



ThinkAgile HX360 V2 Edge

Product Guide

The ThinkAgile HX360 V2 Edge is designed for deploying highly available, hyperconverged infrastructure (HCI) from Nutanix on purpose-built Lenovo edge servers in the remote offices/branch offices (ROBO) and at the edge. It is half the width and significantly shorter than a traditional server, making it ideal for deployment in tight spaces. It can be mounted on a wall, stacked on a shelf or mounted in a rack. The ThinkAgile HX360 V2 Edge Solution delivers fully validated and integrated Lenovo hardware and firmware that is certified for Nutanix. The ThinkAgile HX360 V2 Edge puts increased processing power, storage and network closer to where data is generated, allowing actions resulting from the analysis of that data to take place more quickly. Nutanix brings the benefits of web-scale technologies to enterprise applications through enterprise storage, data protection, infrastructure resilience, management and analytics, and security.

Suggested uses: edge computing (IoT, AI, machine learning), retail, healthcare, finance, video security, telecommunications, manufacturing, distribution



Figure 1. ThinkAgile HX360 V2 Edge

Did you know?

Customers looking for computing solutions at the edge of their networks often have to compromise -- to use either datacenter-class equipment which is too large and power hungry, or PC based equipment which can't run their enterprise level applications. The ThinkAgile HX360 V2 Edge fits the space between those two extremes. Its compact design, low power usage, and high performance are just the right combination for edge locations. The ThinkAgile HX360 V2 Edge can be wall mounted, stacked on a shelf or installed in a rack. It is also designed to operate in rugged environments, up to 45°C.

Key features

The ThinkAgile HX360 V2 Edge is a purpose-built server that is half the width and significantly shorter than a traditional server, making it ideal for deployment in tight spaces. The small footprint with integrated AC/DC can be mounted on a wall, ceiling, in a rack or placed on a desk.

The ThinkAgile HX360 V2 Edge puts increased processing power, storage and network closer to where data is generated, allowing actions resulting from the analysis of that data to take place more quickly. The server has wired connections for 1GbE, and 10GbE/25GbE.

Since these edge servers are typically deployed outside of secure data centers, they include technology that encrypts the data stored on the device if it is tampered with, only enabling authorized users to access it.

The ThinkAgile HX360 V2 Edge offer the following key features

- Built on a proven and reliable Lenovo ThinkEdge server purpose-built server that is half the width and significantly shorter than a traditional server, making it ideal for deployment in tight spaces. It can be mounted on a wall, stacked on a shelf or mounted in a rack.
- Deliver fully validated and integrated hardware and firmware that is certified with Nutanix software.
- Preloaded with Nutanix software and ready for out-of-box deployment (software licenses are not included).
- Provides comprehensive hardware management with advanced systems management capabilities with XClarity.
- Provide flexibility in using the existing Nutanix term-based software licenses and active support contracts or purchasing new software licenses and support contracts from Nutanix.
- GPU support to enable AI inferencing and data visualization scenarios, virtual desktops and graphics intensive applications.
- Offer optional Lenovo Professional Services to get customers up and running quickly

The Nutanix software running on the ThinkAgile HX360 V2 Edge delivers the following key features:

- A natively integrated solution for data protection and continuous availability at VM granularity that gives administrators an affordable range of options to meet the recovery point objectives (RPO) and recovery time objectives (RTO) for different applications.
- A fault resistant platform, with no single point of failure and no bottlenecks with shared-nothing architecture, where all data, metadata and services are distributed to all nodes within the cluster, that is built to detect, isolate and recover from failures anywhere in the system.
- An intuitive user-centric management experience to simplify every aspect of the IT infrastructure lifecycle and provide a single pane of glass to monitor and control Nutanix clusters, with simplified workflows and rich automation for common administrative tasks.
- Powerful security features, such as two-factor authentication and data-at-rest encryption, with a security development lifecycle that is integrated into product development to help customers meet the most stringent security requirements.

Scalability and performance

The ThinkAgile HX360 V2 Edge offers numerous features to boost performance, improve scalability and reduce costs:

- Support a single processor from the Intel Xeon D Processor family. Supports processors up to 16 cores, core speeds of up to 2.1 GHz, and TDP ratings of up to 100W.
- Intelligent and adaptive system performance with Intel Turbo Boost Technology 2.0 allows processor cores to run at maximum speeds during peak workloads by temporarily going beyond processor TDP.
- Intel Hyper-Threading Technology boosts performance for multithreaded applications by enabling simultaneous multithreading within each processor core, up to two threads per core.
- Intel Virtualization Technology integrates hardware-level virtualization hooks that allow operating system vendors to better use the hardware for virtualization workloads.
- Support for up to 4 TruDDR4 memory DIMMs and up to 256 GB of memory using 64 GB DIMMs.
- Up to 8 M.2 data drives -- NVMe -- provide efficient and rugged storage for edge workloads.
- Supports 2 M.2 NVMe drives for OS boot and applications, allowing the convenience of separating application code from the hypervisor.
- The use of NVMe drives increased performance over SATA drives, in terms of throughput, bandwidth, and latency.
- 10GbE/25GbE SFP28 I/O board to support low and high-speed networking to back-end servers.
- One PCIe 4.0 x16 slot for a GPU in the 4 NVMe drive configuration.
- Support for the NVIDIA A2 or NVIDIA L4 for enhanced AI workloads at the edge of your network.

Availability and serviceability

The ThinkAgile HX360 V2 Edge provides many features to simplify serviceability and increase system uptime:

- Supports remote management, including remote control functions down to the UEFI level (most models) makes managing the edge servers easy even without onsite IT personnel.
- ECC memory and memory RAS features including Single Device Data Correction (SDDC, also known as Chipkill)
- RAID redundancy for greater system uptime.
- Remote management can be performed by using wireless connectivity.
- Built-in XClarity Controller 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 collects and saves service data to USB key drive or remote CIFS share folder, for troubleshooting and to reduce service time.
- Auto restart in the event of a loss of AC power
- Support for the XClarity Administrator Mobile app running on a supported smartphone and connected to the server through the service-enabled USB port, enables additional local systems management functions.

- Three-year customer-replaceable unit and onsite limited warranty, 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 HX360 V2 Edge:

- The server includes XClarity Controller 2 (XCC2) to monitor server availability. Included upgrade to XCC Platinum to provide remote control (keyboard video mouse) functions, support for the mounting of remote media files (ISO and IMG image files), boot capture, power capping and new XCC2 Platinum features. New XCC2 Platinum features include System Guard, new security modes including a CNSA-compliant mode, FIPS 140-3 and NIST 800-193 support, and a new Neighbor Group feature.
- 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 HX360 V2 Edge 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 HX360 V2 Edge in an easy to use Web UI.
- New 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.
- Integrated Trusted Platform Module (TPM) 2.0 support enables advanced cryptographic methods, such as digital signatures and remote attestation.
- Industry-standard Advanced Encryption Standard (AES) NI support for faster, stronger encryption.
- Intel Execute Disable Bit functionality can prevent certain classes of malicious buffer overflow attacks when combined with a supported operating system.

Components and connectors

The ports on the front of the ThinkAgile HX360 V2 Edge system depend on which network module is installed. The following figure shows server with the 10/25GbE SFP28 network module installed.

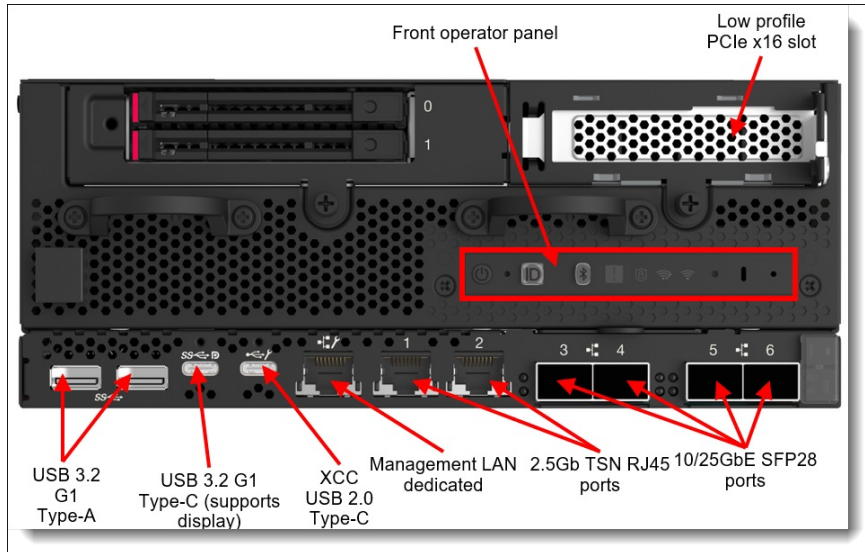


Figure 2. Front view of the ThinkAgile HX360 V2 Edge server with 10/25GbE network module

The following figure shows the rear of the ThinkAgile HX360 V2 Edgesystem.

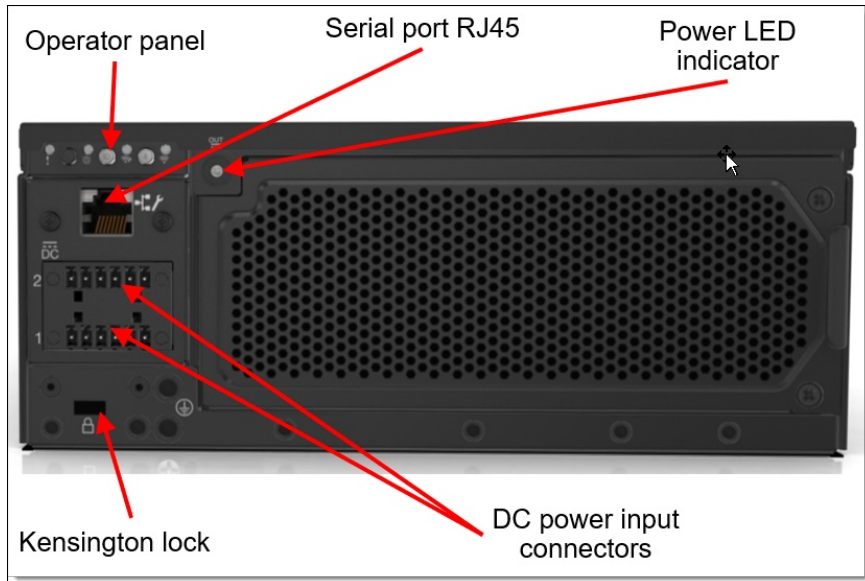


Figure 3. Rear view of the ThinkAgile HX360 V2 Edge

The following figure shows the locations of key components inside the server.

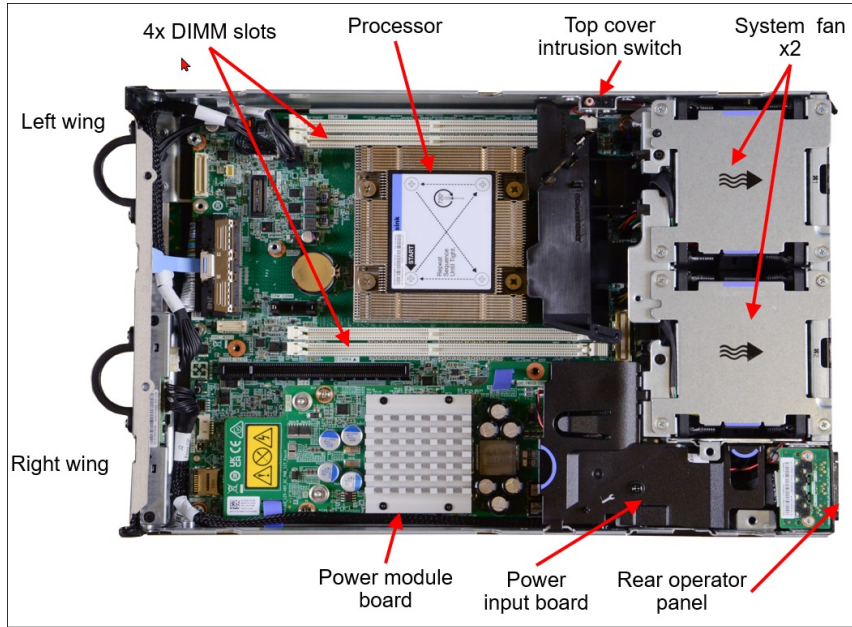


Figure 4. Internal view of the ThinkAgile HX360 V2 Edge

System architecture

The following figure shows the architectural block diagram of the ThinkAgile HX360 V2 Edge system, showing the major components and connections.

