Lenovo ThinkAgile MX455 V3 Edge Premier Solution
Product Guide

The Lenovo ThinkAgile MX455 V3 Edge Premier Solution is designed for deploying highly available, hyper-converged infrastructure (HCI) from Microsoft on purpose-built Lenovo edge servers in the remote offices/branch offices (ROBO) and at the edge. The ThinkAgile MX455 V3 Edge Premier Solution delivers fully validated and integrated Lenovo hardware and firmware that is certified for Microsoft Azure Local solutions.

This product guide provides essential technical and pre-sales information on the Lenovo ThinkAgile MX455 V3 Edge Premier, their key features and specifications, components and options, and configuration guidelines. This guide is intended for technical specialists, sales specialists, sales engineers, IT architects, and other IT professionals who want to learn more about the ThinkAgile MX455 V3 Edge Premier Solution and consider their use in IT solutions.

The ThinkAgile MX455 V3 Edge Premier Solution is a validated platform that help modernize on-premises infrastructure with pre-tested, pre-configured, and easy-to-order configurations, with seamless Azure integration.

The ThinkAgile MX455 V3 Edge Premier Solution includes the Azure Local 23H2 operating system and Lenovo ThinkAgile support with single point of contact support for hardware and L1, L2 support for software from Lenovo. Customers can deploy and update features via Azure Arc and Windows Admin Center. The tight integration with Lenovo XClarity makes cluster management, hardware and software update management, and enforcement of site-wide policies easy for IT administrators. Using SBE PR (Solution Builder Extension for Premier Solution), the best recipes can be acquired via a one-click update. Native integration with Azure services makes it easy for customers to adopt a hybrid cloud strategy for their workloads.

Figure 1. ThinkAgile MX455 V3 Edge Premier Solution

Did you know?

As a new direct and indirect Microsoft Cloud Solution Provider, Lenovo offers cloud services and subscriptions through the Lenovo Cloud Marketplace, which enable HCI use cases with the ThinkAgile MX platforms.

The ThinkAgile MX455 V3 Edge Premier Solution offers a compact design, low power usage, high performance, and security for edge locations. They can be wall-mounted, stacked on a shelf, or installed in a rack cabinet, and they are designed to operate in rugged environments with temperatures of up to 55°C and extreme shock and vibration.

Key features

The ThinkAgile MX455 V3 Edge Premier Solution offer one 4th Generation AMD EPYC processor, up to 576GB memory, up to eight drive bays, and up to 100Gb network connectivity and with a 2U height and short depth case that can go almost anywhere. It can be mounted on a wall, placed on the floor like a tower server, or mounted in a rack. The rugged ThinkAgile MX455 V3 Edge Premier can handle continuous operating temperatures from 5°C and 45°C; and some configurations are designed to meet NEBS Level-3 and ETSI requirements for 96 hours operating excursions from -5°C and 55°C as well as tolerance to locations with high-dust and vibration. The system is optimized for various types of edge and ROBO workloads that need compute power, data storage, and network closer to where data is generated, such as Real Time Processing, Smart Surveillance, or Machine Learning/ AI, and require small compute footprint and operations in rugged environments.

The ThinkAgile MX455 V3 Edge Premier Solution offers the following key features:

- Continuously tested and validated by Lenovo and Microsoft with single point of support for HW and L1, L2 SW support from Lenovo to ensure higher reliability and less downtime.
- Quick and convenient path to implement a hyperconverged solution powered by the Azure Local OS with Hyper-V virtualization, Microsoft Storage Spaces Direct (S2D) Software Defined Storage (SDS), and Software Defined Networking (SDN) network virtualization.
- Streamlined management of Azure Arc enabled servers with unified single-pane-of-glass for creating and managing VMs, S2D volumes, and virtual networks through Windows Admin Center (WAC) in the Azure Portal.
- Consistent, low latency performance with hypervisor-embedded architecture, built-in read and write cache, and support for NVMe PCIe drives.
- Provides per-VM storage performance management with policy-driven Quality of Service (QoS) and continuous built-in monitoring and alerting with cluster-wide performance and capacity metrics.
- Can sustain drive, server, or component failures with built-in resiliency for continuous availability.
- GPU support to enable AI training, inferencing and data visualization scenarios, HPC workloads, virtual desktops and graphics intensive applications.
- Built on proven and reliable Lenovo ThinkEdge servers that provide compute power and space efficiency for a variety of edge workloads and applications.
- Provides comprehensive hardware management with advanced systems management capabilities with XClarity
- Availability of full stack cluster aware update in a single step with rigorous health pre-check.
- Lenovo Open Cloud Automation integration for rapid deployment and lifecycle management of on-prem cloud infrastructure, regardless of its location.
- Ready for out-of-box deployment with the mandatory Azure Local OS pre-loaded, with the option to purchase a Windows Server 2022 Datacenter license if unlimited guest OS VMs are desired.
- Bundled with Premier Support that provides a Single Point of Support for quick 24/7 problem reporting and resolution.
- Available with Lenovo white glove deployment services to get customers up and running quickly.

Hardware features

The ThinkAgile MX455 V3 Edge Premier Solution is based on the ThinkEdge SE455 V3 server and have the following hardware features:

Scalability and performance

The ThinkAgile MX455 V3 Edge Premier Solution offer numerous features to boost performance, improve scalability and reduce costs:

- Supports one fourth-generation AMD EPYC 8004 Processor:
  - Up to 64 cores
  - Core speeds of up to 2.65 GHz
  - TDP ratings of up to 200W

- Support for up to 6 TruDDR5 memory DIMMs and up to 576 GB of memory using 96 GB DIMMs

- DIMMs operate at up to 4800 MHz means you have the fastest available memory subsystem

- Supports up to six single-width GPUs for substantial processing power in an edge system.

- Support for up to 8x 2.5-inch drive bays, 4x hot-swap drives at the front of the server, and 4x non-hot swap drives internal to the server. Optional RAID with the addition of a RAID adapter installed in a slot.

- Supports two M.2 drives for convenient operating system boot functions with RAID-1.

- Supports 8x NVMe drives without oversubscription of PCIe lanes (1:1 connectivity). The use of NVMe drives maximizes drive I/O performance, in terms of throughput and latency.

- Supports up to 6x full-height PCIe slots, all front accessible, plus an additional OCP adapter slot

- Support for up to six network adapters, up to 100 Gb Ethernet for high-speed networking to back-end servers.

Availability and serviceability

The ThinkAgile MX455 V3 Edge Premier Solution provides many features to simplify serviceability and increase system uptime:

- The server uses ECC memory and supports memory RAS features including Advanced Memory Device Correction (AMDC), Patrol/Demand Scrubbing, DRAM Address Command Parity with Replay, DRAM Uncorrected ECC Error Retry, On-die ECC, ECC Error Check and Scrub (ECS), and Post Package Repair.

- The server offers hot-swap drives, supporting hardware RAID redundancy for data protection and greater system uptime.

- The server has up to two hot-swap redundant power supplies and up to six simple-swap N+1 redundant fans to provide availability for business-critical applications.

- Solid-state drives (SSDs) offer more reliability and performance than traditional mechanical HDDs for greater uptime.

- Proactive Platform Alerts (including PFA and SMART alerts): Processors, voltage regulators, memory, internal storage (SSDs, M.2 storage), fans, power supplies, RAID controllers, server ambient and subcomponent temperatures. Alerts can be surfaced through the XClarity Controller to managers such as Lenovo XClarity Administrator and Microsoft System Center. These proactive alerts let you take appropriate actions in advance of possible failure, thereby increasing server uptime and application availability.

- The built-in XClarity Controller 2 continuously monitors system parameters, triggers alerts, and performs recovery actions in case of failures to minimize downtime.

- Built-in diagnostics in UEFI, using Lenovo XClarity Provisioning Manager, speed up troubleshooting tasks to reduce service time.

- Lenovo XClarity Provisioning Manager supports diagnostics and can save service data to a USB key drive or remote CIFS share folder for troubleshooting and reduce service time.

- Auto restart in the event of a momentary loss of AC power (based on power policy setting in the XClarity Controller service processor)

- Offers a diagnostics port on the front of the server to allow you to attach an external diagnostics handset for enhanced systems management capabilities.

- Support for the XClarity Administrator Mobile app running on a supported smartphone or tablet and connected to the server through the service-enabled USB port, enables additional local systems

management functions.

- Three-year or one-year customer-replaceable unit and onsite limited warranty (varies by geography), 9 x 5 next business day. Optional service upgrades are available.

Manageability and security

Systems management features simplify local and remote management of the ThinkAgile MX455 V3 Edge Premier Solution :

- The server includes an XClarity Controller 2 (XCC2) to monitor server availability. Optional upgrade to XCC Platinum to provide remote control (keyboard video mouse) functions, support for the mounting of remote media files, FIPS 140-3 security, enhanced NIST 800-193 support, boot capture, power capping, and other management and security features.
- Supports Lockdown Mode Control, to ensures that the system is only used by its intended recipient and that all data and applications remain secure if the tamper detection sensors are triggered.
- Lenovo XClarity Administrator offers comprehensive hardware management tools that help to increase uptime, reduce costs and improve productivity through advanced server management capabilities.
- IT Administrators can securely claim and activate the ThinkAgile MX455 V3 Edge Premier Solution remotely through the ThinkShield Key Vault Portal, available on the web. They can also manage and unlock their global IoT edge fleet for initial operation and in case of tamper. The ThinkShield Edge Mobile Management app enables Edge Users to securely claim and activate the ThinkAgile MX455 V3 Edge Premier in an easy-to-use Web UI.
- UEFI-based Lenovo XClarity Provisioning Manager, accessible from F1 during boot, provides system inventory information, graphical UEFI Setup, platform update function, RAID Setup wizard, operating system installation function, and diagnostic functions.
- Support for Lenovo XClarity Energy Manager, which captures real-time power and temperature data from the server and provides automated controls to lower energy costs.
- An integrated industry-standard Unified Extensible Firmware Interface (UEFI) enables improved setup, configuration, and updates, and simplifies error handling.
- Support for industry standard management protocols, IPMI 2.0, SNMP 3.0, Redfish REST API, serial console via IPMI
- An integrated hardware Trusted Platform Module (TPM) supporting TPM 2.0 enables advanced cryptographic functionality, such as digital signatures and remote attestation.
- Administrator and power-on passwords help protect from unauthorized access to the server.
- Supports AMD Infinity Guide security features, including Secure Memory Encryption, Secure Encrypted Virtualization and Secure Nested Paging.
- Supports Secure Boot to ensure only a digitally signed operating system can be used. Supported with HDDs and SSDs, as well as M.2 drives.
- Industry-standard Advanced Encryption Standard (AES) NI support for faster, stronger encryption.
- Additional physical security features are an available chassis intrusion switch and available lockable front bezel and top cover.

Energy efficiency

The ThinkAgile MX455 V3 Edge Premier Solution offers the following energy-efficiency features to save energy, reduce operational costs, and increase energy availability:

- Energy-efficient system board components help lower operational costs.
- High-efficiency power supplies with 80 PLUS Platinum and Titanium certifications
- Solid-state drives (SSDs) consume as much as 80% less power than traditional spinning 2.5-inch HDDs.
- Optional Lenovo XClarity Energy Manager provides advanced data center power notification, analysis, and policy-based management to help achieve lower heat output and reduced cooling needs.

Enhanced operating environment

The ThinkAgile MX455 V3 Edge Premier Solution offers the following operating environment enhancements:

- The server supports high ambient temperatures, up to 55°C, which allows the server to be installed in a harsher environments, or allows greater fluctuation of temperatures in less controlled environments.
- The server offers acoustic modes which gives the administrator control over maximum noise emissions, which results in the server being less intrusive in an office or other noise-sensitive environments.
- With the ThinkAgile MX455 V3 Edge Premier Solution, noise mitigation starts the moment that the power is connected. At most ambient temperatures, fan speeds are lowered before and during the boot process, which is especially important when the server is installed in an office or other noise-sensitive environments.
- The ThinkAgile MX455 V3 Edge Premier Solution is designed to operate in rugged environments, meeting NEBS Level 3 requirements.
- The server offers various dust mitigation features, including caps for all I/O ports, and a front mounted dust filter, to maximize the system availability and uptime.

