Software-defined networking

Virtual appliances

LENOVO THINKAGILE MX FOR AZURE STACK HCI

Software-defined storage

Pooled local drives

LEGACY 'THREE TIER' INFRASTRUCTURE

HYPERCONVERGED INFRASTRUCTURE (HCI)

Microsoft Azure

Azure Stack HCI not only provides a solid path to hybrid cloud, but also delivers the typical advantages of HCI over traditional 3-tier infrastructure (i.e. compute, storage, and networking). HCI provides a single pool of virtualised resources with centralised management, easy scalability, and readiness for modern workloads.

Azure Stack HCI helps to reduce cost compared to traditional infrastructure because it requires:

✓ Less hardware ✓ Smaller investment ✓ Less electricity ✓ Less physical space

Solve key challenges

Azure Stack HCI addresses today's business needs.	
Put your hybrid cloud strategy into action	Natively integrate on-premises workloads with Azure hybrid services like Azure Security Center, Azure Backup, Azure Site Recovery, Azure Kubernetes Services and Azure Virtual Desktop. Always stay up to date with HCI delivered as a subscription. Monitor and manage clusters at scale from your Azure portal.
Get the best price-performance with enterprise scalability	Consolidate your workloads and easily move them to on-premises platforms or Azure. Achieve industry-leading performance for virtual machine (VMs) and SQL Server workloads. Save on high-availability solutions with built-in stretch cluster capabilities.
Simplify operations	Simplify deployment, management, and updates with easy-to-use GUIs and dashboards. Easily integrate third-party applications and your existing IT environment. Automate cross-platform tasks with familiar tools. Manage your Azure Stack HCI cluster intuitively with Windows Admin Center, or get a global view of all your Azure Stack HCI clusters in your Azure portal.

Introducing Lenovo ThinkAgile MX

To help you easily access Azure Stack HCI benefits, Lenovo and Microsoft have collaborated to offer ThinkAgile MX hyperconverged infrastructure solutions, which are validated and performance-tuned, and combine ultra-reliable Lenovo servers with Azure Stack HCI software.

Simple, reliable, hybrid cloud

Combining the best of Lenovo and Microsoft, ThinkAgile MX delivers significant advantages in a single, well-supported turnkey solution.

Easy to deploy and manage	Pre-loaded Azure Stack HCI OS on Lenovo ThinkAgile MX Integrated System
	Ongoing feature updates with a subscription-based HCI OS
	Seamless integration with Azure Services for hybrid cloud capabilities
	Deploys quickly and simplifies management with Lenovo XClarity, integrated with Windows Admin Center
Ultra-reliable	Built on Lenovo ThinkSystem servers, which are consistently rated #1 in ITIC global x86 server reliability surveys[2]
	ThinkSystem servers deliver the best uptime among all x86 server platforms[2]
	Microsoft-certified hardware, software, and components
Excellent customer experience	Deploys as an Azure resource in your data centre
	Provides access to Azure hybrid cloud benefits

Lenovo: One partner for everything

To achieve competitive advantage in the next-generation data centre, you need a partner who can deliver the best in optimization and efficiency. Lenovo can help. We leverage a deep heritage of innovation to deliver:

• **Reliable, flexible, and secure** data centre systems with record-setting performance.

• **All the professional services you need**, including data protection solutions and Azure cloud services.

• **Simplified, comprehensive support** with a single point of contact.

ThinkAgile MX: Designed for your business

The Lenovo ThinkAgile MX portfolio makes it easy to get the best solution for your workloads. It provides certified HCI building blocks that are simple to order and use. Solutions integrate compute power, storage space and software, plus optional deployment and support services.

Selected workloads

Remote office, branch office, and edge

Retailers, manufacturers, and other organisations who need to process data close to where it is created can use ThinkAgile MX to:

Meet high performance and low latency needs at branch and edge locations.

Remove the need for constant connectivity with the ability to run hybrid cloud workloads on premises with local compute and storage.

Simplify IT at locations where limited IT skills are available.

Virtual desktop infrastructure

Support hybrid working with an easy-to-deploy, on-premises VDI solution. VDI is vital in many industries including education where it enables remote learning, and healthcare where it provides fast and flexible access to medical images and applications. With ThinkAgile MX you can deploy Azure Virtual Desktop and:

Provision Windows 10 or Windows 11 desktops and applications virtually anywhere.

Keep applications and data secure and compliant, with built-in intelligent security.

Scale quickly based on your business needs.

High-performance database

ThinkAgile MX for Azure Stack HCI provides a highly available, cost efficient, and flexible platform for SQL Server and other databases. With ThinkAgile MX you can:

Run SQL Server flexibly on Windows Server or Linux virtual machines.

Easily deploy and manage SQL with Azure Arc-enabled data services.

Protect data with Azure Site Recovery integration, which provides a cloud-based migration, restoration, and protection solution.

Application modernisation

Modernise applications to take advantage of efficient and scalable containers, with capability to run Azure Kubernetes Service (AKS) on premises with ThinkAgile MX. With an on-premises AKS implementation you can:

Simplify container management and application scaling with automation and a fully managed service.

Modernise at your own pace by continuing to run traditional apps alongside containers.

Accelerate time to market with all the tools you need to adopt CI/CD and other modern development approaches.

A secure foundation

ThinkAgile MX solutions help secure your business with the hardened environment and built-in data protection of Azure Stack HCI, as well as Lenovo ThinkShield security that provides protection throughout the lifecycle of your physical server.

Azure Stack HCI security features	ThinkShield security platform
Protect against malware with Device Guard – Including malware with no known signature, unsigned code, and ability to access the kernel to either capture sensitive information or damage the system.	**Full lifecycle security** – Security begins with design and continues through supply chain, delivery, and the full lifecycle of the device.
Encrypt data at rest with BitLocker – Encrypt the contents of Storage Spaces data volumes on the operating system. Stay compliant with government, regional, and industry-specific standards.	**Trusted Supplier Program** – Lenovo oversees the security and accountability of every supplier.

Physical security – Lenovo ensures physical security via tamper-evident packaging, qualified transportation, and secure tracking. |
| **Encrypt data in transit with SMB encryption** – The Server Message Block (SMB) network file sharing protocol provides end-to-end encryption of data and protects data from eavesdropping occurrences on untrusted networks. | **Secure disposal** – At end of life, Lenovo solutions undergo secure data disposal and secure part recycling. |

ThinkAgile MX Integrated Solutions are fully certified for Azure Stack HCI. You benefit from consistent security settings for Secure Boot, UEFI, and TPM out of the box.

Learn more
Visit www.lenovo.com/thinkagile-mx