Tip: The wrench icons show where the local and remote management functions are enabled

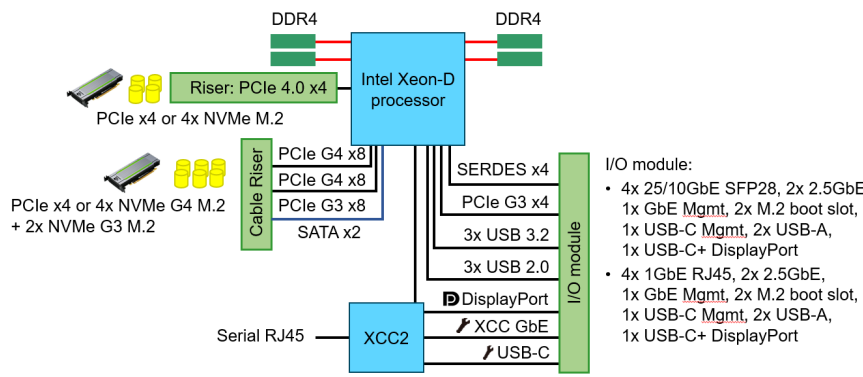


Figure 5. ThinkAgile HX360 V2 Edge system board - architectural block diagram

The system board connects to a network module which provides all wired connections. One network module is offered, 25G/10G IO Board Module. The block diagrams are shown in the following figures. All wired connections are at the front of the server.

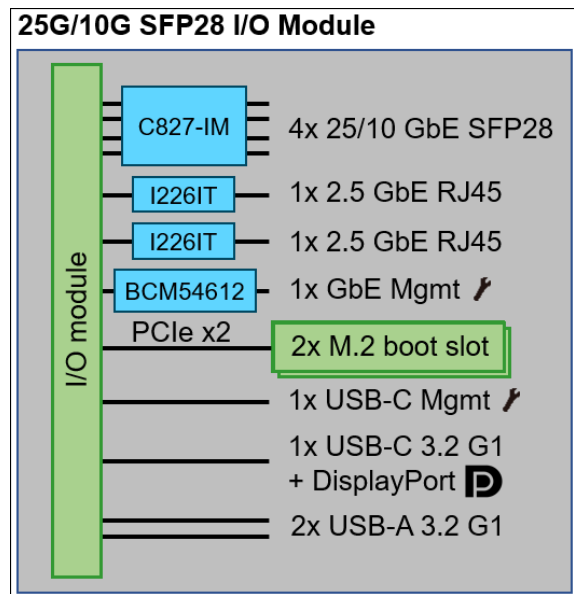


Figure 6. ThinkAgile HX360 V2 Edge network module - architectural block diagrams

Standard specifications

The following table lists the standard specifications.

Table 1. Standard specifications

Components	Specification
Machine types	7DJJ- ThinkAgile HX360 V2 Edge - 3 year warranty 7DJ7 - ThinkAgile HX360 V2 Edge 2U2N Enclosure - 3 year warranty
Form factor	Edge system, 2U high.
Processor	One Intel Xeon D-2700 Series processor (formerly codenamed "Icelake D"). Supports processors up to 16 cores, core speeds of up to 2.1 GHz, and TDP ratings of up to 100W. Processor is soldered onto system board.
Memory	4 DIMM slots. The processor has 4 memory channels, with 1 DIMM per channel. Lenovo TruDDR4 DIMMs operating at 3200 MHz. RDIMMs are supported
Memory maximum	Up to 256GB with 4x 64GB RDIMMs
Memory protection	ECC, SDDC (for x4-based memory DIMMs)
Drive bays	Internal drives for Data drive: •Up to 8x 22110 NVMe M.2 drives Internal drives for OS boot: •I/O module supporting up to two 2280 NVMe M.2 drives
Maximum data storage	15.36 TB using 8x 1.92TB M.2 NVMe SSD drives. *
Storage controller	<ul style="list-style-type: none"> Boot drives: <ul style="list-style-type: none"> Onboard NVMe controller supporting RAID 1 (with Intel VROC RAID support)
Network interfaces	<ul style="list-style-type: none"> 25G/10G IO board: 4x 10 / 25GbE SFP, 2x 2.5GbE RJ45, dedicated port for remote management. The PCIe 4.0 x16 slot can also be used for an additional network card if desired
PCI Expansion slots	Up to one PCIe 4.0 x16 slot: <ul style="list-style-type: none"> One full height half length
GPU adapters	One NVIDIA A2 or L4 GPU
Ports	Front: 2x USB 3.2 Gen 1 (5 Gbps) Type-A ports, 1x USB 3.2 Gen 1 (5 Gbps) Type-C, 1x USB 2.0 Type-C connector Rear: 1x RJ-45 serial port
Cooling	Two non hot-swap 80mm FANs, N+1 redundant in most configurations.
Power supply	AC-DC converter embedded: <ul style="list-style-type: none"> Internal AC Power Supply (230V/115V) (0°C to 55°C)
Video	Embedded graphics with 16 MB memory with 2D hardware accelerator, integrated into the XClarity Controller 2 management controller. Maximum resolution is 1920x1200 32bpp at 60Hz.
Systems management	Operator panel with status LEDs. Dedicated ports for local management (USB type-C for use with mobile app) and remote management (RJ45 Ethernet ports). XClarity Controller 2 (XCC2) embedded management controller, XClarity Administrator centralized infrastructure delivery, XClarity Integrator plugins, and XClarity Energy Manager centralized server power management. Optional XClarity Controller Advanced to enable remote control functions. ThinkShield Edge Mobile Management mobile app and XClarity Mobile app for local onsite ThinkAgile HX360 V2 Edge server management.
Security features	ThinkShield Key Vault Portal web site for security management. Front locking bezel (optional), Kensington cable slot with intelligent lock position switch, motion detection, intrusion detection (optional), self-encrypting drive (SED) support, power-on password, administrator's password. TPM 2.0 (WW) / TCM Nation Z (China only).
Software	Nutanix Acropolis Pro and Ultimate editions (licenses purchased separately from Nutanix).
Hypervisors	Nutanix AHV, VMware ESXi. See the Operating system support section for specifics.
Mounting options	Standalone, desktop mount, DIN Rail or Wall mount, ceiling mount and Standard Rack (2U2N).
Limited warranty	Three-year customer-replaceable unit and onsite limited warranty with 9x5 next business day (NBD).
Service and support	Optional service upgrades are available through Lenovo Services: 4-hour or 2-hour response time, 6-hour fix time, 1-year or 2-year warranty extension, software support for Lenovo hardware and some third-party applications.
Dimensions	Height 84.5 mm (3.33 in.), width: 212 mm (8.35 in.), depth: 317.5 mm (12.5 in.)
Weight	Max weight: 6.5kg (14.33 lbs) – without external AC adapter Max weight: 6.572kg (14.5 lbs) – with 2 external AC adapter

Note: *Planned Maximum for CY4Q2024 30.72TB using 8x 3.84TB M.2 NVMe SSD drives

Models

Factory-integrated models of the integrated systems and certified nodes are configured by using the Lenovo Data Center Solution Configurator (DCSC), <http://dcsc.lenovo.com>

During the configuration process, you are selecting one of the base Configure-to-Order (CTO) models first, and then you are adding components (processors, memory, drives, and network adapters) to the selected model according to the output from the Nutanix Sizer tool, <http://services.nutanix.com/>

To ensure that the controlled GPUs and accelerators are only sold in the supported markets, the following configure-to-order base machine-type models (CTO MTMs) are selectable in DCSC:

- **Standard Open models** are available in all markets worldwide. Controlled GPUs cannot be configured using these models. These are CTO1WW models.
- **GPU Controlled models** are used to order any of the controlled GPUs and accelerators. Controlled models are not available in affected markets. If you start from a controlled model, your configuration must include a controlled GPUs. These models are classified under US Government ECCN regulations and have limited market and customer availability

Note:

- For all models listed in the GPU **Controlled models** column, one of the controlled GPUs *must* be selected in the DCSC configurator. DCSC will display an error if you configuration does not include one of the controlled GPUs.
- You are required to engage a Lenovo representative in the project that includes the ThinkAgile HX Series Integrated Systems. ThinkAgile HX Certified Nodes do not have this requirement.

The following table lists the base CTO models.

Table 2. CTO base models

Server model	Standard Open models	GPU Controlled models
	These CTO models are available in all markets. Configurations based on these MTMs cannot include controlled GPUs.	These CTO models are not available in affected markets. Configurations based on these MTMs must include controlled GPUs.
ThinkAgile HX360 V2 Edge	7DJDCTO1WW	7DJDCTOAWW
ThinkAgile HX360 V2 Edge 2U2N Enclosure	7DJ7CTO2WW	

Configuration note: The ThinkAgile Enclosure is required for selection for mounting two ThinkAgile HX360 V2 Edge in a rack cabinet.

The ThinkAgile HX360 V2 Edge ship with the following items:

- Activation Flyer
- ISG IoT Compliance Booklet
- One or two AC power adapters
- One or two AC customer-selected power cables (per node)
- Slide Rail (if configured with the enclosure)
- Cable Management Arm (if configured with the enclosure)

Processors

The ThinkAgile HX360 V2 Edge supports processors in the Intel Xeon D-2700 family of processors (formerly codenamed "Icelake D"). The server supports one processor and the processor is soldered on the system board.

The table below lists the supported processors.

All supported processors have the following characteristics:

- AI capable: Intel AVX-512, VNNI, OpenVINO
- Intel Turbo Boost 3.1
- Intel Hyper-Threading Technology
- Intel Virtualization Technology (VT-c, VT-x, VT-d)
- Intel AES New Instructions
- Intel Trusted Execution Technology
- Converged Boot Guard (CBnT)
- Intel Software Guard Extensions (SGX)
- Intel Boot Guard
- Faster Boot with Slim Bootloader
- Time Coordinated Computing (TCC)

Part numbers: There are no part numbers for processors because there are no field upgrades supported.

Table 3.

Feature code*	Description
BS3W / BS41	ThinkEdge SE350 V2/SE360 V2 Planar with Intel Xeon D-2733NT 8C 80W 2.1 GHz
BS3Z / BS44	ThinkEdge SE360 V2 Planar with Intel Xeon D-2752TER 12C 77W 1.8 GHz**
BS3X / BS42	ThinkEdge SE350 V2/SE360 V2 Planar with Intel Xeon D-2775TE 16C 100W 2.0 GHz

* The second feature code is for CTO orders from NA and LA geographies, and for Brazil

**12C processor supports - 20C to 65C degree configuration. The other processors support 0C-55C degree configuration only

The following table lists the features of the supported processors.

Table 4. Processor specifications

Intel model	Cores / Threads	HT	TB	Base Frequency	Max Turbo Frequency	L3 Cache	Ethernet mode	Memory channels	Memory bus	TDP
D-2733NT	8	Y	Y	2.10 GHz	3.20 GHz	15 MB	50 G	4	2667 MHz	80 W
D-2752TER	12	Y	Y	1.80 GHz	2.80 GHz	20 MB	50 G	4	2933 MHz	77 W
D-2775TE	16	Y	Y	2.00 GHz	3.1 GHz	25 MB	100 G	4	2933 MHz	100 W

Note: 10/25GbE I/O module LAN speed depends on CPU ethernet mode, 4x 10GbE (max 50 G) or 4x 25GbE (max 100G)

Note: 20-core processor support: The processors listed here have up to 16 cores. The server also supports 20-core processors, however these are currently only available via special bid/CORE. Please contact your Lenovo sales representative.

Memory options

The server uses processors with 4 memory channels and supports 1 DIMM per channel, for a total of 4 DIMMs. The server supports up to 256GB of memory using 4x 64 GB RDIMMs.

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

Lenovo TruDDR4 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 TruDDR4 memory automatically assumes the system warranty, and Lenovo provides service and support worldwide.