Components and connectors

The following figures show the front view of the ThinkAgile MX455 V3 Edge Premier Solution
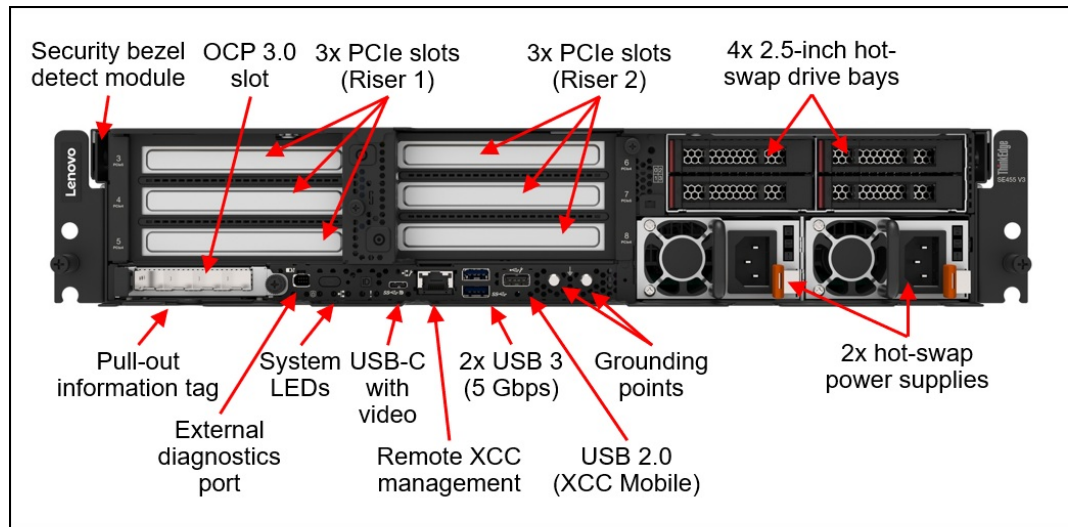

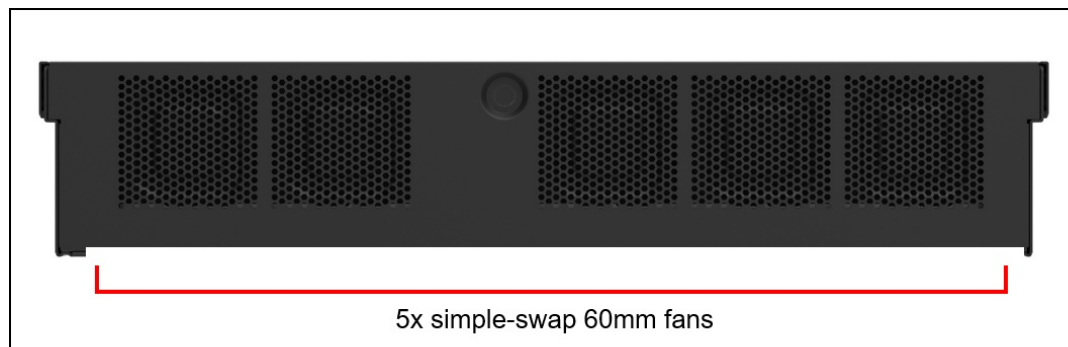Figure 2. ThinkAgile MX455 V3 Edge Premier Solution Front view

Figure 3. ThinkAgile MX455 V3 Edge Premier Solution : Rear view

The ThinkAgile MX455 V3 Edge Premier Solution optionally supports a security bezel which helps restrict physical access to the front of the server while still allowing cables to be properly routed through side panels. The bezel also duplicates the system LEDs that would otherwise be covered up by the bezel. The following figure shows the server with the security bezel attached.
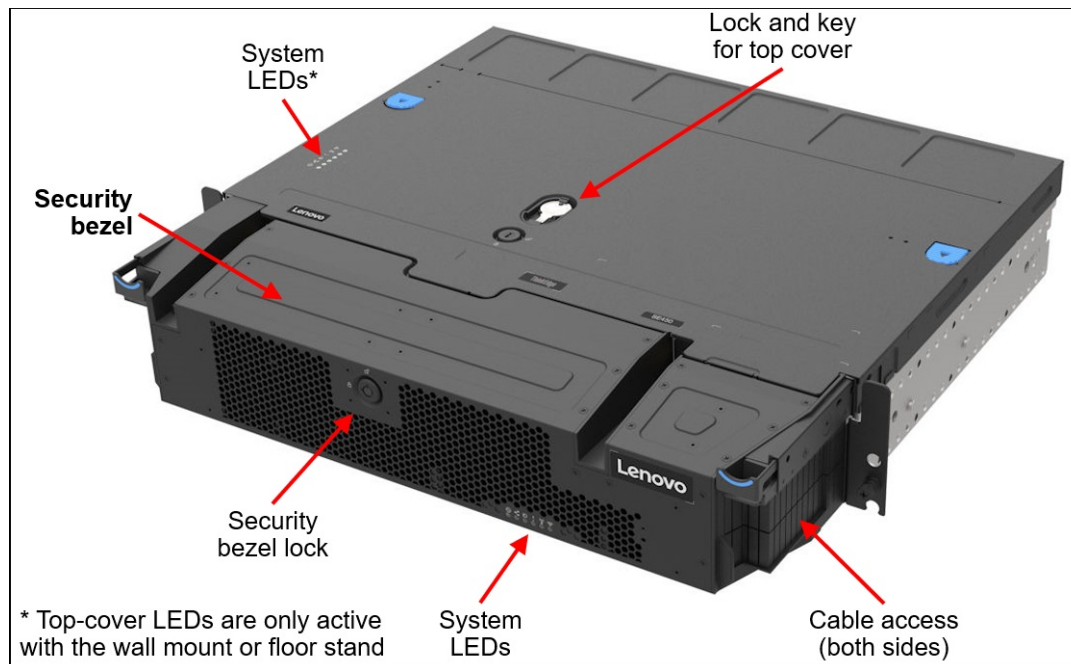
Figure 4. View of the ThinkAgile MX455 V3 Edge Premier Solution with security bezel attached

The following figure shows the locations of key components inside the server. The two riser cards and various brackets have been removed to show the components on the system board.
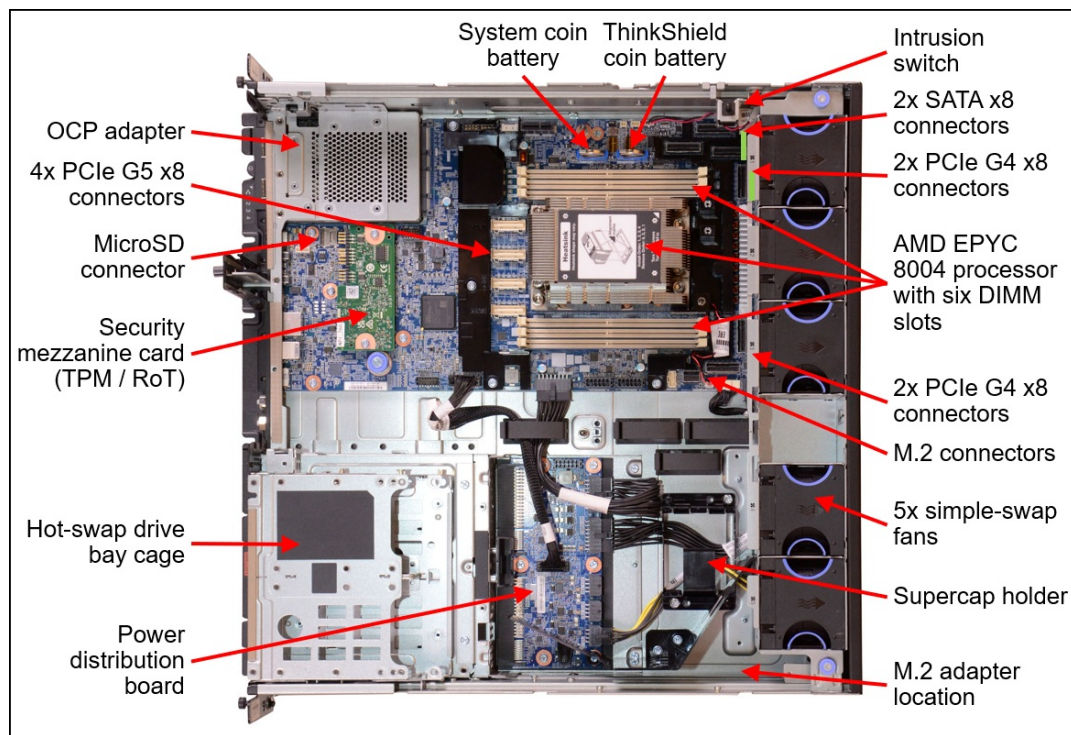

Figure 5. Internal view of the ThinkAgile MX455 V3 Edge Premier Solution

System specifications

The following table lists the system specifications for the ThinkAgile MX455 V3 Edge Premier Solution.

Table 1. System specifications

Attribute	Specification
Machine type	ThinkAgile MX455 V3 Edge Premier Solution: 7DGP
Form factor	2U rack server, 438mm depth
Processor	1x AMD EPYC 8004 processor (formerly code named "Siena"). Supports up to 64 cores, core speeds of up to 2.65 GHz, and TDP ratings of up to 200W.
Memory	6 DIMM slots. The processor has 6 memory channels, with 1 DIMM per channel (DPC). Lenovo TruDDR5 RDIMMs are supported, up to 4800 MHz with a Max of 576 GB
Memory protection	ECC, Advanced Memory Device Correction (AMDC), Patrol/Demand Scrubbing, DRAM Address Command Parity with Replay, DRAM Uncorrected ECC Error Retry, On-die ECC, ECC Error Check and Scrub (ECS), Post Package Repair
Drive bays	4x 2.5-inch hot-swap drive bays (front accessible), supporting NVMe SSD drives with hot-swap trays - Optional 4x 2.5-inch non-hot-swap drive bays internal to the server, supporting NVMe SSD drives. Drives are mounted in a cage that rotates up for easy access. 2x M.2 drives for boot functions, supporting SATA or NVMe drives (RAID 1)
Storage controller	Up to 8x Onboard NVMe ports (non-RAID)
GPU Support	Supports up to 6x single-wide GPUs
Network interfaces	Dedicated OCP 3.0 SFF slot with PCIe 5.0 x16 host interface. OCP slot supports a variety of 2-port and 4-port adapters with 1GbE, 10GbE, 25GbE or 100GbE network connectivity. One port can optionally be shared with the XClarity Controller (XCC) management processor for Wake-on-LAN and NC-SI support. Additional network adapters supported in the PCIe slots.
Boot drive	480 GB or 960 GB M.2 non-hot-swap NVMe SSDs (RAID 1).
Ports	Front: 2x USB 3.1 Type-A (5 Gb/s) ports, 1x USB 3.1 Type-C (USB-C) (5 Gb/s) with support for video connectivity (available dongle to convert USB-C to VGA), USB 2.0 port for XCC local management only, dedicated RJ-45 1GbE remote systems management port, External diagnostics port for local systems management, NMI pinhole.
Cooling	5x simple-swap 60 mm dual-rotor fans (all standard), N+1 redundant in most configurations.
Power Supply	Up to two hot-swap redundant power supplies 1100W Titanium or Platinum AC power supplies 1800W Platinum AC power supply 1100W -48V DC power supply Note: Power supplies are front-mounted so fan rotation is reversed compared to other ThinkSystem servers.
Video	Embedded video graphics with 16 MB memory with 2D hardware accelerator, integrated into the XClarity Controller. Maximum resolution is 1920x1200 32bpp at 60Hz.

Attribute	Specification
Systems management	Operator panel with status LEDs. Optional External Diagnostics Handset with LCD display. XClarity Controller 2 (XCC2) embedded management based on the ASPEED AST2600 baseboard management controller (BMC). Dedicated Ethernet port for XCC2 remote access for management. XClarity Administrator for centralized infrastructure management, XClarity Integrator plugins, and XClarity Energy Manager centralized server power management. Optional XCC Platinum to enable remote control functions and other features. ThinkShield Edge Mobile Management mobile app and XClarity Mobile app for local onsite edge server management.
Security features	Centralized security management with ThinkShield Key Vault Portal web site or manage security directly in XCC2. Platform Firmware Resiliency (PFR) Root of Trust (RoT), Trusted Platform Module, supporting TPM 2.0. Lockable top cover, intrusion detection, self-encrypting drive (SED) support, power-on password, administrator's password. Optional front locking security bezel with duplicate status LEDs
Software	Microsoft Azure Local operating system is preloaded, with an option to purchase a Windows Server 2022 license (Standard or Datacenter edition) to provide guest OS licenses for virtual machines running in the solution. Standard edition provides 2 guest OS licenses, while Datacenter edition provides unlimited guest OS licenses.
Warranty and support	Lenovo Premier Support - Dependent on the customer's needs, support is available for 3 to 5 years. Premier solution includes the following additional features: • L1/L2 Software support • Full stack cluster aware update • Health pre-check • Lenovo Open Cloud Automation for edge deployment • White glove deployment services • Cloud deployment with Azure Local 23H2 and above
Dimensions	Width: 445 mm (17.5 in.), height: 87 mm (3.4 in.), depth: 452 mm (17.8 in.)
Weight	19.21 kg (42.35 lbs)

Models

ThinkAgile MX455 V3 Edge Premier Solution is configured by using the Lenovo Data Center Solution Configurator (DCSC):
http://dcsc.lenovo.com

The following table lists the CTO base models of the ThinkAgile MX455 V3 Edge Premier .

Table 2. CTO base models

Machine Type/Model	Description
ThinkAgile MX455 V3 Edge Premier Solution	
7DGPCTO1WW	ThinkAgile MX455 V3 Edge Premier Solution

The following table lists the base chassis for the ThinkAgile MX455 V3 Edge Premier Solution and Enclosures.

Table 3. Base chassis

Feature code	Description
BVTK	MX455 V3 Edge PR 452mm Chassis

Processors

The ThinkAgile MX455 V3 Edge Premier Solution ships with one processor that is embedded into the system board. The following table lists the processor options that are available for selection.

