ThinkAgile MX Series
Making Azure Stack HCI solutions easy

Accelerate your Business

Deploying hyperconverged infrastructure has become the de-facto standard for organizations looking to modernize their aging infrastructure. Large storage deployments are increasingly being replaced by HCI based solutions for most general-purpose workloads. HCI has proven to deliver better efficiency and price performance in the datacenter. Additionally, customers have been choosing a hybrid approach, migrating certain workloads to the cloud, while keeping other workloads on-premises.

Azure Stack HCI, is Microsoft's HCI solution for customers that wish to run workloads on-premises and extend easily to Azure for hybrid capabilities such as back-up, site recovery, storage, cloud-based monitoring and more.

Azure Stack HCI is a new HCI host operating system from Microsoft, delivered as an Azure service, providing the latest and up-to-date security, performance and feature updates. Azure Stack HCI builds on the foundation of the Microsoft Windows Server Software Defined program and provides a certification path for Storage Spaces Direct solutions.

Lenovo ThinkAgile MX Series (Appliances and Certified Nodes) combine the Storage Spaces Direct technology included in this new host OS, with industry leading Lenovo servers to deliver HCI building blocks that build your infrastructure solutions. Lenovo ThinkAgile MX appliances map to Microsoft Azure Stack HCI Integrated Systems and ThinkAgile MX Certified Nodes map to Microsoft Azure Stack HCI Validated Nodes.

ThinkAgile MX Series are built with certified hardware components, are easily orderable as appliances, and include deployment/update features built into Windows Admin Center. Benefits like these allow businesses to deploy solutions quickly and easily.

Key Benefits

- **Simplicity**: Lenovo XClarity extension integrates with Windows Admin Center from Microsoft, providing a unified single-pane-of-glass simple management experience across infrastructure, virtual machines, software, and hardware.

- **Flexibility:** ThinkAgile MX Nodes offer a wide range of processor, memory, and storage options to provide the maximum flexibility for customizing your infrastructure.

- **Faster time to value** : In traditional IT, a solution is designed, tested, implemented, and maintained requiring significant time and energy. With HCI, this burden has been transferred to the solution provider. Microsoft created S2D to solve the storage challenge and Azure Stack HCI solutions to ensure robust and viable platforms.

Lenovo has designed, tested, and validated ThinkAgile MX Series offerings to quickly and easily provide the solutions you need, with the confidence required, to exceed the stringent requirements of today's IT. The result is that you can quickly deploy a robust, high-performance HCI solution and rapidly solve your IT challenges.

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Reliability: Powered by Lenovo Servers

The ThinkSystem SR650 V2 2U server node and the ThinkSystemSR630 V2 1U server node, are equipped with two powerful Intel® Xeon® Scalable processors, providing extreme reliability, huge internal storage and memory capacity, and a large number of I/O slots, making it an ideal foundation for this solution.

The SR650 V2 configurations used in this solution are storage dense, with a high-performance 4-SSD/NVMe cache tier and a 14HDD capacity tier, along with two mirrored boot drives.

ThinkAgile MX now provides an All-Flash offering, with a high-performance 4-NVMe cache tier and 20-SSD capacity tier. You can start with as few as two nodes, and grow to 16 nodes.

The SR630 V2 configurations, provide an alternative in the smaller 1U form factor for greater flexibility of configurations. Available, with a high-performance 2-SSD/NVMe cache tier and a 10-HDD capacity tier, similar to the SR650 V2 configurations.

ThinkAgile MX is also available in a smaller form factor platform based on the ThinkSystem SE350 as the ThinkAgile MX1000 Series (MX1021 Certified Node & MX1020 Appliance). Its small footprint and power efficiency allow for reliable server-class performance at many Edge locations. With additional benefits of ruggedness and variety of mounting options, these servers are ideal for small locations.

This server can handle temperatures from 0° to 55°C, as well as tolerate locations with high-dust and vibration. The half-width, short-depth, 1U server can be installed almost anywhere: hung on a wall, stacked on a shelf, or mounted in a rack. This high-performance server, using the Intel Xeon-D processor, features 8 to 16 cores, and a variety of storage options.

Lenovo ThinkSystem servers consistently score #1 for reliability* in independent customer surveys.