Table 5. Supported memory options

Part number	Feature code	Description	Minimum supported	Maximum supported
RDIMMs				
4X77A08632	B963	ThinkSystem 16GB TruDDR4 3200 MHz (2Rx8 1.2V) RDIMM	4	4
4X77A08633	B964	ThinkSystem 32GB TruDDR4 3200 MHz (2Rx4 1.2V) RDIMM	2	4
4X77A83361	BS5C	ThinkSystem 32GB TruDDR4 3200 MHz (2Rx4 1.2V) RDIMM Extended Temperature	2	4
4X77A08634	B965	ThinkSystem 32GB TruDDR4 3200 MHz (2Rx8 1.2V) RDIMM	2	4
4X77A08635	B966	ThinkSystem 64GB TruDDR4 3200 MHz (2Rx4 1.2V) RDIMM	1	4

The following rules apply when selecting the memory configuration:

- DIMM installation sequence 1, 4, 2 & 3
- One DIMM per channel only
- Three DIMMs are not supported
- The server supports RDIMMs
- Mix of 2Rx4 and 2Rx8 based DIMMs across channels are not supported
- Mix of 16GB 2Rx8 & 32GB 2Rx8 across channels are supported
- Mix of 32GB 2Rx4 & 64GB 2Rx4 across channels are supported
- Memory mirroring and memory rank sparing are not supported
- Server supports Independent mode
- Rank sparing, ADDC, channel mirroring, hemisphere modes, and 2LM are not supported with Software Guard Extensions (SGX)
- Extended Temperature DIMM must selected with 12 Core MB
- Extended Temperature DIMM support -20C to 65C degree configuration while other DIMM support 0-55C only.
- ThinkSystem 32GB TruDDR4 3200 MHz (2Rx4 1.2V) RDIMM Extended Temperature not allow to mix with other DIMMs even across channel.
- ThinkSystem 32GB TruDDR4 3200 MHz (2Rx4 1.2V) RDIMM Extended Temperature must select with 12Core MB_CPU

The following memory protection technologies are supported:

- ECC detection/correction

I/O expansion

The ThinkAgile HX360 V2 Edge supports riser cage (or riser assembly) for I/O and storage.

The ThinkAgile HX360 V2 Edge has a riser cage that supply M.2 adapter or space for Geotracking. The following figure shows the location of the riser cage.

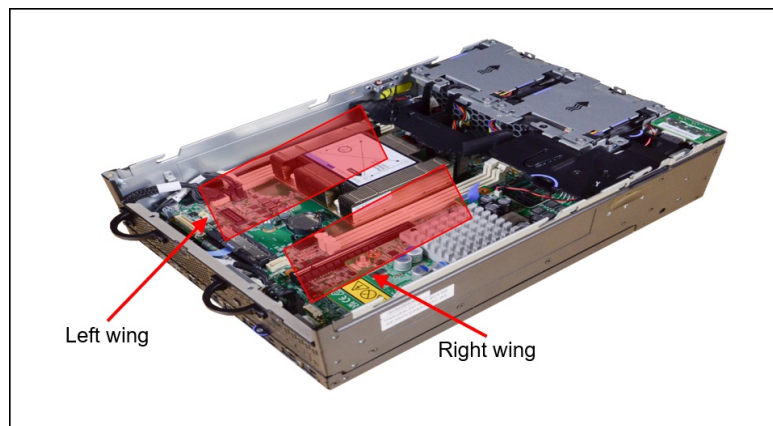


Figure 7. Location of riser cage ThinkAgile HX360 V2 Edge

The two halves of the riser, referred to as "wings", support M.2 data drive adapter depending on the riser. The left wing is on the left side and the right wing is on the right side as viewed from the front of the server. You must select a riser card in the server.

Table 6. ThinkAgile HX360 V2 Edge riser card selections

Part number	Feature code	Description	Maximum supported
4XF7A86292	BS5H	ThinkEdge SE360 V2 Riser Assembly (M.2 Riser)	1
4XF7A86291	BS5F	ThinkEdge SE360 V2 Riser Assembly (M.2 Riser + PCIe Riser)	1
4XF7A86289	BS5G	ThinkEdge SE360 V2 Riser Assembly (M.2 Riser + PCIe Riser) w/ Geotracking	1

The following are images of the supported riser cage

Figure 8. ThinkEdge SE360 V2 Riser Assembly (M.2 Riser) (feature BS5H)

Riser Assembly (M.2 Riser + PCIe Riser): The left wing offers a PCIe 4.0 x16 full high half length slot for supported adapters and right wing support up to 4x 2280/22110 NVMe M.2 drives.

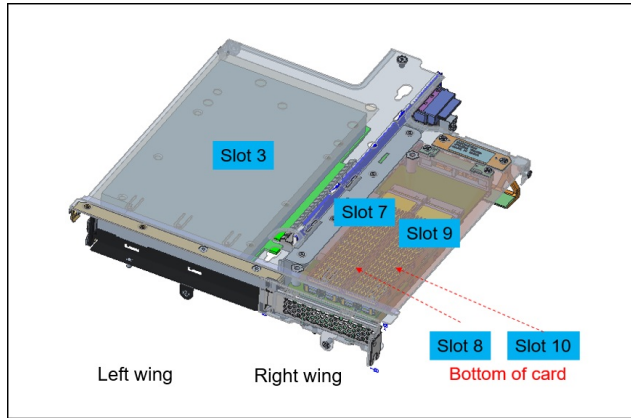


Figure 9. ThinkEdge SE360 V2 Riser Assembly (M.2 Riser + PCIe Riser) (feature BS5F)

Riser Assembly (M.2 Riser + PCIe Riser) w/ Geotracking: The left wing have space for Geotracking with one PCIe 4.0 x16 Low Profile slot for supported adapters and right wing support up to 4x 2280/22110 NVMe M.2 drives.

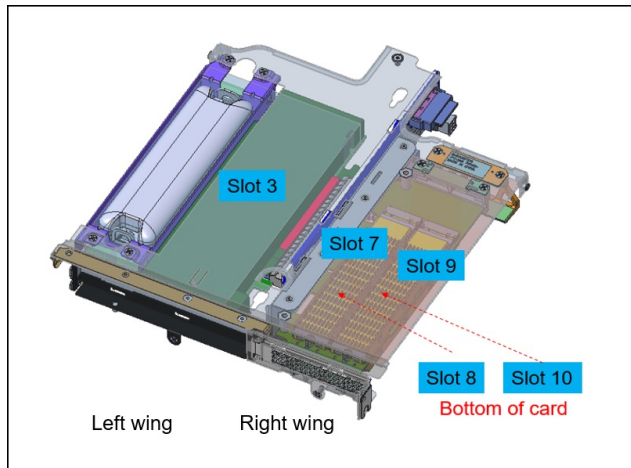


Figure 10. ThinkAgile HX360 V2 Edge Riser Assembly (M.2 Riser + PCIe Riser) w/ Geotracking (feature BS5G)

Internal storage

The internal storage of the ThinkAgile HX360 V2 Edge server is implemented as M.2 NVMe drives. The drives are defined as either boot drives or data drives, based on their intended use in the server.

Internal drives are as follows:

- Data drives are installed in left wing or right wing of riser cage and in bottom M.2 adapter. System can support up to 8x NVMe M.2 data drives total.
- Left wing: up to 4x M.2 PCIe 4.0 drives with M.2 adapter.
- Right wing: up to 4x M.2 PCIe 4.0 drives with M.2 adapter.

Note: Left wing and right wing M.2 adapter design use one M.2 holder to assembly M.2 SSD on top/bottom side, which means M.2 SSD length must be the same as 2280/22110 that assembled on one holder.

Boot drives are installed on I/O module with dedicated slot, either one or two 2280 NVMe M.2 drives are supported.

Controllers for internal storage

The ThinkAgile HX360 V2 Edge supports the following for internal storage:

- Onboard NVMe controller supporting RAID 1 (with Intel VROC RAID support) - boot drives

Intel VROC onboard RAID

Intel VROC (Virtual RAID on CPU) is a feature of the Intel processor that enables RAID support.

There are two separate functions of VROC in the ThinkAgile HX360 V2 Edge:

- Intel VROC NVMe RAID

VROC NVMe RAID offers RAID support for any NVMe drives directly connected to the ports on the server's system board. On the ThinkAgile HX360 V2 Edge, it implements RAID level 1. RAID 1 is limited to 2 drives per array.

The following options are available as follows:

- Included VROC Standard, feature code BR9B/BS7M, to support RAID 1.

VROC Standard or Premium are fulfilled as a Feature on Demand (FoD) license and is activated via the XCC management processor user interface.

Table 7. VROC upgrade included

Part number	Feature code	Description
4L47A83669	BR9B / BS7M	Intel VROC (VMD NVMe RAID) Standard / Standard for M.2

VROC Premium is only needed on the ThinkAgile HX360 V2 Edge for RAID-5 support with NVMe drives. You do not need the VROC Premium license upgrade under any of the following conditions:

- If you are using RAID 0, 1 or 10 with NVMe drives, you do not need VROC Premium.

Internal drive options

The following table lists the supported drive options.

- All SED drives are not available in China

Drive encryption: NVMe drives with SED encryption are only supported in UEFI Boot mode. Legacy BIOS mode is not supported.

Table 8. Supported M.2 drives

Part number	Feature	Description	Maximum supported
			HX360 V2 Edge
NVMe M.2 Boot drives			
4XB7A83139	BS46	ThinkSystem M.2 7450 PRO 480GB Read Intensive NVMe PCIe 4.0 x4 NHS SSD (with Heatsink)	2
4XB7A82674	BQUJ	ThinkSystem M.2 7450 PRO 960GB Read Intensive NVMe PCIe 4.0 x4 NHS SSD (with Heatsink)	2
NVMe M.2 Data drives			
4XB7A82675	BQUK	ThinkSystem M.2 7450 PRO 1.92TB Read Intensive NVMe PCIe 4.0 x4 NHS SSD (with Heatsink)	8

The use of M.2 drives in high temperature and high shock & vibration conditions is described in the [Operating Environment](#) section.

Network Modules

The network ports on the front of the ThinkAgile HX360 V2 Edge are provided by a Network Module, a board that plugs into the system board by a dedicated connector. See the [Internal view](#) for the location of the cable. The Network Modules are listed in the following table.

Table 9. Network Modules

Part number	Feature code	Description
CTO only	BS57	ThinkEdge SE360 V2 4x 10/25Gb, 2x 2.5Gb(TSN) I/O Module
CTO only	BS65	ThinkEdge SE360 V2 IO Cover Assembly for 10/25GbE I/O Module

The 10/25GbE I/O network module has the following characteristics:

- 10/25GbE SFP28 I/O module board
 - Two USB 3.2 Gen 1 Type-A connectors
 - USB 3.2 Gen 1 Type-C connector (supporting display)
 - USB 2.0 Gen 1 Type-C connector with Lenovo XClarity Controller (XCC) management
 - One XCC system management port (1GbE RJ-45)
 - Four 10/25GbE SFP28 connectors
 - 10G/25G port don't support 10M/100M bps
 - Two 2.5GbE RJ-45 connectors not supported in ThinkAgile HX

The 10/25GbE I/O network module is shown in the following figure.

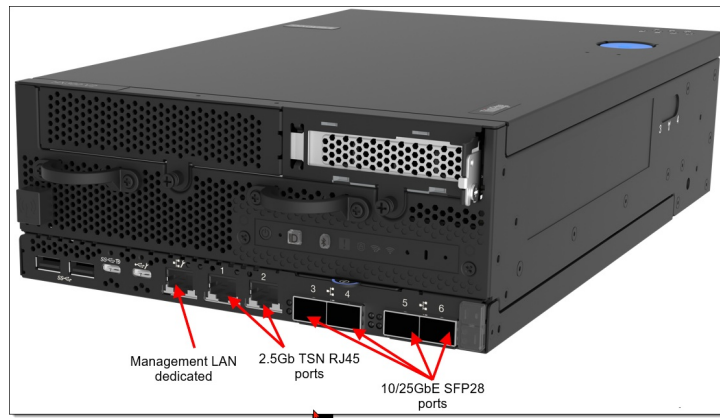


Figure 11. Ports of the available 10/25GbE I/O network module

The block diagrams of the Network Modules are shown in the [System architecture](#) section.

The following are the supported transceivers for the Network Modules.

Table 10. Transceivers for Network Modules

Part number	Feature code	Description
10Gb transceivers		
4TC7A78615	BNDR	ThinkSystem Accelink 10G SR SFP+ Ethernet transceiver
46C3447	5053	SFP+ SR Transceiver
00MY034	ATTJ	Lenovo Dual Rate 1G/10GB SFP Transceiver
25Gb transceivers		
4M27A67041	BFH2	Lenovo 25Gb SR SFP28 Ethernet Transceiver
7G17A03537	AV1B	Lenovo Dual Rate 10G/25G SR SFP28 Transceiver

GPU adapters

The following table lists additional supported GPUs that can be installed in the PCIe slot when the PCIe Riser (feature BS5J, BS5F, BS5D, BS5E, or BS5G) is selected.

Table 11. Supported GPUs

Part number	Feature code	Description	Maximum supported
CTO only	BP05	ThinkSystem NVIDIA A2 16GB PCIe Gen4 Passive GPU	2
4X67A81547	BQZT	ThinkSystem NVIDIA A2 16GB PCIe Gen4 Passive GPU w/o CEC	2
4X67A84824	BS2C	ThinkSystem NVIDIA L4 24GB PCIe Gen4 Passive GPU	2

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

Cooling

The ThinkAgile HX360 V2 Edge server has two non-hot swap 80mm dual motor fan solution, supports N+1 redundancy.