For details about these options, including configuration rules, see the ThinkEdge SE455 V3 server product guide:
https://lenovopress.com/lp1724-lenovo-thinkedge-se455-v3-server#processors

Table 4. Processor selection options

Part number	Feature	Description	Maximum supported MX455 V3 Edge PR
None	BW2W	ThinkEdge SE455 V3 AMD EPYC 8024P 8C 90W 2.4GHz Processor	1
None	BY90	ThinkEdge SE455 V3 AMD EPYC 8024PN 8C 80W 2.05GHz Processor	1
None	BW2V	ThinkEdge SE455 V3 AMD EPYC 8124P 16C 125W 2.45GHz Processor	1
None	BY8Z	ThinkEdge SE455 V3 AMD EPYC 8124PN 16C 100W 2.0GHz Processor	1
None	BW2U	ThinkEdge SE455 V3 AMD EPYC 8224P 24C 160W 2.55GHz Processor	1
None	BY8Y	ThinkEdge SE455 V3 AMD EPYC 8224PN 24C 120W 2.0GHz Processor	1
None	BW2T	ThinkEdge SE455 V3 AMD EPYC 8324P 32C 180W 2.65GHz Processor	1
None	BY8X	ThinkEdge SE455 V3 AMD EPYC 8324PN 32C 130W 2.05GHz Processor	1
None	BW2S	ThinkEdge SE455 V3 AMD EPYC 8434P 48C 200W 2.5GHz Processor	1
None	BY8W	ThinkEdge SE455 V3 AMD EPYC 8434PN 48C 155W 2.0GHz Processor	1
None	BW2R	ThinkEdge SE455 V3 AMD EPYC 8534P 64C 200W 2.3GHz Processor	1
None	BY8V	ThinkEdge SE455 V3 AMD EPYC 8534PN 64C 175W 2.0GHz Processor	1

Memory

The ThinkAgile MX455 V3 Edge Premier Solution uses Lenovo TruDDR5 memory operating at up to 4800 MHz. The server supports 6 DIMMs. The processor has 6 memory channels and supports 1 DIMM per channel.

Lenovo TruDDR5 memory uses the highest quality components that are sourced from Tier 1 DRAM suppliers and only memory that meets the strict requirements of Lenovo is selected. It is compatibility tested and tuned to maximize performance and reliability. From a service and support standpoint, Lenovo TruDDR5 memory automatically assumes the system warranty, and Lenovo provides service and support worldwide.

The following table lists the memory options that are available for selection.

For details about these options, including configuration rules, see the ThinkEdge SE455 V3 server product guide:
https://lenovopress.com/lp1724-lenovo-thinkedge-se455-v3-server#memory-options

Table 5. Memory options

Part number	Feature	Description	Maximum supported
			MX455 V3 Edge PR
RDIMMs			
4X77A81438	BQ39	ThinkSystem 32GB TruDDR5 4800MHz (1Rx4) 10x4 RDIMM-A	6
4X77A81441	BQ3D	ThinkSystem 64GB TruDDR5 4800MHz (2Rx4) 10x4 RDIMM-A	6
4X77A81448	BUVV	ThinkSystem 96GB TruDDR5 4800MHz (2Rx4) 10x4 RDIMM-A	6
4X77A81437	BQ3C	ThinkSystem 16GB TruDDR5 4800MHz (1Rx8) RDIMM-A	6
4X77A81440	BQ37	ThinkSystem 32GB TruDDR5 4800MHz (2Rx8) RDIMM-A	6
4X77A81447	BUVU	ThinkSystem 48GB TruDDR5 4800MHz (2Rx8) RDIMM-A	6

Internal storage

The ThinkAgile MX455 V3 Edge Premier Solution supports the following configurations for data storage:

- 4x 2.5-inch front hot-swap drive bays, supporting NVMe SSD drives with hot-swap trays
- 4x 2.5-inch internal non-hot-swap drive bays, supporting NVMe SSD drives. Drives are mounted in a cage that rotates up for easy access.
- 2x M.2 drives for boot functions, supporting SATA or NVMe drives

In addition, the systems support two internal M.2 SATA SSDs for the Windows Server boot volume.

The following table lists the internal storage options.

Table 6. Internal storage options for the ThinkAgile MX455 V3 Edge Premier Solution

Feature	Description	Maximum supported
		MX455 V3 Edge PR
Internal Drive Cage		
BVVN	ThinkEdge SE455 V3 Internal 2.5" Drive Cage	1
Riser Cards		
BVUR	ThinkEdge SE455 V3 Riser1	1
BVUS	ThinkEdge SE455 V3 Riser2	1
Backplane		
BVUU	ThinkEdge SE455 V3 2.5" NVMe Backplane	1

Table 7. Internal storage adapter

Feature	Description	Maximum supported
		MX455 V3 Edge PR
Controllers for RAID support of M.2 drives		
BVL1	ThinkSystem RAID 5350-8i for M.2 SATA Boot Enablement	1
BVL3	ThinkSystem RAID 540-8i for M.2 NVMe Boot Enablement	1

Drives for internal storage

The following table lists drive options for the ThinkAgile MX455 V3 Edge Premier Solution.

Table 8. Drives Supported in the ThinkAgile MX455 V3 Edge Premier Solution.

Part number	Feature	Description	Maximum supported MX455 V3 Edge PR
2.5-inch SSDs - PCIe 5.0 NVMe			
4XB7A93888	C0ZM	ThinkSystem 2.5" U.2 CD8P 1.6TB Mixed Use NVMe PCIe 5.0 x4 HS SSD	8
4XB7A93480	C0BB	ThinkSystem 2.5" U.2 CD8P 1.92TB Read Intensive NVMe PCIe 5.0 x4 HS SSD	8
4XB7A93891	C0ZJ	ThinkSystem 2.5" U.2 CD8P 12.8TB Mixed Use NVMe PCIe 5.0 x4 HS SSD	8
4XB7A93483	C0B8	ThinkSystem 2.5" U.2 CD8P 15.36TB Read Intensive NVMe PCIe 5.0 x4 HS SSD	8
4XB7A93889	C0ZL	ThinkSystem 2.5" U.2 CD8P 3.2TB Mixed Use NVMe PCIe 5.0 x4 HS SSD	8
4XB7A93481	C0BA	ThinkSystem 2.5" U.2 CD8P 3.84TB Read Intensive NVMe PCIe 5.0 x4 HS SSD	8
4XB7A93484	C0B7	ThinkSystem 2.5" U.2 CD8P 30.72TB Read Intensive NVMe PCIe 5.0 x4 HS SSD	8
4XB7A93890	C0ZK	ThinkSystem 2.5" U.2 CD8P 6.4TB Mixed Use NVMe PCIe 5.0 x4 HS SSD	8
4XB7A93482	C0B9	ThinkSystem 2.5" U.2 CD8P 7.68TB Read Intensive NVMe PCIe 5.0 x4 HS SSD	8
2.5-inch SSDs - PCIe 4.0 NVMe			
4XB7B01867	C6MA	ThinkSystem 2.5" U.2 Solidigm P5520 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	8
4XB7B01868	C6MB	ThinkSystem 2.5" U.2 Solidigm P5520 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	8
4XB7B01869	C6MC	ThinkSystem 2.5" U.2 Solidigm P5520 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	8
4XB7A13631	BNEQ	ThinkSystem 2.5" U.2 P5520 15.36TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	4
4XB7B01879	C6M2	ThinkSystem 2.5" U.2 Solidigm P5620 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	8
4XB7B01880	C6M3	ThinkSystem 2.5" U.2 Solidigm P5620 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	8
4XB7B01881	C6M4	ThinkSystem 2.5" U.2 Solidigm P5620 6.4TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	8
4XB7A17136	BA4V	ThinkSystem 2.5" U.2 P5620 12.8TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	4
4XB7A95050	C2BR	ThinkSystem 2.5" U.3 7500 PRO 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	8
4XB7A95051	C2BS	ThinkSystem 2.5" U.3 7500 PRO 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	8

Part number	Feature	Description	Maximum supported MX455 V3 Edge PR
4XB7A95052	C2BT	ThinkSystem 2.5" U.3 7500 PRO 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	8
4XB7A95053	C2BU	ThinkSystem 2.5" U.3 7500 PRO 15.36TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	8
4XB7A79648	BNF5	ThinkSystem 2.5" U.3 7450 PRO 3.84TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	4
4XB7A79649	BNF4	ThinkSystem 2.5" U.3 7450 PRO 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	4
4XB7A95055	C2BV	ThinkSystem 2.5" U.3 7500 MAX 1.6TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	8
4XB7A95056	C2BW	ThinkSystem 2.5" U.3 7500 MAX 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	8
4XB7A95057	C2BF	ThinkSystem 2.5" U.3 7500 MAX 6.4TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	8
4XB7A95058	C2BX	ThinkSystem 2.5" U.3 7500 MAX 12.8TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	8
4XB7A13970	BNEY	ThinkSystem 2.5" U.3 7450 MAX 3.2TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	4
4XB7A13971	BNEL	ThinkSystem 2.5" U.3 7450 MAX 6.4TB Mixed Use NVMe PCIe 4.0 x4 HS SSD	4
M.2 SSDs - 6 Gb SATA - Boot Drives			
4XB7A82287	BQ1Y	ThinkSystem M.2 5400 PRO 480GB Read Intensive SATA 6Gb NHS SSD	2
4XB7A82288	BQ20	ThinkSystem M.2 5400 PRO 960GB Read Intensive SATA 6Gb NHS SSD	2
M.2 PCIe 4.0 NVMe drives - Boot Drives			
4XB7A82636	BS2P	ThinkSystem M.2 7450 PRO 480GB Read Intensive NVMe PCIe 4.0 x4 NHS SSD	2
4XB7A13999	BKSR	ThinkSystem M.2 7450 PRO 960GB Read Intensive NVMe PCIe 4.0 x4 NHS SSD	2

Network adapters

The ThinkAgile MX455 V3 Edge Premier Solution supports the following networking options.

Only certain network adapters have been certified for particular network traffic types in the Azure Local operating system. For details regarding which available network adapters can be used for each network traffic type, see Lenovo Certified Configurations for Azure Local – V2 Servers:
https://lenovopress.com/lp1520

For details about these options, including configuration rules, see the ThinkEdge SE455 V3 server product guide:
https://lenovopress.com/lp1724-lenovo-thinkedge-se455-v3-server#i-o-expansion
https://lenovopress.com/lp1724-lenovo-thinkedge-se455-v3-server#network-adapters

Table 9. OCP network adapters

Part number	Feature	Description	Maximum supported MX455 V3 Edge PR
25 Gb Ethernet			
4XC7A62582	BE4T	ThinkSystem Mellanox ConnectX-6 Lx 10/25GbE SFP28 2-Port OCP Ethernet Adapter	1
4XC7A08294	BCD4	ThinkSystem Intel E810-DA2 10/25GbE SFP28 2-Port OCP Ethernet Adapter	1
4XC7A80269	BP8L	ThinkSystem Intel E810-DA4 10/25GbE SFP28 4-Port OCP Ethernet Adapter	1

Table 10. PCIe network adapters

Part number	Feature	Description	Maximum supported MX455 V3 Edge PR
25 Gb Ethernet			
4XC7A62580	BE4U	ThinkSystem Mellanox ConnectX-6 Lx 10/25GbE SFP28 2-Port PCIe Ethernet Adapter	6
4XC7A08295	BCD6	ThinkSystem Intel E810-DA2 10/25GbE SFP28 2-Port PCIe Ethernet Adapter	6
4XC7A80267	BP8M	ThinkSystem Intel E810-DA4 10/25GbE SFP28 4-Port PCIe Ethernet Adapter	6
100 Gb Ethernet			
4XC7A08248	B8PP	ThinkSystem Mellanox ConnectX-6 Dx 100GbE QSFP56 2-port PCIe Ethernet Adapter	6

GPU adapters

The ThinkAgile MX455 V3 Edge Premier Solution supports the following GPU options.

For details about these options, including configuration rules, see the ThinkEdge SE455 V3 server product guide:
https://lenovopress.com/lp1724-lenovo-thinkedge-se455-v3-server#gpu-adapters

Table 11. GPU Adapter

Part number	Feature	Description	Maximum supported
			MX455 V3 Edge PR
Single-wide GPUs			
4X67A81547	BP05	ThinkSystem NVIDIA A2 16GB PCIe Gen4 Passive GPU	6
CTO Only	BQZT	ThinkSystem NVIDIA A2 16GB PCIe Gen4 Passive GPU w/o CEC	6

For information about the GPU, see the ThinkSystem GPU Summary, available at:
https://lenovopress.com/lp0768-thinksystem-thinkagile-gpu-summary

Power supplies and cables

The ThinkAgile MX455 V3 Edge Premier Solution supports one or two hot-swap power supplies, installed at the front of the server. When two are installed, they are redundant in most configurations. Ordering information is listed in the following table.

For details about these options, including configuration rules, see the ThinkEdge SE455 V3 server product guide:
https://lenovopress.com/lp1724-lenovo-thinkedge-se455-v3-server#power-supplies

Table 12. Power options

Part number	Feature	Description	Maximum supported
			MX455 V3 Edge PR
AC power supply units			
4P57A78281	BMH8	ThinkEdge 1100W 230V/115V Platinum Hot-Swap Power Supply	2
4P57A78358	BRH9	ThinkEdge 1100W 230V Titanium Hot-Swap Power Supply	2
4P57A78282	BMH9	ThinkEdge 1800W 230V Platinum Hot-Swap Power Supply	2
DC power supply unit			
4P57A78283	BMHA	ThinkEdge 1100W -48V DC Hot-Swap Power Supply	2

Mounting

The ThinkAgile MX455 V3 Edge Premier Solution support the following mounting capabilities.

For details about these options, including configuration rules, see the ThinkEdge SE455 V3 server product guide:
https://lenovopress.com/lp1724-lenovo-thinkedge-se455-v3-server#rack-installation

Rack installation

The ThinkAgile MX455 V3 Edge Premier Solution can be installed can be installed in a rack cabinet, either 2-post, 4-post long, or 4-post short. The following table lists the rack installation options that are available.