Excellent Value

ThinkAgile MX Appliances include Azure Stack HCI, and optionally include Windows Server 2019 Datacenter in case you require unlimited guest OS virtual machine licenses. ThinkAgile MX Certified nodes optionally include the Azure Stack HCI software or Windows Server 2019 Datacenter depending on their needs. The Azure Stack HCI OS license provides the following benefits:

- **Storage Spaces Direct (S2D)**: State of the art software-defined storage from Microsoft with multiple high-performance resiliency options, deduplication, compression and more.
- **Windows Admin Center (WAC)**: A web-based management portal is included with the software at no extra cost. Deployment and update features in WAC make deployment extremely simple and easy to perform. Additionally, Lenovo's XClarity plugin allows you to deploy their hardware as well as software from the same interface, enabling single pane of management.
- **Hyper-V**: Hypervisor is included in the license
- **Software-Defined Networking**: Features such as virtual network encryption, firewall auditing, virtual network peering allows you to get the benefits of a more secure software defined network with Azure Stack HCI.
- **Azure Stack HCI** is hybrid by design, and you can benefit from native integration with Azure ARC and Azure Monitor and connect to Azure for a variety of Azure hybrid services seamlessly. Fleet management for hosts and VMs allows you to monitor and manage clusters at scale.

As Much Help As You Need

Lenovo and Lenovo partners have a comprehensive portfolio of professional services that supports the full life cycle of your infrastructure. At every stage—from planning to deploying, supporting, optimizing, and end of life—extra help is available to accelerate meeting your business objectives.

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ThinkAgile MX Series

The flexible building block for your Microsoft Azure Stack HCI solutions.

Specifications

Model	ThinkAgile MX Series (Appliance & Certified Node) – SR650 V2	ThinkAgile MX Series (Appliance & Certified Node) – SR630 V2
Form Factor	2U	1U
Segment	Hyperconverged Infrastructure – Microsoft Azure Stack HCI solutions	
Processor	2x 3rd-generation Intel® Xeon® Scalable processors, 8-40 cores	
Memory	Up to 4TB in 32x slots, using 16GB-128GB DIMMS	
Network	10/25GbE adapters (RoCE or iWARP), 100GbE (RoCE) RDMA network adapters	
Drive Bays	16x 3.5", 28x 2.5"	4x 3.5", 12x 2.5"
Storage Options – Capacity Tier	Depending on configuration: 4-14x HDDs: 1TB to 14TB 4-30x SSDs: 480GB to 7.68TB 4-24x NVMe, 750GB to 7.68TB	Depending on configuration: 4-10x HDDs: 600GB to 14TB 4-12x SSDs: 480GB to 7.68TB 4-12x NVMe, 750GB to 7.68TB 4-16x E1.S NVMe, 4TB
Cache Tier	Depending on configuration: 2-6x SSDs: 800GB to 6.4TB 2-8x hot-pluggable NVMe: 750 GB to 6.4TB	Depending on configuration: 2-4x SSDs:800GB to 6.4TB 2-4x hot-pluggable NVMe: 750 GB to 6.4TB
Systems Management	Optional hardware management via Lenovo XClarity and resource management through Microsoft Windows Admin Center	
License Options	Azure Stack HCI Software (Included with Appliance), Windows Server 2019 Datacenter (optional)	
Warranty and Support	Lenovo 3-year, 4-year, or 5-year hardware warranty; ThinkAgile Advantage Single Point of Support where available (included with Appliance)	

For details about the MX1000 Series, based on the ThinkSystem SE350 edge server, see the ThinkAgile MX1000 Series datasheet.

Lenovo and Microsoft

With co-located engineering organizations and a history of technical collaboration, Microsoft and Lenovo consistently deliver innovative joint solutions for the data center. Lenovo's leadership in reliability, customer satisfaction, and performance, combined with Microsoft's leadership in software and cloud services, continues to deliver innovative data center solutions and lower TCO for our joint customers

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About Lenovo

Lenovo (HKSE: 992) (ADR: LNVGY) is a US$70 billion revenue global technology powerhouse, ranked #159 in the Fortune Global 500, employing 75,000 people around the world, and serving millions of customers every day in 180 markets. Focused on a bold vision to deliver smarter technology for all, Lenovo is expanding into new growth areas of infrastructure, mobile, solutions and services. This transformation is building a more inclusive, trustworthy, and sustainable digital society for everyone, everywhere.

* ITIC Global Reliability Study, lenovopress.com/lp1117.

For More Information

To learn more about ThinkAgile MX Certified Nodes, contact your Lenovo representative or Business Partner, or visit lenovo.com/thinkagile. For detailed specifications, consult the ThinkAgile MX product guides.

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