Power supplies

The ThinkAgile HX360 V2 Edge supports one power input path for the following components and options:

- Internal AC power source input (0°C to 55°C)
 - Details regarding the use of internal AC power supply:
 - One AC power input source is supported only.
 - Internal AC Power supply does not support power redundancy or hot swap.
 - Power supply does not include a line cord. See the next section for available power cords.

Ordering information is listed in the following table.

Table 12. Power options

Part number	Feature	Description	Maximum supported
			HX360 V2 Edge
CTO Only	BUGM	Internal AC Power Supply (230V/115V)	1
CTO Only	BUGU	ThinkEdge SE360 V2 AC Power Input Board	1
CTO Only	BW8U	ThinkEdge SE360 V2 500W 230V/115V Non-Hot Swap Power Supply	1

Software

The ThinkAgile HX360 V2 Edge support the following hypervisors that are installed on the 2x M.2 SSDs configured in a RAID-1 drive group:

- Nutanix AHV 20230302.300
- VMware ESXi 7.0 U3

The following table lists the hypervisors available for selection.

Table 13. Hypervisors

Description	Feature code	Quantity
Nutanix SW Stack on Nutanix AHV (default selection)	B15S	1
Nutanix SW Stack on VMware ESXi 7.0 (shipped with AHV and field installable to ESXi 7.0)	BFT6	1

Configuration notes:

- The ThinkAgile HX360 V2 Edge supports the Nutanix Software Starter, Pro and Ultimate Editions.
- The ThinkAgile HX360 V2 Edge require the AOS version 6.8 or later.
- The ThinkAgile HX360 V2 Edge can be deployed as a single-node cluster, a dual-node cluster, or as a cluster of 3 or more nodes.
 - Dual-node clusters require a witness VM located outside of the cluster.
 - The following Nutanix software features are not supported on single- and dual-node clusters:
 - Cluster expansion
 - Replication Factor 3
 - Deduplication
 - Erasure Coding
 - Acropolis File Services
 - Acropolis Block Services
 - Synchronous replication
 - Metro availability

Nutanix licenses : ThinkAgile HX360 V2 Edge ships with the Nutanix software preloaded, however Nutanix software licenses and software support are not included. Customers can use the existing Nutanix term-based software licenses and active support contracts, or they can purchase term-based software licenses and support contracts from Nutanix.

For the information on appliance firmware levels, hypervisor versions, and software versions that have been tested for interoperability, refer to the Lenovo ThinkAgile HX Series Best Recipes:

<http://datacentersupport.lenovo.com/us/en/solutions/ht505413>

Systems management

The ThinkAgile HX360 V2 Edge contains an integrated service processor, XClarity Controller (XCC), which provides advanced control, monitoring, and alerting functions. The XCC is based on the Pilot4 XE401 baseboard management controller (BMC) using a dual-core ARM Cortex A9 service processor.

Topics in this section:

- [Activation](#)
- [Local management](#)
- [Lenovo XClarity Mobile](#)
- [Remote management](#)
- [Lenovo XClarity Administrator](#)
- [Lenovo XClarity Essentials](#)

- [Lenovo XClarity Energy Manager](#)

Activation

Activation is an optional security feature of the ThinkAgile HX360 V2 Edge 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 HX360 V2 Edge 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>

Local management

The ThinkAgile HX360 V2 Edge offers a front operator panel with key LED status indicators, as shown in the following figure.

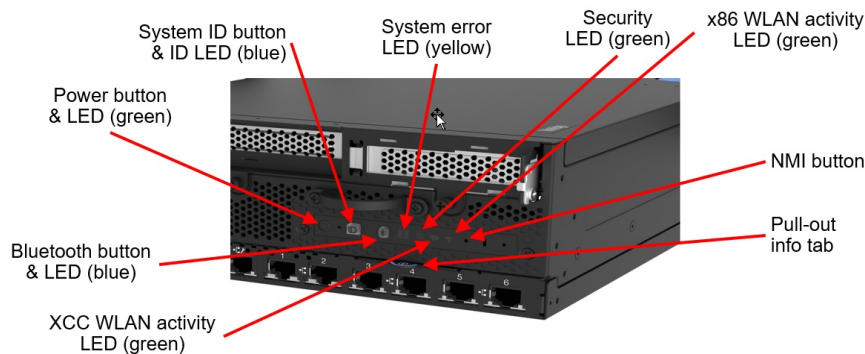


Figure 12. Front operator panel

The buttons on the front of the server:

- Power button
- Identification button - turns on the LED housed within the button as well as passing the signal to the XCC for display remotely in XClarity Administrator
- NMI reset pinhole - sends a NMI signal to the processor thereby causing a blue-screen trap of the operating system

The LEDs on the front of the server are as follows:

- Power LED (green) - indicated activation and power status, as follows:
 - Off - Server does not have power applied
 - Fast flash (4 times per second) - Either server has just had power applied and is not ready to be powered on yet, or the server has not been activated yet
 - Slow flash (once per second) - Server is ready to be powered on
 - On solid - Server is powered on
- Security LED - (green) - indicates system security status.
 - Solid on - the server is operating with security enabled
 - Blinking - the server is in lockdown mode. Activate or unlock the system for operation or activation. See [activate or unlock system](#).
 - Off - No security feature is enabled on the server.


The front of the server also houses an information pull-out tab (also known as the network access tag). See [Figure 2](#) for the location. A label on the tab shows the network information (MAC address and other data) to remotely access the XCC service processor.

System status with XClarity Mobile

The ThinkAgile HX360 V2 Edge also supports local systems management using the XClarity Mobile app. The app includes a tethering function where you can connect your Android or iOS device to the server via the USB type-C port on the server.

You will need a mobile device with a supported operating system installed (iOS 12 or later, Android 5.0 or later), plus the USB charging cable that comes with your phone. You will also need the USB type-C to type-A cable that ships with the SE360 V2.

The steps to connect the mobile device are as follows:

1. Connect the mobile device via your USB cable. You will also need the USB type-C to type-A cable (FC:BS4D) cable to the SE360 V2's USB type-C port with the management symbol 
2. In iOS or Android settings, enable Personal Hotspot or USB Tethering
3. Launch the Lenovo XClarity Mobile app

Once connected you can see the following information:

- Server status including error logs (read only, no login required)
- Server management functions (XClarity login credentials required)

Remote management

Remote server management is provided through industry-standard interfaces:

- Intelligent Platform Management Interface (IPMI) Version 2.0
- Simple Network Management Protocol (SNMP) Version 3 (no SET commands; no SNMP v1)
- Common Information Model (CIM-XML)
- Representational State Transfer (REST) support
- Redfish support (DMTF compliant)
- Web browser - HTML 5-based browser interface (Java and ActiveX not required) using a responsive design (content optimized for device being used - laptop, tablet, phone) with NLS support

The ThinkAgile HX360 V2 Edge offers a MicroSD card port on the system board to enable the use of a MicroSD card for additional storage for use with the XCC2 controller. XCC2 can use the storage as a Remote Disc on Card (RDOC) device (up to 32GB of storage). It can also be used to store firmware updates (including N-1 firmware history) for ease of deployment.

Tip: Without a MicroSD card installed, the XCC2 controller will have 100MB of available RDOC storage.

Ordering information for the supported Micro SD card is listed in the following table.

Table 14. MicroSD card

Part number	Feature code	Description
4X77A77064	BNWP	ThinkSystem MicroSD 32GB Class 10 Flash Memory Card

Lenovo XClarity Administrator

Lenovo XClarity Administrator is a centralized resource management solution designed to reduce complexity, speed response, and enhance the availability of Lenovo systems and solutions. It provides agent-free hardware management for ThinkSystem servers, in addition to ThinkServer, System x, and Flex System servers. The administration dashboard is based on HTML 5 and allows fast location of resources so tasks can be run quickly.

Because Lenovo XClarity Administrator does not require any agent software to be installed on the managed endpoints, there are no CPU cycles spent on agent execution, and no memory is used, which means that up to 1GB of RAM and 1 - 2% CPU usage is saved, compared to a typical managed system where an agent is required.

Lenovo XClarity Administrator is an optional software component for the HX360 V2 Edge. The software can be downloaded and used at no charge to discover and monitor the HX360 V2 Edge and to manage firmware upgrades.

If software support is required for Lenovo XClarity Administrator, or premium features such as configuration management and operating system deployment are required, 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 software license options.

Table 15. Lenovo XClarity Pro ordering information

Part number	Feature code	Description
00MT201	1339	Lenovo XClarity Pro, per Managed Endpoint w/1 Yr SW S&S
00MT202	1340	Lenovo XClarity Pro, per Managed Endpoint w/3 Yr SW S&S
00MT203	1341	Lenovo XClarity Pro, per Managed Endpoint w/5 Yr SW S&S
7S0X000HWWW	SAYV	Lenovo XClarity Pro, per Managed Endpoint w/6 Yr SW S&S
7S0X000JWWW	SAYW	Lenovo XClarity Pro, per Managed Endpoint w/7 Yr SW S&S

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

- Auto-discovery and monitoring of Lenovo 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

Lenovo XClarity Administrator offers the following premium features that require an optional Pro license:

- Pattern-based configuration management that allows to define configurations once and apply repeatedly without errors when deploying new servers or redeploying existing servers without disrupting the fabric
- Bare-metal deployment of operating systems and hypervisors to streamline infrastructure provisioning

For more information, refer to the Lenovo XClarity Administrator Product Guide:

<http://lenovopress.com/tips1200>

Lenovo XClarity Integrators

Lenovo also offers software plug-in modules, Lenovo XClarity Integrators, to manage physical infrastructure from leading external virtualization management software tools including those from Microsoft and VMware.

These integrators are offered at no charge, however if software support is required, a Lenovo XClarity Pro software subscription license should be ordered.

Lenovo XClarity Integrators offer the following additional features:

- Ability to discover, manage, and monitor Lenovo server hardware from VMware vCenter or Microsoft System Center
- Deployment of firmware updates and configuration patterns to Lenovo x86 [rack servers](#) and Flex System from the virtualization management tool
- Non-disruptive server maintenance in clustered environments that reduces workload downtime by dynamically migrating workloads from affected hosts during rolling server updates or reboots
- 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

For more information about all the available Lenovo XClarity Integrators, see the Lenovo XClarity Administrator Product Guide:

<https://lenovopress.com/tips1200-lenovo-xclarity-administrator>

XCC2 Platinum

The XCC2 service processor in the ThinkAgile HX360 V2 Edge includes an upgrade to a Platinum level of features. Compared to the XCC functions of ThinkSystem and earlier systems, Platinum adds the same features as Enterprise and Advanced levels in ThinkSystem, plus additional features.

XCC2 Platinum adds the following Enterprise and Advanced functions:

- Remotely viewing video with graphics resolutions up to 1600x1200 at 75 Hz with up to 23 bits per pixel, regardless of the system state
- Remotely accessing the server using the keyboard and mouse from a remote client
- International keyboard mapping support
- Syslog alerting
- Redirecting serial console via SSH
- Component replacement log (Maintenance History log)
- Access restriction (IP address blocking)
- Lenovo SED security key management
- Displaying graphics for real-time and historical power usage data and temperature
- Boot video capture and crash video capture
- Virtual console collaboration - Ability for up to 6 remote users to be log into the remote session simultaneously
- Remote console Java client
- Mapping the ISO and image files located on the local client as virtual drives for use by the server
- Mounting the remote ISO and image files via HTTPS, SFTP, CIFS, and NFS
- Power capping
- System utilization data and graphic view
- Single sign on with Lenovo XClarity Administrator
- Update firmware from a repository
- License for XClarity Energy Manager

XCC2 Platinum also adds the following features that are new to XCC2:

- System Guard - Monitor hardware inventory for unexpected component changes, and simply log the event or prevent booting
- Enterprise Strict Security mode - Enforces CNSA 1.0 level security

- Neighbor Group - Enables administrators to manage and synchronize configurations and firmware level across multiple servers

Ordering information is listed in the following table. XCC2 Platinum is a software license upgrade - no additional hardware is required.

Table 16. XCC2 Platinum license upgrade

Part number	Feature code	Description
CTO only	BRPJ	Lenovo XClarity Controller 2 (XCC2) Platinum Upgrade

With XCC Platinum, for CTO orders, you can request that System Guard be enabled in the factory and the first configuration snapshot be recorded. To add this to an order, select feature code listed in the following table. The selection is made in the Security tab of the DCSC configurator.

Table 17. Enable System Guard in the factory (CTO orders)

Feature code	Description
BUT2	Install System Guard

For more information about System Guard, see https://pubs.lenovo.com/xcc2/NN1ia_c_systemguard

Lenovo XClarity Provisioning Manager

Lenovo XClarity Provisioning Manager (LXPM) is a UEFI-based application embedded in ThinkSystem servers and accessible via the F1 key during system boot.