Table 13. Rack installation

Part number	Feature	Description	Maximum supported MX455 V3 Edge PR
4XF7A81942	BMH2	ThinkEdge 600mm Ball Bearing Rail Kit	1
4XF7A81941	BMH1	ThinkEdge 2-Post Friction Rail Kit	1
4XF7A90718	BY8U	ThinkEdge 1000mm Friction Rail Kit v2	1

Software

The ThinkAgile MX455 V3 Edge Premier Solution includes the pre-loaded Azure Local operating system only and requires activation via a CSP such as Lenovo Cloud Marketplace

The following table lists the Windows Server software options that are available for selection from Lenovo for the ThinkAgile MX455 V3 Edge Premier Solution.

Table 14. Windows Server software selection options

Part number	Feature	Description	Maximum supported MX455 V3 Edge PR
None	C2W3	MS Azure Local MX Premier	1

Systems management

The ThinkAgile MX455 V3 Edge Premier Solution supports the following systems management tools:

- Activation
- Lenovo XClarity Controller
- Lenovo XClarity Administrator and XClarity Pro
- Lenovo XClarity Integrator for Microsoft Windows Admin Center
- Lenovo XClarity Integrator for Microsoft System Center
- Lenovo XClarity Energy Manager

For details about these options, including configuration rules, see the ThinkEdge SE455 V3 server product guide:
https://lenovopress.com/lp1724-lenovo-thinkedge-se455-v3-server#systems-management

Activation

Activation is an optional security feature of the ThinkAgile MX455 V3 Edge Premier Solution that ensures that the system delivered from the factory is only used by its intended recipient and that all data and applications remains secure. Activation is enabled on a factory order when the Security Pack Enabled feature code (feature BLZ2) is selected as described in the Security Pack section.

Enabled by default: Activation is enabled by default for new CTO orders. Activation can be disabled in the factory order as described in the Security Pack section.

If Activation is enabled, the system is delivered in system lockdown and will require activation before operation. There are three ways the server can be activated:

- Using a mobile device (iOS or Android) connect to the server to the USB management port on the front of the server and running the ThinkShield Edge Mobile Management app .

- Connecting the system to the Internet via the XCC management port on the front of the server and accessing the ThinkShield Key Vault Portal from a web browser on another system.

- In a disconnected mode, where neither a mobile device or an internet connection to the ThinkAgile MX455 V3 Edge Premier Solution are available.

For further information on activation and the use of the ThinkShield Edge Mobile Management app, including videos and tours, see this support page:
https://support.lenovo.com/us/en/solutions/ht509033

Lenovo XClarity Controller

The ThinkAgile MX455 V3 Edge Premier Solution contains Lenovo XClarity Controller (XCC) Enterprise, which provides advanced service-processor control, monitoring, and alerting functions.

XClarity Controller Enterprise offers the following capabilities in these systems:

- Gathering and viewing system information and inventory
- Monitoring system status and health
- Alerting and notifications
- Event logging
- Syslog alerting
- Configuring security
- Updating system firmware
- Real-time power usage monitoring
- Displaying graphics for real-time and historical power usage data and temperature
- Capping power usage
- Remotely controlling power (Power on, Power off, Restart)

The XClarity Controller provides remote node management through the following interfaces:

- IPMI Version 2.0
- SNMP Version 3
- Common Information Model (CIM)
- DCMI Version 1.5
- Redfish REST API
- Web browser with HTML5 support
- Command-line interface
- Virtual Operator Panel with XClarity Mobile App via the front USB port with XClarity Controller access

Virtual Operator Panel provides quick access to system status, firmware, network, health, and alerts information. With proper authentication, it also allows to configure systems management and network settings and to control system power (Power on, Power off, Restart). The Virtual Operator Panel can be accessed from the XClarity Mobile App running on the Android or iOS mobile device that is connected to the front USB port with XClarity Controller access (See Components and connectors).

Lenovo XClarity Administrator and XClarity Pro

Lenovo XClarity Administrator is a centralized systems management solution that helps administrators deliver infrastructure faster. This solution integrates easily with Lenovo x86 servers, appliances, certified nodes, Top-of-Rack Ethernet switches, and storage systems, providing automated agent-less discovery, inventory, monitoring, and alerts across multiple systems. In addition, some managed endpoints support firmware updates and configuration management.

Lenovo XClarity Administrator is an optional software component for managing ThinkAgile MX455 V3 Edge Premier Solution which can be downloaded and used at no charge to discover and monitor the nodes and manage firmware upgrades for them.

If software support is required for XClarity Administrator and XClarity Integrator for System Center, Lenovo XClarity Pro software subscription should be ordered. Lenovo XClarity Pro is licensed on a per managed system basis, that is, each managed Lenovo system requires a license.

The following table lists the Lenovo XClarity Pro license options available for selection.

Table 15. Lenovo XClarity Pro licenses

Description	Feature code
Lenovo XClarity Pro, per Managed Server w/3 Yr SW S&S	B3XS
Lenovo XClarity Pro, per Managed Server w/5 Yr SW S&S	B3XT

Lenovo XClarity Administrator offers the following standard features that are available at no charge:

- Auto-discovery and monitoring of Lenovo x86 servers, appliances, certified nodes, Top-of-Rack Ethernet switches, and DM/DE/DS Series storage systems
- Firmware updates and compliance enforcement
- External alerts and notifications via SNMP traps, syslog remote logging, and e-mail
- Secure connections to managed endpoints
- NIST 800-131A or FIPS 140-2 compliant cryptographic standards between the management solution and managed endpoints
- Integration into existing higher-level management systems such as cloud automation and orchestration tools through REST APIs, providing extensive external visibility and control over hardware resources
- An intuitive, easy-to-use GUI
- Scripting with Windows PowerShell, providing command-line visibility and control over hardware resources

For more information, refer to the Lenovo XClarity Administrator Product Guide:
http://lenovopress.com/tips1200

Lenovo XClarity Integrator for Microsoft Windows Admin Center

Lenovo XClarity Integrator for Microsoft Windows Admin Center is a software plug-in module for Lenovo XClarity Administrator that provides customers a smooth and seamless management experience across Windows Server hyperconverged and physical infrastructure in a single unified user interface.

Lenovo XClarity Integrator for Windows Admin Center offers the following features:

- Monitoring health status of cluster hardware and generating alerts
- Collecting inventory, including available firmware updates
- Managing firmware updates for nodes and clusters
- Performing remote management, including remote power on/off and remote control.

Lenovo XClarity Integrator for Windows Admin Center can be downloaded and used at no charge. For more information, refer to the Lenovo XClarity Integrator for Microsoft System Center web page:
http://support.lenovo.com/us/en/solutions/ht507549

Lenovo XClarity Integrator for Microsoft System Center

Lenovo XClarity Integrator for Microsoft System Center is a software plug-in module for Lenovo XClarity Administrator that allows customers to integrate the management features of the Lenovo x86 servers, appliances, and certified nodes with Microsoft System Center.

Lenovo XClarity Integrator for System Center offers the following features:

- Integrated end-to-end management of node hardware with monitoring of both physical node and virtual server health
- Deployment of the latest Lenovo firmware and driver update management
- Non-disruptive node maintenance in clustered environments that reduces workload downtime by dynamically migrating workloads from affected hosts during rolling firmware updates
- Greater service level uptime and assurance in clustered environments during unplanned hardware events by dynamically triggering workload migration from impacted hosts when impending hardware failures are predicted

Lenovo XClarity Integrator for System Center can be downloaded and used at no charge. For more information, refer to the Lenovo XClarity Integrator for Microsoft System Center web page:
http://support.lenovo.com/us/en/solutions/lnvo-manage

Lenovo XClarity Energy Manager

Lenovo XClarity Energy Manager provides a stand-alone, web-based agent-less power management console that provides real time data and enables you to observe, plan and manage power and cooling for Lenovo servers, appliances, and certified nodes. Using built-in intelligence, it identifies node power consumption trends and ideal power settings and performs cooling analysis so that you can define and optimize power-saving policies.

Lenovo XClarity Energy Manager offers the following capabilities:

- Monitors room, row, rack, and device levels in the data center
- Reports vital system information, such as power, temperature and resource utilization
- Monitors inlet temperature to locate hot spots, reducing the risk of data or device damage
- Provides finely grained controls to limit platform power in compliance with IT policy
- Generates alerts when a user-defined threshold is reached

Lenovo XClarity Energy Manager is an optional software component for the MX systems that is licensed on a per managed node basis, that is, each managed system requires a license. The 1-node Energy Manager license is included in the XClarity Controller Enterprise upgrade.

For more information, refer to the Lenovo XClarity Energy Manager web page:
http://datacentersupport.lenovo.com/us/en/solutions/lnvo-lxem

Security

Topics in this section:

- Security features
- Intrusion switch
- Firmware and Root of Trust Security Module
- Security bezel
- System Lockdown Mode
- SED encryption in factory orders
- AMD Infinity Guard

The ThinkAgile MX455 V3 Edge Premier Solution offers a number of security features, both electronic and physical.

For details about these options, including configuration rules, see the ThinkEdge SE455 V3 server product guide:
https://lenovopress.com/lp1724-lenovo-thinkedge-se455-v3-server#security

Security features

The ThinkAgile MX455 V3 Edge Premier Solution offers a number of security features, both electronic and physical.

Physical security features:

- Lockable top cover

- Front security bezel with key lock (optional, available as a field upgrade but requires the bezel detect module added in the factory).

- Intrusion detection. See Intrusion switch.

- EIA mounting flange with security key (optional, CTO only). Available EIA bracket that uses a security screw to attach the server to the front flange of the rack cabinet. See EIA bracket with security screw for more information.

Electronic security features include:

- Tamper Detection with System Lockdown. In the event of an intrusion or movement, the server can be configured in XCC to perform actions, including server shutdown, data SED lockdown, and disabling remote access to the XCC from the network ports (referred to as the BMC network bridge).

- Management of these lockdown features can be either centralized via the ThinkShield Key Vault Portal, or performed locally in the XCC management controller. See the System Lockdown Mode Control system for details.

- Self-encrypting (SED) drives that ensure data is secured when the drives are powered off

- Administrator password and a power-on password in UEFI

- Root of Trust (RoT) module providing Platform Firmware Resiliency (PFR) and Trusted Platform Module (TPM 2.0) functionality. See Firmware and Root of Trust Security Module .

- AMD Infinity Guard, as described in the AMD Infinity Guard section

For more information, see ThinkEdge Security, available from:
https://lenovopress.lenovo.com/lp1725-thinkedge-security

The server is NIST SP 800-147B compliant.

Intrusion switch

The server supports an intrusion switch that rests against the top cover. See the Internal view of the server for the location of this component. In the event that the cover is removed, a Warning event is recorded in XClarity Controller and actions can be taken to secure the server.

The intrusion switch is included in all orders.

Table 16. Intrusion switch

Feature code	Description
BVV6	ThinkEdge SE455 V3 Intrusion Switch

Firmware and Root of Trust Security Module

The ThinkAgile MX455 V3 Edge Premier Solution includes a security mezzanine card that plugs into the system board as shown in the Internal view of the server. The RoT module has the following functions:

- Contains the following components:
    - Root of Trust chip
    - Trusted Platform Module 2.0 (TPM 2.0) chip
    - Non-volatile storage for configuration data
- Provides support for Platform Firmware Resiliency (PFR) as described in the Lenovo ThinkShield - Platform Firmware Resiliency section
- Allows field recovery of a firmware-corrupted system without requiring planar replacement
- Allows field replacement of system planar while maintaining customer code levels and configuration settings

Ordering information is listed in the following table.

Table 17. Root of Trust module

Part number	Feature code	Description	Markets
CTO only	BVTM	ThinkEdge SE455 V3 Root of Trust	All markets except China
CTO only	BVTN	ThinkEdge SE455 V3 Root of Trust for PRC	China only

Security bezel

The security bezel is an optional component that mounts on the front of the server that restricts access to networking connectors on the front of the server. In the event that the bezel is added or removed, an Information event is recorded in XClarity Controller and actions can be taken to secure the server.

The following figure shows the MX455 V3 Edge with security bezel installed.

Figure 6. ThinkAgile MX455 V3 Edge Premier Solution with security bezel installed

The security bezel includes a dust filter as described in the Operating environment section. Additional dust filters are orderable.

Ordering information for the bezel and additional dust filters is listed in the following table.

Table 18. Security bezel

Part number	Feature code	Description
4XF7A88070	BVTQ	ThinkEdge SE455 V3 Security Bezel Kit
4XF7A89295	None*	ThinkEdge SE455 V3 Bezel Filter

* Field upgrades only; the security bezel includes one filter

The security bezel also includes the following system LEDs:

- Power
- Ethernet network activity (OCP adapter)
- ID (identification)
- System error

See the Local management section for information about these LEDs.

System Lockdown Mode

System Lockdown Mode is an optional security feature of the ThinkAgile MX455 V3 Edge Premier Solution that ensures that the system is only used by its intended recipient and that all data and applications remains secure.

System Lockdown Mode is an optional feature that can be remotely managed in two ways:

- ThinkShield Key Vault Portal Managed. This provides a centralized remote management approach, allowing the administrator to remotely managed multiple systems and to register ownership of systems to their company, which reduces the system's value if stolen.

- XClarity Controller Managed. This provides remote management level control to an individual system using XCC web interface, OneCLI or Redfish.

To select ThinkShield Key Vault Portal Managed in factory orders, select feature BYBR, as listed in the following table. The default in DCSC is to select XClarity Controller Managed, feature BYBQ.

Table 19. Feature codes to activate System Lockdown mode

Feature code	Description	Purpose
BYBR	ThinkShield Key Vault Portal Managed	System Lockdown Mode is enabled in the factory (Activation required on delivery). The server remains secured and in System Lockdown Mode until registered and activated with the ThinkEdge Key Vault Portal. Unauthorized tampering of the server will result in the server being locked down and the data secured, and will remain in this state until reauthenticated with the Key Vault Portal.
BYBQ	XClarity Controller Managed	Default choice in DCSC. System Lockdown Mode is not enabled in the factory. Configures the server security to be managed by the XCC2 management processor. Server will boot at first power on and, by default, will not be locked down on any tamper event. You can configure tamper detection in the XCC2 interface if desired. The server can be converted to be managed ThinkShield Key Vault Portal at a later stage if desired (one-way conversion).

If System Lockdown is enabled in the factory, the system will be delivered in system lockdown mode and will require activation before operation. There are three ways the server can be activated:

- Using a mobile device (iOS or Android) connect to the server to the USB management port on the front of the server and running the ThinkShield Edge Mobile Management app .
- Connecting the system to the Internet via the XCC management port on the front of the server and accessing the ThinkShield Key Vault Portal from a web browser on another system.
- In a disconnected mode, where neither a mobile device or an internet connection to the ThinkAgile MX455 V3 Edge Premier Solution are available.

For more information, see ThinkEdge Security, available from:
https://lenovopress.lenovo.com/lp1725-thinkedge-security

Converting from XCC Managed to Portal Managed : Is it possible to convert a system from XCC Managed security to ThinkShield Key Vault Portal Managed via the XCC management interface, however the reverse is not possible. Once a server is in ThinkShield Key Vault Portal Managed mode, it cannot be converted back to XClarity Controller Managed.

The ThinkAgile MX455 V3 Edge Premier Solution offers a Security LED that indicates the status of the server:

- LED on: Security is enabled; System is operational.
- LED blinking: Security is enabled and the server is in lockdown, either due to being delivered from the factory in lockdown mode or has entered lockdown as a result of a tamper event. System must be activated or reactivated before becoming operational.
- LED off: Security is disabled; System is operational.

SED encryption in factory orders

The ThinkAgile MX455 V3 Edge Premier Solution also optionally supports enabling SED drive encryption in the factory using feature BYBS as listed in the following table. This feature enables SED on the selected drives and sets and SED Authentication Key (SED AK).

If SED drive encryption is disabled in factory, it is possible to enable it later in XClarity Controller. Note that it is not possible to disable drive encryption once it has been enabled.

> **Tip**: SED encryption is a function that is independent of System Lockdown Control.

Table 20. SED encryption in factory orders

Feature code	Description	Purpose
BYBS	SED Enabled	Enables SED drive encryption on all factory installed drives and sets an SED Authentication Key (AK).
C1QS	SED Disabled	No drive encryption set in factory. It can be enabled later in XClarity Controller.

AMD Infinity Guard

The ThinkAgile MX455 V3 Edge Premier Solution implements the following security features enabled in the AMD EPYC processor:

- Secure Memory Encryption

  Helps protect against attacks on the integrity of main memory (such as cold-boot attacks) because it encrypts the data. High-performance encryption engines integrated into the memory channels help speed performance. All of this is accomplished without modifications to your application software.

- Secure Encrypted Virtualization

  Helps safeguard privacy and integrity by encrypting each virtual machine with one of up to 509 unique encryption keys known only to the processor. This aids in protecting confidentiality of your data even if a malicious virtual machine finds a way into your virtual machine's memory, or a compromised hypervisor reaches into a guest virtual machine.

- Secure Nested Paging

  Adds strong memory integrity protection capabilities to help prevent malicious hypervisor based attacks like data replay, memory re-mapping, and more in order to create an isolated execution environment.

- Secure Boot

  Mitigates against firmware-level attacks, Extends the AMD silicon root of trust to help protect the system BIOS. This helps the system establish an unbroken chain of trust from the AMD silicon root of trust to the BIOS using AMD Secure Boot, and then from the system BIOS to the OS Bootloader using UEFI secure boot.

- Shadow Stack

  Provides hardware-enforced stack protection capabilities address threat vectors such as return oriented programming attacks by keeping a record of the return addresses so a comparison can be made to ensure integrity is not compromised. In addition, AMD Shadow Stack enables Microsoft® hardware enforced stack protection.

For more information, see the AMD Infinity Guard web page:
https://www.amd.com/en/technologies/infinity-guard

Physical specifications

The ThinkAgile MX455 V3 Edge Premier Solution has the following overall physical dimensions, excluding components that extend outside the standard chassis, such as EIA flanges, front security bezel (if any), and power supply handles:

- Width: 445 mm (17.5 inches)
- Height: 87 mm (3.4 inches)
- Depth: 452 mm (17.8 inches)
- Weight: 19.21 kg (42.35 lbs)

Operating environment

The ThinkAgile MX455 V3 Edge Premier Solution server complies with ASHRAE Class A2 specifications with most configurations, and depending on the hardware configuration, also complies with ASHRAE Class A3 or A4 specifications.

For details about these options, including configuration rules, see the ThinkEdge SE455 V3 server product guide:
https://lenovopress.com/lp1724-lenovo-thinkedge-se455-v3-server#operating-environment

Topics in this section:

- Temperature and humidity
- Configuration requirements
- Acoustical noise emissions
- Shock and vibration
- NEBS support

Temperature and humidity

The server is supported in the following environment:

Tip: Additional high temperature and humidity support may be possible for specific configurations. For more information contact your Lenovo sales representative or business partner.

Air temperature:

- Operating:
  - ASHRAE A2: 10°C to 35°C (50°F to 95°F); the maximum ambient temperature decreases by 1°C for every 300 m (984 ft) increase in altitude above 900 m (2,953 ft).
  - ASHRAE A3: 5°C to 40°C (41°F to 104°F); the maximum ambient temperature decreases by 1°C for every 175 m (574 ft) increase in altitude above 900 m (2,953 ft).
  - ASHRAE A4: 5°C to 45°C (41°F to 113°F); the maximum ambient temperature decreases by 1°C for every 125 m (410 ft) increase in altitude above 900 m (2,953 ft).
  - Extended operation temperature (with limited configuration): 5°C to 55°C (41°F to 131°F)
- Server off: -5°C to 55°C (23°F to 131°F)
- Shipment/storage: -40°C to 70°C (-40°F to 158°F)

Maximum altitude: 3,050 m (10,000 ft)

Relative Humidity (non-condensing):

- Operating
  - ASHRAE Class A2: 8% to 80%; maximum dew point: 21°C (70°F)
  - ASHRAE Class A3: 8% to 85%; maximum dew point: 24°C (75°F)
  - ASHRAE Class A4: 8% to 90%; maximum dew point: 24°C (75°F)
- Shipment/storage: 8% to 90%

Configuration requirements

The following table lists the components that are supported based on the ambient temperature.

Table 21. Configuration requirements (Green=No restriction; Yellow=Some restrictions; White=No support)

Components	Up to 35°C	Up to 40°C	Up to 45°C	Up to 50°C	Up to 55°C
Processor	All processors	All processors	All processors	All processors except: - 8224P (24 cores) - 8324P (32 cores) - 8434P (48 cores) - 8534P (64 cores)	All processors† except: - 8124P (16 cores) - 8224P (24 cores) - 8324P (32 cores) - 8434P (48 cores) - 8534P (64 cores)
Memory	All memory	All memory	All memory	All memory except: - 96GB RDIMMs	All memory except: - 96GB RDIMMs - 64GB RDIMMs

Components	Up to 35°C	Up to 40°C	Up to 45°C	Up to 50°C	Up to 55°C
Network and storage PCI adapters	All adapters	All adapters	All adapters	All adapters	All adapters except: ● RAID 940-8i 4GB Flash PCIe Gen4 12Gb Adapter ● Broadcom 57508 100GbE QSFP56 2-port PCIe 4 Ethernet Adapter V2 ● Mellanox ConnectX-6 Dx 100GbE QSFP56 2-port PCIe Ethernet Adapter ● NVIDIA ConnectX-7 NDR200/HDR QSFP112 2-port PCIe Gen5 x16 InfiniBand Adapter
OCP adapters	All adapters	All adapters	All adapters	All adapters	All adapters except: ● Broadcom 57508 100GbE QSFP56 2-Port OCP Ethernet Adapter
GPUs and accelerators	All GPUs & accelerators	All GPUs & accelerators	All GPUs & accelerators except: ● NVIDIA L40	No support	No support
Front SATA drives	All SATA drives	All SATA drives	All SATA drives	All SATA drives	All SATA drives

Components	Up to 35°C	Up to 40°C	Up to 45°C	Up to 50°C	Up to 55°C
Front NVMe drives	All NVMe drives	All NVMe drives except: • 7450 PRO, 3.84TB or larger • 7450 MAX, 1.6TB or larger	All NVMe drives except: • 7450 PRO, 3.84TB or larger • 7450 MAX, 1.6TB or larger	All NVMe drives except: • 7450 PRO, 3.84TB or larger • 7450 MAX, 1.6TB or larger • P5520, 7.68TB or larger • P5620, 6.4TB or larger	No support
Internal SATA drives	All SATA drives	All SATA drives	All SATA drives	No support	No support
Internal NVMe drives	All NVMe drives* except: • 7450 PRO, 3.84TB or larger • P5520, 15.36TB • P5620, 12.8TB • 7450 MAX, 1.6TB or larger	No support	No support	No support	No support
M.2 SATA drives	All SATA drives	All SATA drives	All SATA drives	All SATA drives	No support
M.2 NVMe drives	All NVMe drives	All NVMe drives	All NVMe drives	No support	No support

* For internal NVMe drives, the P5520 (7.68TB) and P5620 (6.4TB) drives might be throttled when ambient temperature is higher than 30°C
† The 8434PN (48 cores) and 8534PN (64 cores) processors are only supported if Riser 2 is not installed

For more information, see the following page:
https://pubs.lenovo.com/se455-v3/server_specifications_environmental

Acoustical noise emissions

The server has the following acoustic noise emissions declaration:

- Sound power level (L $_{WAd}$)
  - Idling:
    - Minimum: 5.5 Bel
    - GPU Rich: 5.5 Bel
    - Storage Rich: 5.8 Bel
  - Operating profile 1:
    - Minimum: 5.5 Bel
    - GPU Rich: 5.5 Bel
    - Storage Rich: 5.8 Bel

- Operating profile 2:
  - Minimum: 5.5 Bel
  - GPU Rich: 7.4 Bel
  - Storage Rich: 6.0 Bel
- Sound pressure level (L_{pAm}):
  - Idling:
    - Minimum: 39.0 dBA
    - GPU Rich: 39.0 dBA
    - Storage Rich: 42.8 dBA
  - Operating profile 1:
    - Minimum: 39.0 dBA
    - GPU Rich: 39.0 dBA
    - Storage Rich: 42.8 dBA
  - Operating profile 2:
    - Minimum: 39.0 dBA
    - GPU Rich: 58.2 dBA
    - Storage Rich: 44.6 dBA

Notes:

- These sound levels were measured in controlled acoustical environments according to procedures specified by ISO7779 and are reported in accordance with ISO 9296. Operating profile 1 is represented by 50% CPU TDP. Operating profile 2 is represented by 100% CPU TDP or 70%/30% storage write/read or 100% GPU.

- The declared acoustic sound levels are based on the specified configurations, which may change depending on configuration/conditions.
  - Minimum: 1x AMD EPYC 8024P (8 core, 90W) CPU, 4x ThinkSystem 32GB TruDDR5 4800MHz (2Rx8) RDIMMs, 1x ThinkSystem Intel X710-T2L 10GBASE-T 2-port OCP Ethernet Adapter, 2x 5400 Pro 2280 M.2 SATA SSD 960GB boot drive, 4x ThinkSystem 2.5" 5400 MAX 3.84TB Mixed Use SATA 6Gb HS SSD data drives, 2x ThinkSystem RAID 5350-8i PCIe 12Gb Adapter, 2x AC PSU 1100W
  - GPU Rich: 1x AMD EPYC 8224P (24 core, 160W) CPU, 4x ThinkSystem 32GB TruDDR5 4800MHz (2Rx8) RDIMMs, 1x ThinkSystem Intel X710-T2L 10GBASE-T 2-port OCP Ethernet Adapter, 2x 5400 Pro 2280 M.2 SATA SSD 960GB boot drive, 4x ThinkSystem 2.5" 5400 MAX 3.84TB Mixed Use SATA 6Gb HS SSD data drives, 2x ThinkSystem RAID 5350-8i PCIe 12Gb Adapter, 4x ThinkSystem NVIDIA L4 24GB PCIe Gen4 Passive GPU, 2x AC PSU 1100W
  - Storage Rich: 1x AMD EPYC 8124P (16 core, 125W) CPU, 4x ThinkSystem 32GB TruDDR5 4800MHz (2Rx8) RDIMMs, 1x ThinkSystem Intel X710-T2L 10GBASE-T 2-Port PCIe Ethernet Adapter, 2x 5400 Pro 2280 M.2 SATA SSD 960GB boot drive, 8x ThinkSystem 2.5" 5400 PRO 7.68TB Read Intensive SATA 6Gb HS SSD, 2x AC PSU 1100W

- Government regulations (such as those prescribed by OSHA or European Community Directives) may govern noise level exposure in the workplace and may apply to you and your server installation. The actual sound pressure levels in your installation depend upon a variety of factors, including the number of racks in the installation; the size, materials, and configuration of the room; the noise levels from other equipment; the room ambient temperature, and employee's location in relation to the equipment. Further, compliance with such government regulations depends on a variety of additional factors, including the duration of employees' exposure and whether employees wear hearing protection. Lenovo recommends that you consult with qualified experts in this field to determine whether you are in compliance with the applicable regulations.