LXPM provides the following functions:

- Graphical UEFI Setup
- System inventory information and VPD update
- System firmware updates (UEFI and XCC)
- RAID setup wizard
- OS installation wizard (including unattended OS installation)
- Diagnostics functions

Lenovo XClarity Essentials

Lenovo offers the following XClarity Essentials software tools that can help you set up, use, and maintain the server at no additional cost:

- **Lenovo Essentials OneCLI**
OneCLI is a collection of server management tools that uses a command line interface program to manage firmware, hardware, and operating systems. It provides functions to collect full system health information (including health status), configure system settings, and update system firmware and drivers.
- **Lenovo Essentials UpdateXpress**
The UpdateXpress tool is a standalone GUI application for firmware and device driver updates that enables you to maintain your server firmware and device drivers up-to-date and help you avoid unnecessary server outages. The tool acquires and deploys individual updates and UpdateXpress System Packs (UXSPs) which are integration-tested bundles.
- **Lenovo Essentials Bootable Media Creator**
The Bootable Media Creator (BOMC) tool is used to create bootable media for offline firmware update.

For more information and downloads, visit the Lenovo XClarity Essentials web page:

<http://support.lenovo.com/us/en/documents/LNVO-center>

Lenovo XClarity Energy Manager

Lenovo XClarity Energy Manager (LXEM) is a power and temperature management solution for data centers. It is an agent-free, web-based console that enables you to monitor and manage power consumption and temperature in your data center through the management console. It enables server density and data center capacity to be increased through the use of power capping.

LXEM is a licensed product. A single-node LXEM license is included with the XClarity Controller Enterprise upgrade as described in the [Remote Management](#) section. If your server does not have the XCC Enterprise upgrade, Energy Manager licenses can be ordered as shown in the following table.

Table 18. Lenovo XClarity Energy Manager

Part number	Description
4L40E51621	Lenovo XClarity Energy Manager Node License (1 license needed per server)

For more information about XClarity Energy Manager, see the following resources:

- **Lenovo Support page:**
<https://datacentersupport.lenovo.com/us/en/solutions/Invo-lxem>
- **User Guide for XClarity Energy Manager:**
<https://pubs.lenovo.com/lxem/>

Security

Topics in this section:

- [Security features](#)
- [Security Pack](#)
- [Intel Transparent Supply Chain](#)

Security features

The ThinkAgile HX360 V2 Edge offers a number of security features, both electronic and physical.

Electronic security features include:

- Automatic actions on tamper detection in the event of an intrusion or movement, the server can be configured in XCC to perform actions, including server shutdown and disabling remote access to the XCC from the network ports.
- Self-encrypting (SED) are supported on M.2 and 2.5" SSD. M.2 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 Onboard Trusted Platform Module (TPM) supporting TPM 2.0 enables advanced cryptographic functionality in the operating system and applications.
- For China users, the server has an internal TCM port that supports a NationZ TPM 2.0 module. Available CTO only.
- The server is NIST SP 800-147B compliant.

Ordering information for the security components is listed in the following table.

Table 19. Security components

Part number	Feature code	Description
CTO only	B8LE	ThinkSystem NationZ TPM 2.0 for PRC
4XF7A88740	BS5S	ThinkEdge SE360 V2 Kensington Lock Kit

Physical security features:

- Lockable top / bottom cover
- Front security bezel with key lock (optional, available as a field upgrade). See [Security bezel](#).
- Intrusion detection. See [Intrusion switch](#).
- Motion detection
The server has an onboard G-sensor accelerometer (disabled by default) that will generate an event if the server is moved. As part of the setup process in XCC, you specify the orientation of the server - desktop, ceiling or wall mount. You can also specify the sensitivity of the motion detection. The motion detection feature is standard.
- Support for a Kensington lock and cable
The server has a slot on the rear side of the server which a customer-supplied Kensington lock and cable can be attached to, to help prevent theft of the server.

The following image shows Kensington lock in the rear of the SE360 V2.



Kensington lock

Figure 13. Kensington lock in the back of the ThinkAgile HX360 V2 Edge

- Intrusion arm/disarm feature
The security keylock can be used as an electronic switch to disarm the intrusion switch detection, so that authorized servicing of the hardware can be performed without triggering the security actions.
Front bezel with key lock
- Optional component that mounts on the front of the server that restricts access to networking connectors on the front of the server. See [Mounting components](#) for more information.

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

Note: Customers who purchased server with former firmware prior to November 2023, can seamlessly upgrade to latest firmware to take advantage of latest security features or contact your local Lenovo sales representative or business partner.

Security Pack

The Security Pack is the collection of security and activation features of the HX360 V2 Edge:

- Enablement of local Self-encrypting (SED) authentication key (AK) management
- Mandatory claiming and activation process to identify the owner of HX360 V2 Edge when the server is first delivered/powered on

Table 20. Security Pack ordering information

Feature code	Description
BLZ2	ThinkEdge Security Pack Enabled
BKFC	ThinkEdge Security Pack Disabled

Notes:

- The Security Pack features setting cannot be changed after the system leaves the factory. For example, if you select feature BLZ2 to enable the Security Pack features, then the system will *require* activation before it can be first used. Similarly, if your system was configured in the factory with Security Pack disabled, you cannot enable it at a later time.
- Customers can use the ThinkShield Portal to determine which of their systems have Security Pack enabled or disabled (you will see "Standard" if the system has Security Pack disabled).

Intel Transparent Supply Chain

Add a layer of protection in your data center and have peace of mind that the server hardware you bring into it is safe authentic and with documented, testable, and provable origin.

Lenovo has one of the world's best supply chains, as ranked by Gartner Group, backed by extensive and mature supply chain security programs that exceed industry norms and US Government standards. Now we are the first Tier 1 manufacturer to offer Intel® Transparent Supply Chain in partnership with Intel, offering you an unprecedented degree of supply chain transparency and assurance.

To enable Intel Transparent Supply Chain for the Intel-based servers in your order, add the following feature code in the [DCSC configurator](#), under the Security tab.

Table 21. Intel Transparent Supply Chain ordering information

Feature code	Description
BB0P	Intel Transparent Supply Chain

For more information on this offering, see the paper *Introduction to Intel Transparent Supply Chain on Lenovo ThinkSystem Servers*, available from <https://lenovopress.com/lp1434-introduction-to-intel-transparent-supply-chain-on-thinksystem-servers>.

Mounting options

The ThinkAgile HX360 V2 Edge is designed to be used in a variety of locations -- wall, ceiling, table top -- as well as in a rack.

In this section:

- [Mounting components](#)
- [Desktop mount](#)
- [Stacked mount](#)
- [Wall or ceiling mount](#)
- [1U rack installation](#)
- [Short-depth 2U rack installation](#)

Mounting components

Many of the mounting options share the same components.

Node sleeve

The node sleeve, shown below, holds the ThinkAgile HX360 V2 Edge server when mounted on the wall. The server is then slid into the node sleeve and secured with additional thumbscrews.

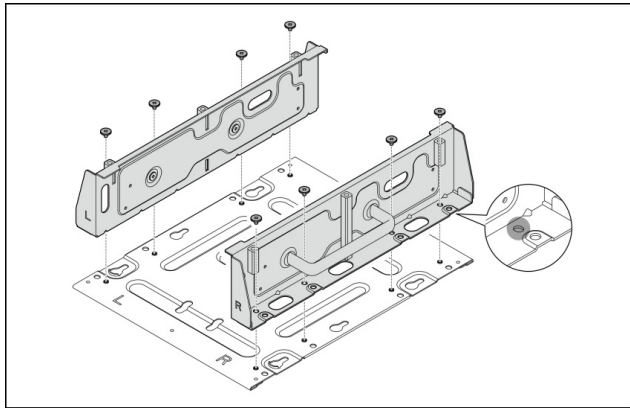


Figure 14. Node sleeve

Table 22. Node Sleeve ordering information

Part number	Feature code	Description	Quantity required
CTO only	BS5Q	ThinkEdge SE360 V2 Node Sleeve	1 per server

Security bezel

The security bezel is an optional component that mounts on the front of the node sleeve to help prevent physical access to the front components of the server. The bezel includes a lock-and-key mechanism for security. The bezel and filter help cover the PCIe slot area and the network area to reduce the dust that can enter the server through the front air holes.

Security bezel can prevent LAN cable plug or unplug after installed in node sleeve.

ThinkAgile HX360 V2 Edge supports two types of security bezel to support different I/O module board.

Tip: The use of the locking bezel requires a node sleeve.

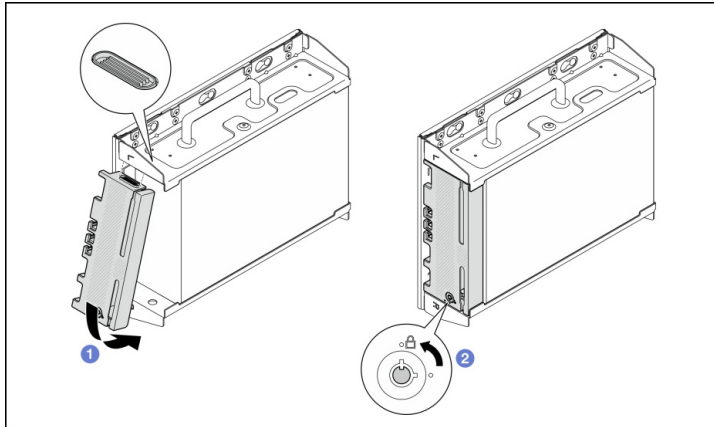


Figure 15. Security Bezel

The following image shows the supported mounting / installation options for the ThinkAgile HX360 V2 Edge server.

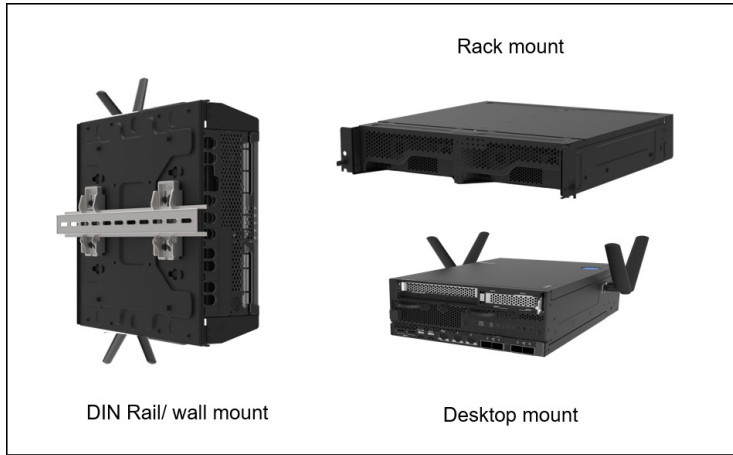


Figure 16. Installation options for ThinkAgile HX360 V2 Edge

The following table shows a list of components for mounting server, bezel and airflow.

Table 23. Components for mounting

Part number	Feature code	Description	Maximum
Wall/Ceiling Mount Mode			
4XF7A86295	BS5Q	ThinkEdge SE360 V2 Node Sleeve	1
DIN RAIL Mount Mode			
4XF7A86295	BS5Q	ThinkEdge SE360 V2 Node Sleeve	1
4M17A37285	B87S	ThinkEdge DIN Mount Kit (Extreme Shock & Vibe)	1
Security Bezel			
4B37A86299	BT92	ThinkEdge SE360 V2 Security Bezel for 10/25GbE I/O Module	1
Rear to front airflow feature			
4XF7A91006	BS5V	ThinkEdge SE360 V2 Fan Assembly (Rear to Front)	1
4XF7A91958	BS5T	ThinkEdge SE360 V2 Air Flow Sensor Module	1
4XF7A86287	BS5U	ThinkEdge SE360 V2 Dust Filter Assembly (Rear)	1

Desktop mount

Desktop mounting has the server oriented horizontally with self-adhesive rubber pads mounted to its underside.

- Air flow of node system in this mount type can be front to rear or rear to front.
- Rear to front air flow can select airflow sensor to check rear dust filter status.

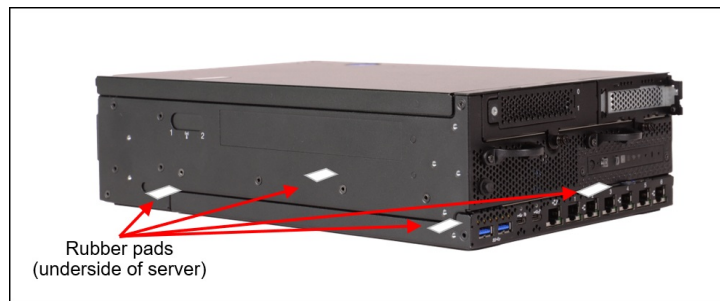


Figure 17. ThinkAgile HX360 V2 Edge with Rubber Feet option

The following table shows a list of components for mounting server and airflow.