Shock and vibration

The server has the following vibration and shock limits:

- Vibration:
  - Operating: 0.21 G rms at 5 Hz to 500 Hz for 15 minutes across 3 axes
  - Non-operating (in packaging): 1.04 G rms at 2 Hz to 200 Hz for 15 minutes across 6 surfaces

- Rack-load vibration: 0.8 G rms at 2 Hz to 200 Hz
- Shock:
  - Operating: 15 G for 3 milliseconds in each direction (positive and negative X, Y, and Z axes)
  - Non-operating (in packaging): 52 G at 152 in/sec
- Rack-load drop
  - Free-fall drop height: 40 tp 100mm
  - Equivalent shock: 40 to 70 inch/sec, 2-3 ms
- NEBS GR63:
  - Bench handling drop:
    - Edge drop height (each edge): 100mm
    - Free-fall drop height: 75mm
  - Office vibration: 0.21Grms, 5-100 Hz, 30 min/axis
  - Earthquake test: GR63 earthquake zone 4

NEBS support

The ThinkAgile MX455 V3 Edge Premier Solution is designed to support NEBS Level 3 compliance. NEBS3 is defined as follows:

- Operating temperature: 5°C to 40°C.
- High altitude operating temperature (1829m to 3960m, 6000ft to 13,000ft): 5°C to 35°C
- Short term operating temp*: -5°C to 55°C
- Humidity: 5% to 85% RH, Non-condensing.
- Maximum rate of change(°C /hr) should ≤ 20 Humidity transition rate should ≤ 10%/hr.

* Short-term conditions: A period of no more than 96 consecutive hours and a total of not more than 15 days in 1 year. A total of 360 hours in any given year, but no more than 15 occurrences during a 1-year period.

NEBS configurations use one of the NEBS-compliant AMD EPYC processors (8xxxPN processor SKUs). For details, see the Processors section.

For more information about NEBS support, contact your sales representative.

Regulatory compliance

The ThinkAgile MX455 V3 Edge Premier Solution conforms to the following standards:

- ANSI/UL62368-1
- IEC 62368-1 (CB Certificate and CB Test Report)
- FCC - Verified to comply with Part 15 of the FCC Rules, Class A
- Canada ICES-003, issue 7, Class A
- CSA C22.2 No. 62368-1
- CISPR 32, Class A, CISPR 35
- Argentina IEC 62368-1: 2018
- Japan VCCI, Class A
- Taiwan BSMI CNS15936, Class A; CNS15598-1; Section 5 of CNS15663
- Taiwan BSMI CNS15936, Class A; Section 5 of CNS15663
- CE, UKCA Mark (EN55032 Class A, EN62368-1, EN55024, EN55035, EN61000-3-2, EN61000-3-3, (EU) 2019/424, and EN IEC 63000 (RoHS))
- CE, UKCA Mark (EN55032 Class A, EN62368-1, EN55035, EN61000-3-11, EN61000-3-12, (EU) 2019/424, and EN IEC 63000 (RoHS))
- Korea KN32, Class A, KN35
- Russia, Belorussia and Kazakhstan, TP EAC 037/2016 (for RoHS)
- Russia, Belorussia and Kazakhstan, EAC: TP TC 004/2011 (for Safety); TP TC 020/2011 (for EMC)
- EAC Russia, Belorussia and Kazakhstan, TR CU 020/2011 and TR CU 004/2011
- Australia/New Zealand AS/NZS CISPR 32, Class A; AS/NZS 62368.1
- UL Green Guard, UL2819
- SGS, VOC Emission
- Energy Star 3.0
- Energy Star 4.0
- EPEAT (NSF/ ANSI 426) Bronze
- China CCC certificate, GB17625.1; GB4943.1; GB/T9254.1
- China CECP certificate, CQC3135
- China CELP certificate, HJ 2507-2011
- China ISCCC, GB40050-2021
- Japanese Energy-Saving Act
- Mexico NOM-019
- TUV-GS (EN62368-1, and EK1-ITB2000)
- India BIS 13252 (Part 1)
- Germany GS
- Brazil INMETRO
- South Africa NRCS LOA
- Ukraine UkrCEPRO
- Morocco CMIM Certification (CM)
- EU2019/424 Energy Related Product (ErP Lot9)
- NEBS 3
- Verizon Carrier Certification

Warranty and support

The ThinkAgile MX455 V3 Edge Premier Solution ensures customers experience enhanced operational efficiency and support. Leveraging deep integration between Lenovo ThinkAgile hardware and Microsoft Azure Local software, it enables quicker issue resolution with single point of support for both hardware and software. Automated and jointly tested full-stack updates ensure seamless updates with just a single click, while the solution also lowers total service costs through automated end-to-end deployment workflows and life cycle management, empowering customers to streamline infrastructure management and devote more time to innovation.

The ThinkAgile MX455 V3 Edge Premier Solution can be configured with a three-, four, or five-year hardware warranty with 24x7 ThinkAgile Premier Single Point of Support (Lenovo appliance hardware and Microsoft software) and various levels of coverage with a defined scope of services, including service hours, response time, term of service, and service agreement terms and conditions.

For more information refer to the Lenovo Support Plan - ThinkAgile MX455 V3 Edge Premier Solution support plan https://support.lenovo.com/us/en/solutions/HT516695

Lenovo's additional support services provide a sophisticated, unified support structure for your data center, with an experience consistently ranked number one in customer satisfaction worldwide. Available offerings include:

- **Warranty Upgrade (Preconfigured Support)**

  Services are available to meet the on-site response time targets that match the criticality of your systems.

  - 3 years of service coverage
  - **Foundation Service**: 9x5 service coverage with next business day onsite response. YourDrive YourData is an optional extra (see below).
  - **Essential Service:** 24x7 service coverage with 4-hour onsite response or 24-hour committed repair (available only in select countries). Bundled with YourDrive YourData.
  - **Advanced Service:** 24x7 service coverage with 2-hour onsite response or 6-hour committed repair (available only in select countries). Bundled with YourDrive YourData.

- **Managed Services**

  Lenovo Managed Services provides continuous 24x7 remote monitoring (plus 24x7 call center availability) and proactive management of your data center using state-of-the-art tools, systems, and practices by a team of highly skilled and experienced Lenovo services professionals.

  Quarterly reviews check error logs, verify firmware & OS device driver levels, and software as needed. We'll also maintain records of the latest patches, critical updates, and firmware levels, to ensure your systems are providing business value through optimized performance.

- **Technical Account Management (TAM)**

  A Lenovo Technical Account Manager helps you optimize the operation of your data center based on a deep understanding of your business. You gain direct access to your Lenovo TAM, who serves as your single point of contact to expedite service requests, provide status updates, and furnish reports to track incidents over time. In addition, your TAM will help proactively make service recommendations and manage your service relationship with Lenovo to make certain your needs are met.

- **Enterprise Server Software Support**

  Enterprise Software Support is an additional support service providing customers with software support on Microsoft, Red Hat, SUSE, and VMware applications and systems. Around the clock availability for critical problems plus unlimited calls and incidents helps customers address challenges fast, without incremental costs. Support staff can answer troubleshooting and diagnostic questions, address product comparability and interoperability issues, isolate causes of problems, report defects to software vendors, and more.

- **YourDrive YourData**

  Lenovo's YourDrive YourData is a multi-drive retention offering that ensures your data is always under your control, regardless of the number of drives that are installed in your Lenovo server. In the unlikely event of a drive failure, you retain possession of your drive while Lenovo replaces the failed drive part. Your data stays safely on your premises, in your hands. The YourDrive YourData service can be purchased in convenient bundles and is optional with Foundation Service. It is bundled with Essential Service and Advanced Service.

- **Health Check**

  Having a trusted partner who can perform regular and detailed health checks is central to maintaining efficiency and ensuring that your systems and business are always running at their best. Health Check supports Lenovo-branded server, storage, and networking devices, as well as select Lenovo-supported products from other vendors that are sold by Lenovo or a Lenovo-Authorized Reseller.

Examples of region-specific warranty terms are second or longer business day parts delivery or parts-only base warranty.

If warranty terms and conditions include onsite labor for repair or replacement of parts, Lenovo will dispatch a service technician to the customer site to perform the replacement. Onsite labor under base warranty is limited to labor for replacement of parts that have been determined to be field-replaceable units (FRUs). Parts that are determined to be customer-replaceable units (CRUs) do not include onsite labor under base warranty.

If warranty terms include parts-only base warranty, Lenovo is responsible for delivering only replacement parts that are under base warranty (including FRUs) that will be sent to a requested location for self-service. Parts-only service does not include a service technician being dispatched onsite. Parts must be changed at the customer's own cost and labor and defective parts must be returned following the instructions supplied with the spare parts.

Lenovo Service offerings are region-specific. Not all preconfigured support and upgrade options are available in every region. For information about Lenovo service upgrade offerings that are available in your region, refer to the following resources:

- Service part numbers in Lenovo Data Center Solution Configurator (DCSC):
  http://dcsc.lenovo.com/#/services
- Lenovo Services Availability Locator
  http://lenovolocator.com/

For service definitions, region-specific details, and service limitations, please refer to the following documents:

- Lenovo Statement of Limited Warranty for Infrastructure Solutions Group (ISG) Servers and System Storage
  http://pcsupport.lenovo.com/us/en/solutions/ht503310
- Lenovo Data Center Services Agreement
  http://support.lenovo.com/us/en/solutions/ht116628

Deployment services

The MX systems can optionally include Lenovo deployment services to get customers up and running quickly.

The following Lenovo custom installation services are optional for both MX Premier Solutions and MX Certified Nodes:

- Unpacking and inspecting the systems
- Mounting the systems (rack cabinet, desktop, stack, bookshelf, wall or ceiling, or rack installation)
- Connecting the systems to electrical power and network
- Checking and updating firmware to the latest levels
- Verifying operations
- Disposal of the packaging materials (within the customer site)

The following Lenovo deployment services are optional for both MX Premier Solutions and MX Certified Nodes:

- Conducting remote preparation and planning
- Verifying firmware versions and performing firmware updates, if needed
- Configuring XClarity Controller management settings
- Configuring Storage Spaces Direct
- Configuring Microsoft System Center and discovering hosts and storage (if System Center is used)
- Configuring Lenovo XClarity Administrator network settings and performing discovery and inventory (if XClarity is selected)
- Transferring knowledge
- Developing post-installation documentation

The following table lists ThinkAgile Health Check & Deployment offerings are available for ThinkAgile MX customers. These offerings are performed by Lenovo Professional Services.

- **Onsite Deployment**: Install, configure, and validate solution on-site, and conduct knowledge transfer.

- **Remote Deployment**: Install, configure, and validate solution remotely, and conduct knowledge transfer.

- **Remote Health Check**: Report & remediation of hardware and cluster health issues, including firmware and software updates.

Table 22. ThinkAgile Health Check & Deployment offerings

Part number	Description
Onsite deployment services	
5MS7B09464	ThinkAgile MX Onsite Deployment (up to 2 nodes)
5MS7B09465	ThinkAgile MX Onsite Deployment (additional node)
Remote deployment services	
5MS7B09466	ThinkAgile MX Remote Deployment (up to 2 nodes)
5MS7B09467	ThinkAgile MX Remote Deployment (additional node)
Remote Health Check	
5MS7B00049	ThinkAgile MX 1X Remote Health Check (per 2-4 node cluster)
5MS7B00050	ThinkAgile MX 1X Remote Health Check (additional node)
5MS7B00051	ThinkAgile MX 1X Remote Health Check & Update (per 2-4 node cluster)
5MS7B00052	ThinkAgile MX 1X Remote Health Check & Update (additional node)

For more information, refer to the Data Center Implementation Services web page:
https://www.lenovo.com/us/en/data-center/services/implementation-services/

Lenovo Financial Services

Why wait to obtain the technology you need now? No payments for 90 days and predictable, low monthly payments make it easy to budget for your Lenovo solution.

- **Flexible**

  Our in-depth knowledge of the products, services and various market segments allows us to offer greater flexibility in structures, documentation and end of lease options.

- **100% Solution Financing**

  Financing your entire solution including hardware, software, and services, ensures more predictability in your project planning with fixed, manageable payments and low monthly payments.

- **Device as a Service (DaaS)**

  Leverage latest technology to advance your business. Customized solutions aligned to your needs. Flexibility to add equipment to support growth. Protect your technology with Lenovo's Premier Support service.

- **24/7 Asset management**

  Manage your financed solutions with electronic access to your lease documents, payment histories, invoices and asset information.

- **Fair Market Value (FMV) and $1 Purchase Option Leases**

  Maximize your purchasing power with our lowest cost option. An FMV lease offers lower monthly payments than loans or lease-to-own financing. Think of an FMV lease as a rental. You have the flexibility at the end of the lease term to return the equipment, continue leasing it, or purchase it for the fair market value. In a $1 Out Purchase Option lease, you own the equipment. It is a good option when you are confident you will use the equipment for an extended period beyond the finance term. Both lease types have merits depending on your needs. We can help you determine which option will best meet your technological and budgetary goals.

Ask your Lenovo Financial Services representative about this promotion and how to submit a credit application. For the majority of credit applicants, we have enough information to deliver an instant decision and send a notification within minutes.

Seller training courses

The following sales training courses are offered for employees and partners (login required). Courses are listed in date order.

1. **Lenovo Data Center Product Portfolio**
   2025-06-11 | 20 minutes | Employees and Partners

   This course introduces the Lenovo data center portfolio, and covers servers, storage, storage networking, and software-defined infrastructure products. After completing this course about Lenovo data center products, you will be able to identify product types within each data center family, describe Lenovo innovations that this product family or category uses, and recognize when a specific product should be selected.

   Course objectives:
   1.Identify product types within each data center family
   2.Describe the features of the product family or category
   3.Recognize when a specific product should be selected

   Tags: Advanced DataCenter, DataCenter Products, Server, ThinkAgile, ThinkEdge, ThinkSystem

   Published: 2025-06-11
   Length: 20 minutes

   > **Start the training:**
   > Employee link: Grow@Lenovo
   > Partner link: Lenovo 360 Learning Center

   Course code: SXXW1110r8

2. **VTT: Nutanix Integration in XClarity One - SAM - May 2025**
   2025-06-10 | 56 minutes | Employees Only

   Please join this session as our speaker Sorin Tacu, will be sharing us a preview of SAM (Solutions Advanced Manager) - a powerful new tool developed by the ThinkAgile HX team in collaboration with XClarity One. Designed to seamlessly integrate the Nutanix Solution into XClarity One, SAM is set to streamline solution management and drive greater value for our customers. Get a first look at its future capabilities and learn more about it.

   Tags: Nutanix, XClarity

   Published: 2025-06-10
   Length: 56 minutes

   > **Start the training:**
   > Employee link: Grow@Lenovo

   Course code: DVSYS217

3. **Lenovo Cloud Architecture VTT: Drive Hybrid Cloud Conversations with ThinkAgile MX V4 Solutions**
2025-06-10 | 73 minutes | Employees Only

Join Amit Kulkarni, Lenovo Sr. Product Manager and Adam Mandelbloom, Lenovo Technical Marketing Manager for a focused session on the latest ThinkAgile MX V4 solutions with 6th Gen Intel® Xeon® Scalable processors, delivering top-tier performance, efficiency, and scalability for hybrid cloud and AI workloads. We'll explore how these advancements combined with Azure Local and Azure Arc, are transforming how businesses manage on-prem and cloud environments through a unified control plane.
Key topics include:
• Hybrid Cloud Integration with Azure Arc, AKS, and Azure Virtual Desktop optimized for local HCI environments
• VMware-to-Azure Local Migration strategies for customers looking to modernize legacy virtualization platforms

Tags: Client Virtualization, Cloud, Microsoft, Software Defined Infrastruture (SDI), ThinkAgile

Published: 2025-06-10
Length: 73 minutes

Start the training:
Employee link: Grow@Lenovo

Course code: DVCLD223

4. **Lenovo Cloud Architecture VTT Follow up: Getting Started with ScopeSys: A Beginner's Guide**
2025-06-10 | 45 minutes | Employees Only

This training webinar on Scopesys sizing tool from Acuutech is a follow up to the recent webinar that occurred in February 2025. This training is designed to provide you as new users with an introduction to ScopeSys solution-scoping platform. This session will walk you through the essential first steps of getting started, including system access, navigation, and setup. We'll then dive into how to effectively capture a client's requirements and import OneIQ and RVTools output within the platform to leverage ScopeSys's intelligent recommendation engine to identify the most appropriate, tailored solution. Finally, we'll wrap up by showing you where to access helpful resources, tools, and support so you can continue building confidence and efficiency in using the tool.

David Monks, Software Developer for Acuutech is our guest speaker and leading you through this training session.
Agenda:
1. Welcome & Objectives
2. What is ScopeSys Used For?
3. How to Get Started
4. Entering a Client's Requirements and Importing OneIQ and RVTools output
5. Choosing a Solution
6. Where to Get Further Help
7. Q&A

Tags: Client Virtualization, Cloud, Microsoft, Sales Tools, Software Defined Infrastruture (SDI)

Published: 2025-06-10
Length: 45 minutes

Start the training:
Employee link: Grow@Lenovo

Course code: DVCLD222

5. **Partner Technical Webinar - ThinkAgile V4**
   2025-06-09 | 60 minutes | Employees and Partners

   In this 60-minute replay, Pawan Misra, Lenovo SDI Product Manager and Adam Mandelbloom, Lenovo SDI Technical Marketing Manager, reviewed the newly announced ThinkAgile V4 systems for HX, VX and MX.

   Tags: Microsoft, Nutanix, VMware

   Published: 2025-06-09
   Length: 60 minutes

   > **Start the training:**
   > Employee link: Grow@Lenovo
   > Partner link: Lenovo 360 Learning Center

   Course code: JUN0625

6. **Family Portfolio: ThinkAgile Systems**
   2025-04-30 | 45 minutes | Employees and Partners

   This course covers the foundational components of the ThinkAgile family, including server configurations, key system differences, and the unique features of the HX, MX, and VX product families.
   By the end of this course, you should be able to:
   •List the ThinkSystem and ThinkEdge servers that the ThinkAgile family is based on
   •Explain the difference between Certified Nodes and Integrated Systems
   •List two features each of the HX, MX, and VX families

   Tags: ThinkAgile, ThinkSystem

   Published: 2025-04-30
   Length: 45 minutes

   > **Start the training:**
   > Employee link: Grow@Lenovo
   > Partner link: Lenovo 360 Learning Center

   Course code: SXSW2150r2

7. **Partner Technical Webinar - Storage Announcements**
   2025-04-29 | 60 minutes | Employees and Partners

   In this 60-minute replay, the April 23 Storage Announcement was presented. Adam Mandelbloom, Lenovo Technical Marketing Manager, presented the ThinkAgile announcements. Next, Roger Yarosh, Senior Storage Product Manager, presented the DG and DM announcements.

   Tags: Data Management, ThinkAgile

   Published: 2025-04-29
   Length: 60 minutes

   > **Start the training:**
   > Employee link: Grow@Lenovo
   > Partner link: Lenovo 360 Learning Center

   Course code: 042525

8. **Azure Local 101**
   2025-04-14 | 60 minutes | Employees and Partners

   In this 60-minute replay, Amit Kulkarni, Lenovo WW Azure Local / ThinkAgileMX Product Manager presented the basics of Azure Local. Amit reviewed Azure Local, licensing options and ThinkAgile MX models. Aaron Rothfuss NA Microsoft Product Manager contributed with recent uses cases for Azure Local.

   Tags: Microsoft, ThinkAgile

   Published: 2025-04-14
   Length: 60 minutes

   > **Start the training:**
   > Employee link: Grow@Lenovo
   > Partner link: Lenovo 360 Learning Center

   Course code: 041125

9. **Think AI Weekly: Simplifying AI Deployments with ThinkAgile**
   2025-04-11 | 54 minutes | Employees Only

   Please view this session to hear Adam Mandelbloom, Technical Marketing Manager for ISG explain these topics:

   -Overall value proposition of ThinkAgile in AI solutions
   -Use cases for ThinkAgile HX
   -Use cases for ThinkAgile VX and MX

   Tags: Artificial Intelligence (AI), ThinkAgile

   Published: 2025-04-11
   Length: 54 minutes

   > **Start the training:**
   > Employee link: Grow@Lenovo

   Course code: DTAIW137

10. **Lenovo VTT Cloud Architecture Session Lenovo ThinkAgile MX using Acuutech ScopeSys Sizing Tool**
2025-02-21 | 60 minutes | Employees Only

Complex clustered system design and ordering in seconds, not days with ScopeSys.

Are you finding designing Azure Local (Azure Stack HCI) and Windows Server solutions complicated? Taking hours or even days to work out the correct server specifications, networking and services required to meet your customer needs? With ScopeSys from Acuutech, go from customer requirements to full solution design and ordering in seconds.

Learn how ScopeSys from Acuutech, makes designing complex Azure Local and clustered Windows Server solution simple, from simple edge scenarios to large datacenter replacements, including multi-site topologies.
With a workload and requirements centric approach, design based on what your clients are using; VM, Kubernetes, VDI and GPU accelerated workloads, moving beyond traditional hardware component-based design.

Join Philip Moss, Acuutech Chief Product Officer, for this 90-minute, interactive session with live demos and Q&A, where he will demonstrate how easy it is to design both simple and complex solutions with ease. Even better, come armed with some of your active opportunities and we can build the correct solution for your next client together.

Tags: Cloud, Microsoft, Sales Tools, Technical Sales, ThinkAgile

Published: 2025-02-21
Length: 60 minutes

Start the training:
Employee link: Grow@Lenovo

Course code: DVCLD219

11. **Lenovo Cloud Architecture VTT: Azure Migrate for migrating VMware VMs to Azure Local instance based on Lenovo MX**
2025-01-29 | 70 minutes | Employees Only

Now customers can use the Azure Migrate platform to move on-premises VMware VMs to Azure Local instance based on Lenovo MX.
Azure Migrate is a central hub for tools to discover, assess, and migrate on-premises servers, apps, and data to the Microsoft Azure cloud. Azure Local (previously Azure Stack HCI) is a hyperconverged infrastructure system solution that hosts virtualized Windows and Linux workloads in a hybrid environment, on premise on Lenovo ThinkAgile MX.

Please join Per Ljungstrom, Lenovo Principal TC, EMEA for this informative webinar.

Tags: Cloud, Microsoft, Technical Sales, Technology solutions, ThinkAgile

Published: 2025-01-29
Length: 70 minutes

Start the training:
Employee link: Grow@Lenovo

Course code: DVCLD218

12. **Selling On Prem Value - Private Cloud and Private AI**
2024-12-13 | 40 minutes | Employees Only

This course provides Lenovo Sellers with a series of five videos that are designed to help you better articulate our joint value in the Private Cloud and Private AI solution opportunity. After completing this course, Lenovo Sellers should be prepared to elevate customer discussions by transitioning from product features to explaining value-driven benefits, enabling a deeper understanding of the strategic impact for their business.

Tags: Artificial Intelligence (AI), Industry solutions, Technology solutions, ThinkAgile, VMware

Published: 2024-12-13
Length: 40 minutes

> **Start the training:**
> Employee link: Grow@Lenovo

Course code: DVMB101

13. **Lenovo Client Virtualization Solution Options and Concept**
2024-12-10 | 30 minutes | Employees and Partners

This 30-minute e-learning is designed to give Lenovo technical, general sellers and partners detailed information about the LCV solution options and best practices to ensure alignment with the customer on the solution concept.

Tags: Client Virtualization, Microsoft, Storage, ThinkAgile, ThinkSystem, VMware

Published: 2024-12-10
Length: 30 minutes

> **Start the training:**
> Employee link: Grow@Lenovo
> Partner link: Lenovo 360 Learning Center

Course code: DCV234r4

14. **Partner Technical Webinar - Overview - Azure Stack HCI**
2024-11-19 | 60 minutes | Employees and Partners

November 15, 2024 – In this 60-minute webinar Aaron Rothfuss, and Philip Moss from Acuutech share the positioning of Azure Stack HCI, Azure Migrate, and Acuutech SCOPSIS.

Tags: Microsoft, ThinkAgile

Published: 2024-11-19
Length: 60 minutes

> **Start the training:**
> Employee link: Grow@Lenovo
> Partner link: Lenovo 360 Learning Center

Course code: 111524

15. **Partner Technical Webinar - Data Center 101 - Why HCI? Why 3-tier?**
2024-11-14 | 60 minutes | Employees and Partners

October 11, 2024 – In this 60-minute webinar Alex Docherty, Channel Technical Strategist, discussed When to HCI vs 3 Tier.

Tags: ThinkAgile, ThinkSystem

Published: 2024-11-14
Length: 60 minutes

> **Start the training:**
> Employee link: Grow@Lenovo
> Partner link: Lenovo 360 Learning Center

Course code: 101124

16. **ThinkAgile Solutions for AI - Security and Compliance Considerations**
2024-10-01 | 15 minutes | Employees and Partners

This course, tailored specifically for Lenovo and its partner technical sellers, is designed to equip participants with essential knowledge and skills to effectively assess security measures and address compliance considerations for ThinkAgile Solutions for AI.

Upon completion of this training, you will be able to:
• Describee security features of ThinkAgile for AI data protection.
• Explain how to mitigate risk and address compliance considerations in AI deployments.

Last Updated: September 2024

Tags: Artificial Intelligence (AI), High-Performance Computing (HPC), ThinkAgile

Published: 2024-10-01
Length: 15 minutes

> **Start the training:**
> Employee link: Grow@Lenovo
> Partner link: Lenovo 360 Learning Center

Course code: DCLDAI203

17. **Integration of ThinkAgile and AI**
    2024-09-11 | 25 minutes | Employees and Partners

    Designed specifically for Lenovo and its partner technical sellers, this course aims to equip you with the knowledge and skills to effectively communicate the integration of ThinkAgile Solutions and AI.

    Upon completion of this training, you will be able to:
    •Highlight the advantages of using ThinkAgile for AI workloads
    •Explore how ThinkAgile platforms are specifically optimized for AI

    Last Updated: September 2024

    Tags: Artificial Intelligence (AI), ThinkAgile

    Published: 2024-09-11
    Length: 25 minutes

    Start the training:
    Employee link: Grow@Lenovo
    Partner link: Lenovo 360 Learning Center

    Course code: DCLDAI204

18. **Key Features of Lenovo ThinkAgile Solutions for AI**
    2024-09-10 | 15 minutes | Employees and Partners

    Designed specifically for Lenovo and its partner technical sellers, this course aims to equip you with the knowledge and skills to effectively communicate the key features of ThinkAgile Solutions for AI. By completing this course, you'll be better prepared to understand customer needs and present the most suitable AI solutions, ensuring successful engagements and driving value for your clients.