Table 24. Components for mounting and options

Part number	Feature code	Description	Maximum
Desktop mount			
4M17A37610	B6Q3	ThinkEdge Rubber Feet (contains 4 rubber pads)	1
Rear to front airflow feature			
4XF7A91006	BS5V	ThinkEdge SE360 V2 Fan Assembly (Rear to Front)	1
4M17A37285	B87S	ThinkEdge DIN Mount Kit (Extreme Shock & Vibe)	1
4XF7A86287	BS5U	ThinkEdge SE360 V2 Dust Filter Assembly (Rear)	1
Front to rear airflow feature			
4XF7A91007	BS5W	ThinkEdge SE360 V2 Fan Assembly (Front to Rear)	1

Wall or ceiling mount

The ThinkAgile HX360 V2 Edge can be mounted on a wall or the ceiling, using the node sleeve. When wall mounted, the server needs to be installed into the node sleeve first.

When wall/ceiling mounted, the node sleeve can be mounted directly on the wall/ceiling. A DIN mount kit is needed for DIN rail. Air flow of node system in this mount type must be rear to front and can select airflow sensor to check rear dust filter status.

The components needed for a wall or ceiling mount are shown in the following table. See the [Mounting components](#) section for details about the node sleeve and security bezel.

Table 25. Wall or ceiling mount

Part number	Feature code	Description	Quantity required
CTO only	BS5Q	ThinkEdge SE360 V2 Node Sleeve	1 per server
CTO only	BS5U	ThinkEdge SE360 V2 Dust Filter Assembly (Rear)	1 per server
CTO only	BSMR	ThinkEdge SE360 V2 Rack Front Bottom Filter	1 per server
4XF7A94042	BVE5	ThinkEdge SE350 V2/SE360 V2 Dust Cover Kit for I/O Ports	1 per server

The DIN Rail and ThinkAgile HX360 V2 Edge inside node sleeve is shown in the following figure.

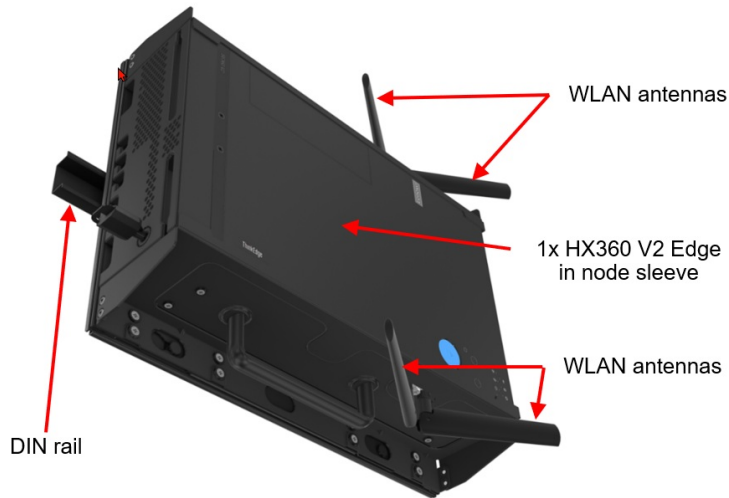


Figure 18. DIN Rail Kit and mounted node

Short-depth 2U rack installation

Two ThinkAgile HX360 V2 Edge servers can also be mounted in a short-depth rack or a 2-post rack. In such a configuration, the servers occupy 2U of rack space. The components are mounted in the ThinkEdge SE360 V2 2U2N Enclosure, machine type 7DBN.

Notes:

- The 2U2N Enclosure is available in DCSC using CTO base model 7DBNCTO1WW
- The Wireless Network Module is not supported as there is insufficient physical space for the antennas
- The 2U2N Enclosure comes with two node fillers to ensure correct airflow if a node space is not populated

The following figure shows two ThinkAgile HX360 V2 Edge servers installed in the 2U2N Enclosure.

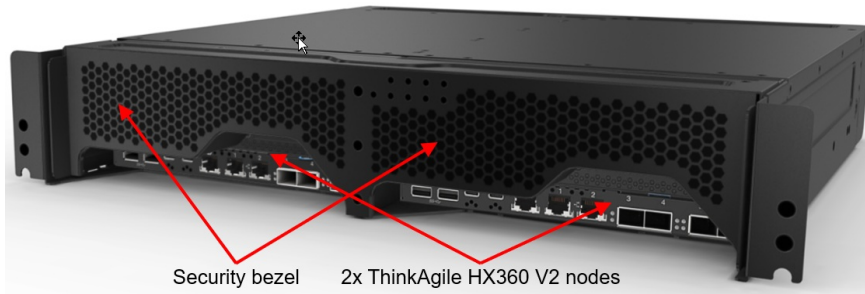


Figure 19. ThinkAgile HX360 V2 Edge 2U2N Enclosure

The following table lists the components used in the 2U rack installation.

Table 26. Components for the 2U2N Enclosure

Part number	Feature code	Description	Quantity required
2U2N Enclosure components			
CTO / model only*	7DBN BSMQ	ThinkEdge SE360 V2 2U2N Enclosure	1 per enclosure
4XF7A94044	7DBN BSN0	ThinkEdge SE360 V2 Enclosure Shipping Bracket	1 per enclosure
4XF7A86297	7DBN BT94	ThinkEdge SE360 V2 Rack Front Top Filter	1 per server
	7DBN BSMR	ThinkEdge SE360 V2 Rack Front Bottom Filter	1 per server

* Available via configure-to-order (CTO) or via predefined enclosure models

The following table summarizes the specifications of the available rail kits

Table 27. Specifications of rail kits for short-depth installations

Feature	ThinkEdge 1000mm Friction Rail Kit v2	ThinkEdge 600mm Ball Bearing Rail Kit	ThinkEdge 2-Post Friction Rail Kit	ThinkEdge 1000mm Friction Rail Kit
Part number	4XF7A90718	4XF7A81942	4XF7A81941	4XF7A81940
CMA	None	None	None	None
Rail length	751 mm (29.56 in)	454 mm (17.87 in)	484 mm (19.1 in.)	751 mm (29.56 in)
Rail type	Full-out slide rail (friction)	Full-out slide rail (ball bearing)	Half-out slide rail (friction)	Full-out slide rail (friction)
Slide travel	480 mm (18.9 in)	485 mm (19.1 in)	270 mm (10.6 in.)	480 mm (18.9 in)
Tool-less installation	Yes	Yes	No (screw-in)	Yes
In-rack server maintenance	No	No	No	No
1U PDU support	Yes	Yes	Yes	Yes
0U PDU support	Yes	Not applicable	Not applicable	Yes
Rack type	Four-post IBM and Lenovo standard rack	Four-post 600 mm depth standard rack	2-post rack	Four-post IBM and Lenovo standard rack
Mounting holes	Square or round	Square or round	Square, round, or threaded	Square or round
Mounting flange thickness	2 - 3.3 mm (0.08 - 0.13 in)	2 - 3.3 mm (0.08 - 0.13 in)	76 - 279 mm (3 - 11 in)	2 - 3.3 mm (0.08 - 0.13 in)
Max distance between front and rear mounting flanges	610 - 864 mm (24 - 34 in)	380 - 500mm (15 - 19.7 in)	Not applicable	610 - 864 mm (24 - 34 in)

Operating system support

The ThinkAgile HX360 V2 Edge supports the following operating systems:

- Nutanix AHV 20230302.3002
- VMware ESXi 7.0 U3

Physical and electrical specifications

Dimensions and weight of the ThinkAgile HX360 V2 Edge server:

- Node
- Height: 84.5 mm (3.33 inches)
- Width: 212 mm (8.35 inches)
- Depth: 317.5 mm (12.5 inches)
- - Dimensions and weight of the 2U2N Enclosure:
 - Height: 87 mm (3.4 in.)
 - Height: 87 mm (3.43 inches)
 - Width: 482.1 mm (18.98 inches)
 - Depth: 466 mm (18.35 inches)
 - Weight: Maximum (with two nodes installed): 16.66 kg (36.73 lbs)
 - Weight
 - Maximum weight: 6.5kg (14.33 lbs) – without external AC adapter
 - Maximum weight: 6.572kg (14.5 lbs) – with 2 external AC adapter
 - Node with node sleeve
 - Height: 95.95 mm (3.78 inches)
 - Width: 295 mm (11.61 inches)
 - Depth: 345.7 mm (13.61 inches)

Operating environment

Summary of the environmental specifications of ThinkAgile HX360 V2 Edge server.

Topics in this section:

- [Acoustical noise emissions](#)
- [Acoustical mode](#)
- [Ambient temperature management](#)
- [Environment](#)
- [Shock and vibration](#)
- [Particulate contamination](#)
- [Airflow](#)
- [Dust filter](#)

Acoustical noise emissions

The server has the following acoustic noise emissions declaration:

- Sound power level (L_{WA})
 - Idling:
 - Min: 5.4 Bel
 - Typical: 5.4 Bel
 - Max: 5.5 Bel
 - Operating:
 - Min: 5.7 Bel
 - Typical: 6.1 Bel
 - Max: 7.2 Bel
- Sound pressure level (L_{pAm}):
 - Idling:
 - Min: 43.6 dBA
 - Typical: 43.6 dBA
 - Max: 44.5 dBA
 - Operating:
 - Min 45.8 dBA
 - Typical: 50.0 dBA
 - Max: 61.1 dBA

NOTE:

- These sound levels were measured in controlled acoustical environments according to procedures specified by ISO7779 and are reported in accordance with ISO 9296. The operating profile is represented by 80% CPU TDP or 70%/30% storage read/write or 100% GPU workload.
- The declared acoustic sound levels are based on the specified configurations, which may change depending on configuration/conditions.
 - Min: 1x 80W CPU, 2x 16GB RDIMMs, 1GbE I/O module board, 1 x NVMe M.2 boot drive , 2x SATA SSDs, 2x NVMe M.2 data drives, DC power module board (PMB), no dust filter, rear-to-front fan direction
 - Typical: 1x 80W CPU, 4x 16GB RDIMMs, 10/25GbE I/O module board, 1 x NVMe M.2 boot drive, 1x NVIDIA A2 GPU, 4x NVMe M.2 data drives, no dust filter, DC power module board (PMB), rear-to-front fan direction
 - Max: 1x 100W CPU, 4x 64GB RDIMMs, 10/25GbE I/O module board, 2 x NVMe M.2 boot drives, 2x NVIDIA A2 GPU, 2x NVMe M.2 data drives, DC power module board (PMB), no dust filter, rear-to-front fan direction
- 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.

Acoustical mode

ThinkAgile HX360 V2 Edge supports three acoustic modes with different acoustic performance.

- **Disabled:** The server operates at default fan speeds.
- **Mode 1:** The operation of system fans is optimized to lower the overall noise level of the server.
 - Mode 1 supports ambient temperature lower than 35°C.
 - In Mode 1, the server operates with sound pressure level of 50 dBA at 25°C.
 - Performance degradation may occur at heavy workloads.
- **Mode 2:** The operation of system fans is optimized to lower the overall noise level of the server further than Mode 1.
 - Mode 2 supports configurations with 4-core or 8-core processor at ambient temperature lower than 35°C.
 - In Mode 2, the server operates with sound pressure level of 45 dBA at 25°C.
 - Performance degradation may occur at heavy workloads.

To change the acoustic mode, enter the Setup Utility and go to **System settings** > Operating Modes > Acoustic mode.

Ambient temperature management

- Most of the configurations of ThinkAgile HX360 V2 Edge support operating at temperature of 55°C or lower. Specific configuration supports operating at -20°C to 45°C. See Environment for the details of configuration supporting extended operation temperature.

- The following components can operate at temperature of 55°C or lower and require proper ambient temperature to prevent performance degradation:
 - When one of the following components is installed, keep ambient temperature lower than 45°C for proper operation. If the ambient temperature is over 45°C, performance degradation or throttled event might occur.
 - 16 core processor
 - NVMe M.2 drives
- When one of the following drives is installed in Slot 7 to 10 (M.2 Bay 6 to 9) with heavy workload, keep ambient temperature lower than 40°C for proper operation. If the ambient temperature is over 40°C, performance degradation or throttled event might occur.
 - NVMe M.2 drives
- When a 300W external power adapter is installed, keep ambient temperature lower than 40°C to prevent performance degradation. If the ambient temperature is over 40°C, performance degradation or throttled event might occur.
- The following components can operate at temperature of 50°C or lower. Keep ambient temperature lower than 45°C to prevent performance degradation:
 - ThinkSystem NVIDIA A2 16GB PCIe Gen4 Passive GPU
 - ThinkSystem NVIDIA L4 PCIe Gen4 Passive GPU

For CTO orders, specify the operational temperature requirement and the shock & vibration requirement, by selecting the feature codes listed in the following table. Selecting the higher temperature and shock/vibration values will ensure the correct heat/vibration tolerant components are selected.