    In this course, you will learn how to:
    • Present compute capabilities for AI processing
    • Articulate optimized storage solutions with ThinkAgile for high-speed AI performance
    • Identify essential networking considerations for ThinkAgile AI workloads
    • Present ThinkAgile AI Ready solutions

    Last Updated: September 2024

    Tags: Artificial Intelligence (AI), ThinkAgile

    Published: 2024-09-10
    Length: 15 minutes

    Start the training:
    Employee link: Grow@Lenovo
    Partner link: Lenovo 360 Learning Center

    Course code: DCLDAI201

19. **ThinkAgile Solutions for AI - Sales Strategies and Messaging**
2024-09-06 | 15 minutes | Employees and Partners

This course is designed exclusively for Lenovo and its partner technical sales teams, with the goal of empowering you with the knowledge and strategies necessary to effectively engage customers in conversations about ThinkAgile Solutions for AI.

In this course, you'll learn how to:
• Identify customer pain points.
• Recommend ThinkAgile Solutions for AI tailored to those needs. And lastly,
• Communicate the benefits of ThinkAgile for AI to key stakeholders.

Last Updated: September 2024

Tags: Artificial Intelligence (AI), ThinkAgile

Published: 2024-09-06
Length: 15 minutes

Start the training:
Employee link: Grow@Lenovo
Partner link: Lenovo 360 Learning Center

Course code: DCLDAI202

20. **Position Lenovo ThinkAgile Solutions for AI**
2024-08-19 | 10 minutes | Employees and Partners

Designed specifically for Lenovo and partner technical sellers, this course aims to equip you with the knowledge and skills necessary to effectively evaluate and position ThinkAgile Solutions for AI to your customers. By completing this course, you will be better prepared to understand customer needs and present the most suitable AI solutions, ensuring successful engagements and driving value for your clients.

In this course, you will learn how to position ThinkAgile Solutions for AI to your customers by:
•Evaluating the key challenges in the enterprise landscape
•Advocating the value proposition of ThinkAgile Hyper-Converged Infrastructure
•Exploring use cases of ThinkAgile in AI environments
•Implementing ThinkAgile-based AI deployments

Tags: Artificial Intelligence (AI), ThinkAgile

Published: 2024-08-19
Length: 10 minutes

Start the training:
Employee link: Grow@Lenovo
Partner link: Lenovo 360 Learning Center

Course code: DCLDAI200

21. **Partner Technical Webinar - Latest on Azure Stack HCI and ThinkAgile MX**
2024-07-01 | 60 minutes | Employees and Partners

In this 60-minute replay, Phil Searles discussed the Thinkagile MX455 and delivered a REPEAT to the very popular Azure Shack HCI. Phil and Amit also shared some announcements such as the ThinkAgile MX450/5, Premier, and OEM skus.

Tags: Advanced DataCenter, Cloud, Microsoft, Software Defined Infrastruture (SDI), ThinkAgile

Published: 2024-07-01
Length: 60 minutes

> **Start the training:**
> Employee link: Grow@Lenovo
> Partner link: Lenovo 360 Learning Center

Course code: 06282024

22. **ThinkAgile Roadshow for Account Managers**
2024-06-21 | 60 minutes | Employees Only

As customers transition through technology refresh and modernize their IT, learn how to win and position ThinkAgile portfolio. Get an overview of current ThinkAgile momentum and strategy along with best practices in product positioning

Tags: Artificial Intelligence (AI), Cloud, Microsoft, Nutanix, ThinkAgile, VMware

Published: 2024-06-21
Length: 60 minutes

> **Start the training:**
> Employee link: Grow@Lenovo

Course code: DTAO101

23. **VTT Cloud Architecture: NVIDIA Using Cloud for GPUs and AI**
2024-05-22 | 60 minutes | Employees Only

Join JD Dupont, NVIDIA Head of Americas Sales, Lenovo partnership and Veer Mehta, NVIDIA Solution Architect on an interactive discussion about cloud to edge, designing cloud Solutions with NVIDIA GPUs and minimizing private\hybrid cloud OPEX with GPUs. Discover how you can use what is done at big public cloud providers for your customers. We will also walk through use cases and see a demo you can use to help your customers.

Tags: Artificial Intelligence (AI), Cloud, Nvidia, Software Defined Infrastruture (SDI), Technical Sales

Published: 2024-05-22
Length: 60 minutes

> **Start the training:**
> Employee link: Grow@Lenovo

Course code: DVCLD212

24. **Start the Conversation - Lenovo Cloud Strategy**
2024-05-20 | 25 minutes | Employees and Partners

The purpose of this course is to help sellers use the Lenovo cloud strategy as a foundation to start the customer cloud conversation.

Course Objectives:
•Understand why customers choose the cloud
•Describe the Lenovo Cloud Strategy
•Be able to start the customer cloud conversation

Tags: Cloud, Technology solutions

Published: 2024-05-20
Length: 25 minutes

> **Start the training:**
> Employee link: Grow@Lenovo
> Partner link: Lenovo 360 Learning Center

Course code: DCLDS103r3

25. **VTT Cloud and Edge Architecture: Principal Consultant Overview**
2024-04-10 | 50 minutes | Employees Only

Join Ruth Miller, Lenovo Principal Consultant, SSG Services for a data-led discussions to examine in detail customer IT environments, highlighting pain points, performance issues, edge and hybrid cloud strategy and carbon reduction capability.
Examples of workshop deliverables and outcomes will be discussed to illustrate the value of early engagement and discovery.

Tags: Cloud, Services, Sustainability, Technology solutions, TruScale Infrastructure as a Service

Published: 2024-04-10
Length: 50 minutes

> **Start the training:**
> Employee link: Grow@Lenovo

Course code: DVCLD211

26. **VTT Data Management How to sell storage - April 2024**
    2024-04-10 | 60 minutes | Employees and Partners

    In this course, you will know:

    - Why do we sell storage?
    - What are the basics you need to get an opportunity rolling?
    - Why Lenovo for Storage?
    - What is happening in the market today?
    - How to determine traction?

    Tags: Data Management, Storage

    Published: 2024-04-10
    Length: 60 minutes

    > **Start the training:**
    > Employee link: Grow@Lenovo
    > Partner link: Lenovo 360 Learning Center

    Course code: DVDAT209

27. **Technical Overview: ThinkAgile HCI and Cloud Platforms**
    2024-03-07 | 35 minutes | Employees and Partners

    This course is designed to give Lenovo sales and partner representatives a technical overview of Lenovo's ThinkAgile hyperconverged infrastructure and cloud platforms. Turnkey cloud platforms along with their architectural makeup, and container and data protection solutions are also covered.

    Learning Objectives:

    •Describe Lenovo's ThinkAgile hyperconverged infrastructure and cloud platforms
    •Explain do-it-yourself and turnkey cloud platforms along with their architectural makeup
    •Describe container and data protection solutions

    Tags: Architecture, Engineering & Construction, Cloud, Technical Sales, ThinkAgile

    Published: 2024-03-07
    Length: 35 minutes

    > **Start the training:**
    > Employee link: Grow@Lenovo
    > Partner link: Lenovo 360 Learning Center

    Course code: DCLDT2001r3

28. **Family Introduction: Converged and Hyperconverged**
2024-01-25 | 15 minutes | Employees and Partners

This course is designed to give Lenovo sales a foundation on the characteristics of the Converged and Hyperconverged family. As an introduction to each family, this course also includes positioning, when to use a family and product, and keywords a client may use when discussing a converged or hyperconverged product.
Objectives:
•Family characteristics
•Priority positioning
•Product usage
•Key words and phrases

Tags: Sales, Storage

Published: 2024-01-25
Length: 15 minutes

Start the training:
Employee link: Grow@Lenovo
Partner link: Lenovo 360 Learning Center

Course code: SXSW1101r2

29. **Lenovo Azure Stack Solutions Overview**
2023-11-02 | 15 minutes | Employees and Partners

In this course, Eric Mills presents the new Microsoft Azure Stack family and Lenovo ThinkAgile MX server, offering detailed information on Hub and Edge.

Upon completion of this training, you will be able to:
• List the solutions of the Microsoft Azure Stack family
• Name the Lenovo hardware for Microsoft Azure Stack family

Tags: Cloud, Microsoft, ThinkAgile

Published: 2023-11-02
Length: 15 minutes

Start the training:
Employee link: Grow@Lenovo
Partner link: Lenovo 360 Learning Center

Course code: DMXF100

30. **Lenovo Azure Stack HCI Solution Overview**
2023-11-02 | 27 minutes | Employees and Partners

In this course, watch Phillip Moss define the Microsoft Azure HCI solution. He walks your though the technologies the HCI solution is built on and the business value it can bring to your customers.

Upon completion of this training, you will be able to:
• Identify the core features of Azure Stack HCI
• Identify the key benefits of an Azure Stack HCI solution
• Describe Storage Spaces Direct and it's key features

Tags: Cloud, Microsoft, Server, ThinkAgile

Published: 2023-11-02
Length: 27 minutes

> **Start the training:**
> Employee link: Grow@Lenovo
> Partner link: Lenovo 360 Learning Center

Course code: DMXF101

31. **Azure Stack HCI Solution Selling Tips**
2023-11-01 | 8 minutes | Employees and Partners

In this course Eric Mills provides useful selling tips for the ThinkAgile MX solution with Azure Stack HCI.

Tags: Microsoft, ThinkAgile

Published: 2023-11-01
Length: 8 minutes

> **Start the training:**
> Employee link: Grow@Lenovo
> Partner link: Lenovo 360 Learning Center

Course code: DMXF107

32. **Azure Stack HCI Licensing**
2023-10-30 | 8 minutes | Employees and Partners

In this course, Phillip Moss and Eric Mills discuss the licensing for the Azure Stack HCI solution.

Tags: Microsoft, ThinkAgile

Published: 2023-10-30
Length: 8 minutes

> **Start the training:**
> Employee link: Grow@Lenovo
> Partner link: Lenovo 360 Learning Center

Course code: DMXF105

33. **Azure Stack HCI Core Components and Features**
2023-10-30 | 15 minutes | Employees and Partners

In this course, Phillip Moss, with an assist from Cosmos Darwin discuss the core components and features of the Azure Stack HCI solution. The course further details each of the components, features and the role it plays in the HCI.

Tags: Microsoft, ThinkAgile

Published: 2023-10-30
Length: 15 minutes

Start the training:
Employee link: Grow@Lenovo
Partner link: Lenovo 360 Learning Center

Course code: DMXF103

34. **Azure Stack HCI Management**
2023-10-30 | 16 minutes | Employees and Partners

In this course, Phillip Moss, Eric Mills and Cosmo Darwin take turns discussing the number of available options to manage the Microsoft Azure HCI solution. The course briefly discusses each of the management platforms and how each is used to manage the HCI solution and its integration with Lenovo's XClarity hardware management.

Tags: Microsoft, ThinkAgile

Published: 2023-10-30
Length: 16 minutes

Start the training:
Employee link: Grow@Lenovo
Partner link: Lenovo 360 Learning Center

Course code: DMXF102

35. **ThinkAgile Accelerating Cloud Agility: MX Series Technical Presentation**
2023-07-28 | 45 minutes | Employees and Partners

Amalu Santhosh, Lenovo Technical Product Manager, reviews the ThinkAgile MX product portfolio and SXM. She will walk you through a technical deep dive into MX and SXM workloads and discuss technical details and performance of the latest ThinkAgile MX and SXM solutions.

Tags: ThinkAgile

Published: 2023-07-28
Length: 45 minutes

Start the training:
Employee link: Grow@Lenovo
Partner link: Lenovo 360 Learning Center

Course code: DMXT201

36. **Cloud and HCI or Somewhere in Between**
    2023-07-11 | 40 minutes | Employees and Partners

    Provides a brief overview of Lenovo Portfolio for HCI and Cloud including ThinkAgile HX, VX, MX Certified Nodes and Appliances, Azure, and Engineered Cloud Solutions. Review Scenarios and complete questions "choose your own adventure" to identify and qualify an opportunity as HCI or Cloud and which portfolio solution would be the best option.

    Course objectives:
    •Where in the Sales Cycle we are
    •What is Cloud
    •What is Hyperconverged Infrastructure (HCI)
    •Review Lenovo Offerings in Cloud and HCI
    •Scenarios

    Tags: Cloud

    Published: 2023-07-11
    Length: 40 minutes

    > **Start the training:**
    > Employee link: Grow@Lenovo
    > Partner link: Lenovo 360 Learning Center

    Course code: DCLDS104r2

Related publications and links

For more information, see these resources:

- Lenovo ThinkAgile MX Certified Node product page
  https://www.lenovo.com/us/en/data-center/software-defined-infrastructure/ThinkAgile-MX-Certified-Node/p/WMD00000377
- Lenovo Data Center Solution Configurator (DCSC):
  https://dcsc.lenovo.com
- Microsoft Azure Local documentation
  https://docs.microsoft.com/en-us/azure-stack/hci/overview
- Lenovo ThinkAgile MX Best Recipes
  https://datacentersupport.lenovo.com/us/en/solutions/ht507406
- Lenovo ThinkAgile MX Information Center
  https://thinkagile.lenovofiles.com/help/topic/com.lenovo.thinkagile.7Z20.doc/mx_appliances.html?cp=3
- Lenovo Certified Configurations for Microsoft Azure Local (S2D)
  https://lenovopress.com/lp0866
- Lenovo Data Center Support
  https://datacentersupport.lenovo.com

Related product families

Product families related to this document are the following:

- Edge Servers
- Hyperconverged Infrastructure
- Microsoft Alliance
- ThinkAgile MX Series for Microsoft Azure Local

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