Table 28. Environmental requirements for CTO orders

Feature code	Description
Operational temperature selections	
BW2H	System Operational Temperature 5C to 40C / 41F to 104F
B8ZU	System Operational Temperature 0C to 55C / 32F to 131F
BS6W	System Operational Temperature -20C to 65C (supports 70C for up to 16 Hours) / -4F to 149F (supports 158F for up to 16 Hours)

Environment

ThinkAgile HX360 V2 Edge complies with ASHRAE Class A4 specifications. System performance may be impacted when operating temperature is outside AHSARE A4 specification or fan failed condition with ambient temperature over 25°C

- ThinkAgile HX360 V2 Edge is supported in the following environment:
 - Air temperature:
 - Operating
 - ASHARE Class H1: 5°C to 25°C (41°F to 77°F); the maximum ambient temperature decreases by 1°C for every 500 m (1640 ft) increase in altitude above 900 m (2,953 ft).
 - ASHARE Class 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).
 - ASHARE Class A3: 5°C to 40°C (41°F to 104°F); the maximum ambient temperature decreases by 1°C for every 175m (574 ft) increase in altitude above 900 m (2,953 ft).
 - ASHARE Class A4: 5°C to 45°C (41°F to 113°F); the maximum ambient temperature decreases by 1°C for every 125m (410 ft) increase in altitude above 900 m (2,953 ft).
 - Server off: 5°C to 45°C (41°F to 113°F)
 - Extended operation temperature (with limited configuration):
 - Server on: -20°C to 65°C (-4°F to 149°F), to 70°C for 16 hours(158°F)
 - Server off: -20°C to 65°C (-4°F to 149°F)

Notes: The configurations with one of the following PCIe adapters do not comply with **IP3X** standard:

- ThinkSystem Qualcomm Cloud AI 100
- ThinkSystem Intel Flex 140 12GB Gen4 Passive GPU
- ThinkSystem Intel X710-T4L 10GBase-T 4-Port PCIe Ethernet Adapter
- ThinkSystem Intel E810-DA2 10/25GbE SFP28 2-Port PCIe Ethernet Adapter

Attention: Airborne particulates and reactive gases acting alone or in combination with other environmental factors such as humidity or temperature might pose a risk to the server. For information about the limits for particulates and gases, see “[SE360 V2 user guide](#)”.

The following table indicates what environmental conditions (ambient temperature) are supported with supported options, such as: processors, memory, the M.2 drives and GPUs.

Table 29. Drive and GPU support based on environmental selections (ambient temperature)

Part number	Description	0°C to 35°C	36°C to 40°C	41°C to 45°C	46°C to 50°C	51°C to 55°C	56°C to 65°C
Processor on Planar							
CTO only	ThinkEdge SE350 V2/SE360 V2 Planar with Intel Xeon D-2733NT 8C 80W 2.1 GHz	Yes	Yes	Yes	Yes	Yes	No
CTO only	ThinkEdge SE360 V2 Planar with Intel Xeon D-2752TER 12C 77W 1.8 GHz	Yes	Yes	Yes	Yes	Yes	Yes†
CTO only	ThinkEdge SE350 V2/SE360 V2 Planar with Intel Xeon D-2775TE 16C 100W 2.0 GHz	Yes	Yes	Yes	Yes†	Yes†	No
Memory							
4X77A08632	ThinkSystem 16GB TruDDR4 3200 MHz (2Rx8 1.2V) RDIMM	Yes	Yes	Yes	Yes	Yes	No
4X77A08633	ThinkSystem 32GB TruDDR4 3200 MHz (2Rx4 1.2V) RDIMM	Yes	Yes	Yes	Yes	Yes	No
4X77A08634	ThinkSystem 32GB TruDDR4 3200 MHz (2Rx8 1.2V) RDIMM	Yes	Yes	Yes	Yes	Yes	No
4X77A08635	ThinkSystem 64GB TruDDR4 3200 MHz (2Rx4 1.2V) RDIMM	Yes	Yes	Yes	Yes	Yes	No
4X77A83361	ThinkSystem 32GB TruDDR4 3200 MHz (2Rx4 1.2V) RDIMM Extended Temperature	Yes	Yes	Yes	Yes	Yes	Yes†
M.2 NVMe SSD - Micron 7450 (Data Drive)							
4XB7A82675	ThinkSystem M.2 7450 PRO 1.92TB Read Intensive NVMe PCIe 4.0 x4 NHS SSD (with Heatsink)	Yes	Yes	Yes†	Yes†	Yes†	No
4XB7A82852	ThinkSystem M.2 7450 PRO 3.84TB Read Intensive NVMe PCIe 4.0 x4 NHS SSD (with Heatsink)	Yes	Yes	Yes†	Yes†	Yes†	No
M.2 NVMe SSD - Micron 7450 (Boot Drive)							
4XB7A82674	ThinkSystem M.2 7450 PRO 960GB Read Intensive NVMe PCIe 4.0 x4 NHS SSD (with Heatsink)	Yes	Yes	Yes	Yes	Yes	No
4XB7A83139	ThinkSystem M.2 7450 PRO 480GB Read Intensive NVMe PCIe 4.0 x4 NHS SSD (with Heatsink)	Yes	Yes	Yes	Yes	Yes	No
GPU							
4X67A81547	ThinkSystem NVIDIA A2 16GB PCIe Gen4 Passive GPU w/o CEC	Yes	Yes	Yes	Yes†	No	No
4X67A84824	ThinkSystem NVIDIA L4 24GB PCIe Gen4 Passive GPU	Yes	Yes	Yes	Yes†	No	No
Network adapters							
7ZT7A00535	Lenovo ThinkSystem I350-T4 PCIe 1Gb 4-Port RJ45 Ethernet Adapter By Intel	Yes	Yes	Yes	Yes	Yes	No
4XC7A08295	ThinkSystem Intel E810-DA2 10/25GbE SFP28 2-Port PCIe Ethernet Adapter	Yes	Yes	Yes	Yes	Yes	No
4XC7A79699	ThinkSystem Intel X710-T4L 10GBASE-T 4-Port PCIe Ethernet Adapter	Yes	Yes	Yes	Yes	Yes	No

† Performance might slightly decrease with this temperature region

Shock and vibration

Table 30. Shock and vibration specifications

Mounting type of ThinkEdge SE360 V2	Shock (when the server is in operation)	Shock (when the server is not in operation, such as in shipping)	Vibration (when the server is in operation)	Vibration (when the server is not in operation, such as in shipping)
Desktop mount (standing alone)	Half-sine wave, 15G 11ms	Trapezoidal wave, 50G 167 inch/sec	5-100 Hz, 0.15 Grms, 30 mins	2-200 Hz, 1.04 Grms, 15 mins
Rack mount (2U2N enclosure)	Half-sine wave, 15G 3ms	Free-fall drop height: 100mm Equivalent shock: 70 inch/sec, 2-3 ms	5-500 Hz, 0.21 Grms, 15mins	2-200Hz, 0.8 Grms, 15mins
DIN-rail mount	Half-sine wave, 15G 11ms	Not applicable	5-100 Hz, 0.15 Grms, 30 mins	Not applicable
Wall mount	Half-sine wave, 40G 6ms Half-sine wave, 30G 11ms	Not applicable	1.91 Grms, 10-500 Hz, 30 mins 1.04 Grms, 10-500 Hz, 1 hr	Not applicable
Ceiling mount	Not applicable	Not applicable	1.91 Grms, 10-500z, 30 mins 1.04 Grms, 10-500z, 1 hr	Not applicable

Particulate contamination

- ThinkAgile HX360 V2 Edge supports a dust filter installed at rear of the node. The dust filter has a Minimum Efficiency Rating Value (MERV) of 5, per ASHRAE 52.2-2017 / 80% Average Arrestance per ASHRAE 52.1-1992.

- SE360 V2U2N Enclosuresupports a set of dust filters installed in the front shipping bracket. The dust filter set has a Minimum Efficiency Rating Value (MERV) of 5, per ASHRAE 52.2-2017 / 80% Average Arrestance per ASHRAE 52.1-1992.
- ThinkAgile HX360 V2 Edge complies with IP3X Ingress Protection per ANSI/IEC60529-2020 Degrees of Protection Provided by Enclosures (IP Code)
- Note: The configurations with one of the following PCIe adapters do not comply with IP3X standard:
 - ThinkSystem Qualcomm Cloud AI 100
 - ThinkSystem Intel Flex 140 12GB Gen4 Passive GPU
 - ThinkSystem Intel X710-T4L 10GBase-T 4-Port PCIe Ethernet Adapter
 - ThinkSystem Intel E810-DA2 10/25GbE SFP28 2-Port PCIe Ethernet Adapter

Attention: Airborne particulates (including metal flakes or particles) and reactive gases acting alone or in combination with other environmental factors such as humidity or temperature might pose a risk to the device that is described in this document.

Risks that are posed by the presence of excessive particulate levels or concentrations of harmful gases include damage that might cause the device to malfunction or cease functioning altogether. This specification sets forth limits for particulates and gases that are intended to avoid such damage. The limits must not be viewed or used as definitive limits, because numerous other factors, such as temperature or moisture content of the air, can influence the impact of particulates or environmental corrosives and gaseous contaminant transfer. In the absence of specific limits that are set forth in this document, you must implement practices that maintain particulate and gas levels that are consistent with the protection of human health and safety. If Lenovo determines that the levels of particulates or gases in your environment have caused damage to the device, Lenovo may condition provision of repair or replacement of devices or parts on implementation of appropriate remedial measures to mitigate such environmental contamination. Implementation of such remedial measures is a customer responsibility.

Table 31. Limits for particulates and gases.

Contaminant	Limits
Reactive gases	Severity level G1 as per ANSI/ISA 71.04-1985 ¹ : <ul style="list-style-type: none"> • The copper reactivity level shall be less than 200 Angstroms per month (Å/month = 0.0035 µg/cm²-hour weight gain).² • The silver reactivity level shall be less than 200 Angstroms per month (Å/month = 0.0035 µg/cm²-hour weight gain).³ • The reactive monitoring of gaseous corrosivity must be conducted approximately 5 cm (2 in.) in front of the rack on the air inlet side at one-quarter and three-quarter frame height off the floor or where the air velocity is much higher.
Airborne particulates	Data centers must meet the cleanliness level of ISO 14644-1 class 8. For data centers without airside economizer, the ISO 14644-1 class 8 cleanliness might be met by choosing one of the following filtration methods: <ul style="list-style-type: none"> • The room air might be continuously filtered with MERV 8 filters. • Air entering a data center might be filtered with MERV 11 or preferably MERV 13 filters. For data centers with airside economizers, the choice of filters to achieve ISO class 8 cleanliness depends on the specific conditions present at that data center. <ul style="list-style-type: none"> • The deliquescent relative humidity of the particulate contamination should be more than 60% RH.⁴ • Data centers must be free of zinc whiskers⁵

Notes:

¹ANSI/ISA-71.04-1985.*Environmental conditions for process measurement and control systems: Airborne contaminants*. Instrument Society of America, Research Triangle Park, North Carolina, U.S.A.

²The derivation of the equivalence between the rate of copper corrosion growth in the thickness of the corrosion product in Å/month and the rate of weight gain assumes that Cu₂S and Cu₂O grow in equal proportions

³The derivation of the equivalence between the rate of silver corrosion growth in the thickness of the corrosion product in Å/month and the rate of weight gain assumes that Ag₂S is the only corrosion product.

⁴The deliquescent relative humidity of particulate contamination is the relative humidity at which the dust absorbs enough water to become wet and promote ionic conduction.

⁵Surface debris is randomly collected from 10 areas of the data center on a 1.5 cm diameter disk of sticky electrically conductive tape on a metal stub. If examination of the sticky tape in a scanning electron microscope reveals no zinc whiskers, the data center is considered free of zinc whiskers.

Airflow

The SE360 V2 supports two types of air-flow which can be front to rear (F2R) or rear to front(R2F)

Table 32. Reversible airflow

Feature code	Description
BS5V	ThinkEdge SE360 V2 Fan Assembly (Rear to Front)
BS5W	ThinkEdge SE360 V2 Fan Assembly (Front to Rear)

Rear dust filter and air flow sensor when SE360 V2 server is setup as R2F

Table 33. Air flow sensor

Feature code	Description
BS5T	ThinkEdge SE360 V2 Air Flow Sensor Module

Dust filter

ThinkAgile HX360 V2 Edge supports a dust filter installed at rear of the node. The dust filter has a Minimum Efficiency Rating Value (MERV) of 5, per ASHRAE 52.2-2017 / 80% Average Arrestance per ASHRAE 52.1-1992.

Table 34. Dust filter

Part number	Feature code	Description
4XF7A86287	BS5U	ThinkEdge SE360 V2 Dust Filter Assembly (Rear)

Warranty and Support

The ThinkAgile HX360 V2 Edge server can be configured with three-, four-, or five-year hardware warranty and various levels of service coverage with a well-defined scope of services, including service hours, response time, term of service, and service agreement terms and conditions.

The base warranty provides 9x5 Next Business Day response with parts delivered. Lenovo's additional support services provide a sophisticated, unified support structure for a customer's data center, with an experience consistently ranked number one in customer satisfaction worldwide.

For more information refer to the Lenovo Support Plan - ThinkAgile HX Certified Nodes
<https://support.lenovo.com/us/en/solutions/HT510301>

Hardware warranty

The ThinkAgile HX360 V2 Edge has a 3-year warranty:

- 7DJJ – 3-year warranty

The HX360 V2 Edge 2U2N Enclosure have the following warranty:

- 7DJ7 - 3-year warranty

The standard warranty terms are customer-replaceable unit (CRU) and onsite (for field-replaceable units FRUs only) with standard call center support during normal business hours and 9x5 Next Business Day Parts Delivered.

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:

- **Premier Support**

Premier Support provides a Lenovo-owned customer experience and delivers direct access to technicians skilled in hardware, software, and advanced troubleshooting, in addition to the following:

- Direct technician-to-technician access through a dedicated phone line
- 24x7x365 remote support
- Single point of contact service
- End to end case management
- Third-party collaborative software support
- Online case tools and live chat support
- On-demand remote system analysis

- **Warranty Upgrade (Preconfigured Support)**

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

- 3, 4, or 5 years of service coverage
- 1-year or 2-year post-warranty extensions
- **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 markets). Bundled with YourDrive YourData.
- **Advanced Service:** 24x7 service coverage with 2-hour onsite response or 6-hour committed repair (available only in select markets). 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 latest patches, critical updates, and firmware levels, to ensure you 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 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://lenovocator.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

For custom Hardware Installation and Deployment Services, please contact the Lenovo Professional Services team for sizing and pricing:

- North America (USA, Canada): dcg_ps_na@lenovo.com
- Asia Pacific + PRC: dcg_ps_ap@lenovo.com
- Latin America (Brazil, Mexico, SSA): dcg_ps_la@lenovo.com
- Europe, Middle East, Africa: dcg_ps_emea@lenovo.com

Regulatory compliance

The HX360 V2 Edge conforms to the following standards:

Uninterruptible power supply units

The following table lists the uninterruptible power supply (UPS) units that are offered by Lenovo.

Table 35. Uninterruptible power supply units

Part number	Description
Rack-mounted or tower UPS units - 100-125VAC	
7DD5A001WW	RT1.5kVA 2U Rack or Tower UPS-G2 (100-125VAC)
7DD5A003WW	RT3kVA 2U Rack or Tower UPS-G2 (100-125VAC)
Rack-mounted or tower UPS units - 200-240VAC	
7DD5A002WW	RT1.5kVA 2U Rack or Tower UPS-G2 (200-240VAC)
7DD5A005WW	RT3kVA 2U Rack or Tower UPS-G2 (200-240VAC)
7DD5A007WW	RT5kVA 3U Rack or Tower UPS-G2 (200-240VAC)
7DD5A008WW	RT6kVA 3U Rack or Tower UPS-G2 (200-240VAC)
7DD5A00AWW	RT11kVA 6U Rack or Tower UPS-G2 (200-240VAC)

† Only available in China and the Asia Pacific market.

For more information, see the list of Product Guides in the UPS category:

<https://lenovopress.com/servers/options/ups>

Power distribution units

The following table lists the power distribution units (PDUs) that are offered by Lenovo.

Table 36. Power distribution units

Part number	Feature code	Description	ANZ	ASEAN	Brazil	EET	MEA	RUCIS	WE	HTK	INDIA	JAPAN	LA	NA	PRC
0U Basic PDUs															
4PU7A93176	C0QH	0U 36 C13 and 6 C19 Basic 32A 1 Phase PDU v2	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
4PU7A93169	C0DA	0U 36 C13 and 6 C19 Basic 32A 1 Phase PDU	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
4PU7A93177	C0QJ	0U 24 C13/C15 and 24 C13/C15/C19 Basic 32A 3 Phase WYE PDU v2	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
4PU7A93170	C0D9	0U 24 C13/C15 and 24 C13/C15/C19 Basic 32A 3 Phase WYE PDU	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
00YJ776	ATZY	0U 36 C13/6 C19 24A 1 Phase PDU	N	Y	Y	N	N	N	N	N	N	Y	Y	Y	N

Part number	Feature code	Description	ANZ	ASEAN	Brazil	EET	MEA	RUCIS	WE	HTK	INDIA	JAPAN	LA	NA	PRC
0U Switched and Monitored PDUs															
4PU7A93181	C0QN	0U 21 C13/C15 and 21 C13/C15/C19 Switched and Monitored 48A 3 Phase Delta PDU v2 (60A derated)	N	Y	N	N	N	N	N	Y	N	Y	N	Y	N
4PU7A93174	C0D5	0U 21 C13/C15 and 21 C13/C15/C19 Switched and Monitored 48A 3 Phase Delta PDU (60A derated)	N	Y	N	Y	N	N	Y	Y	N	N	N	Y	N
4PU7A93178	C0QK	0U 20 C13 and 4 C19 Switched and Monitored 32A 1 Phase PDU v2	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
4PU7A93171	C0D8	0U 20 C13 and 4 C19 Switched and Monitored 32A 1 Phase PDU	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
4PU7A93182	C0QP	0U 18 C13/C15 and 18 C13/C15/C19 Switched and Monitored 63A 3 Phase WYE PDU v2	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
4PU7A93175	C0CS	0U 18 C13/C15 and 18 C13/C15/C19 Switched and Monitored 63A 3 Phase WYE PDU	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
4PU7A93180	C0QM	0U 18 C13/C15 and 18 C13/C15/C19 Switched and Monitored 32A 3 Phase WYE PDU v2	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
4PU7A93173	C0D6	0U 18 C13/C15 and 18 C13/C15/C19 Switched and Monitored 32A 3 Phase WYE PDU	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
4PU7A93179	C0QL	0U 16 C13/C15 and 16 C13/C15/C19 Switched and Monitored 24A 1 Phase PDU v2 (30A derated)	N	Y	N	N	N	N	N	Y	N	Y	N	Y	N
4PU7A93172	C0D7	0U 16 C13/C15 and 16 C13/C15/C19 Switched and Monitored 24A 1 Phase PDU(30A derated)	N	Y	N	Y	N	N	Y	Y	N	N	N	Y	N
00YJ781	AU03	0U 20 C13/4 C19 Switched and Monitored 24A 1 Phase PDU	N	N	Y	N	Y	N	Y	N	N	Y	Y	Y	N
1U Switched and Monitored PDUs															
4PU7A90808	C0D4	1U 18 C19/C13 Switched and monitored 48A 3P WYE PDU V2 ETL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
4PU7A81117	BNDV	1U 18 C19/C13 switched and monitored 48A 3P WYE PDU - ETL	N	N	N	N	N	N	N	N	N	N	N	N	Y
4PU7A90809	CODE	1U 18 C19/C13 Switched and monitored 48A 3P WYE PDU V2 CE	N	N	N	N	N	N	Y	N	N	N	N	N	N
4PU7A81118	BNDW	1U 18 C19/C13 switched and monitored 48A 3P WYE PDU - CE	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y
4PU7A90810	C0DD	1U 18 C19/C13 Switched and monitored 80A 3P Delta PDU V2	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
4PU7A77467	BLC4	1U 18 C19/C13 Switched and Monitored 80A 3P Delta PDU	N	N	N	N	N	N	N	N	N	Y	N	Y	N
4PU7A90811	C0DC	1U 12 C19/C13 Switched and monitored 32A 3P WYE PDU V2	N	N	N	N	N	Y	Y	N	N	N	N	N	N
4PU7A77468	BLC5	1U 12 C19/C13 switched and monitored 32A 3P WYE PDU	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
4PU7A90812	C0DB	1U 12 C19/C13 Switched and monitored 60A 3P Delta PDU V2	N	N	N	N	N	N	N	N	N	Y	N	N	N
4PU7A77469	BLC6	1U 12 C19/C13 switched and monitored 60A 3P Delta PDU	N	N	N	N	N	N	N	N	N	N	N	Y	N
1U Ultra Density Enterprise PDUs (9x IEC 320 C13 + 3x IEC 320 C19 outlets)															
71763NU	6051	Ultra Density Enterprise C19/C13 PDU 60A/208V/3PH	N	N	Y	N	N	N	N	N	N	Y	Y	Y	N
71762NX	6091	Ultra Density Enterprise C19/C13 PDU Module	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
1U C13 Enterprise PDUs (12x IEC 320 C13 outlets)															
39Y8941	6010	DPI C13 Enterprise PDU Module (WW)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
1U Front-end PDUs (3x IEC 320 C19 outlets)															
39Y8938	6002	DPI Single-phase 30A/120V Front-end PDU (US)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
39Y8939	6003	DPI Single-phase 30A/208V Front-end PDU (US)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
39Y8934	6005	DPI Single-phase 32A/230V Front-end PDU (International)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
39Y8940	6004	DPI Single-phase 60A/208V Front-end PDU (US)	Y	N	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N
39Y8935	6006	DPI Single-phase 63A/230V Front-end PDU (International)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
1U NEMA PDUs (6x NEMA 5-15R outlets)															
39Y8905	5900	DPI 100-127V NEMA PDU	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Line cords for 1U PDUs that ship without a line cord															
40K9611	6504	4.3m, 32A/380-415V, EPDU/IEC 309 3P+N+G 3ph wye (non-US) Line Cord	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
40K9612	6502	4.3m, 32A/230V, EPDU to IEC 309 P+N+G (non-US) Line Cord	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
40K9613	6503	4.3m, 63A/230V, EPDU to IEC 309 P+N+G (non-US) Line Cord	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
40K9614	6500	4.3m, 30A/208V, EPDU to NEMA L6-30P (US) Line Cord	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
40K9615	6501	4.3m, 60A/208V, EPDU to IEC 309 2P+G (US) Line Cord	N	N	Y	N	N	N	Y	N	N	Y	Y	Y	N
40K9617	6505	4.3m, 32A/230V, Souriau UTG Female to AS/NZ 3112 (Aus/NZ) Line Cord	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
40K9618	6506	4.3m, 32A/250V, Souriau UTG Female to KSC 8305 (S. Korea) Line Cord	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

For more information, see the Lenovo Press documents in the PDU category:
<https://lenovopress.com/servers/options/pdu>

Rack cabinets

The ThinkAgile HX360 V2 Edge supports installation in a rack when mounted in the 2U E2 Enclosure. See [Mounting options](#) for details.

Note: The E2 Enclosure is not supported in the 12U and 18U Micro Data Center rack cabinets.

KVM console options

The following table lists the supported KVM consoles.

Table 37. KVM console

Part number	Description
4XF7A84188	ThinkSystem 18.5" LCD Console (with US English keyboard)

The following table lists the available KVM switches and the options that are supported with them.

Table 39. KVM switches and options

Part number	Description
KVM Console switches	
1754D1X	Global 2x2x16 Console Manager (GCM16)
1754A2X	Local 2x16 Console Manager (LCM16)
1754A1X	Local 1x8 Console Manager (LCM8)
Cables for GCM and LCM Console switches	
46M5383	Virtual Media Conversion Option Gen2 (VCO2)
46M5382	Serial Conversion Option (SCO)

For more information, see the list of Product Guides in the KVM Switches and Consoles category:
<http://lenovopress.com/servers/options/kvm>

Lenovo Financial Services

Lenovo Financial Services reinforces Lenovo's commitment to deliver pioneering products and services that are recognized for their quality, excellence, and trustworthiness. Lenovo Financial Services offers financing solutions and services that complement your technology solution anywhere in the world.

We are dedicated to delivering a positive finance experience for customers like you who want to maximize your purchase power by obtaining the technology you need today, protect against technology obsolescence, and preserve your capital for other uses.

We work with businesses, non-profit organizations, governments and educational institutions to finance their entire technology solution. We focus on making it easy to do business with us. Our highly experienced team of finance professionals operates in a work culture that emphasizes the importance of providing outstanding customer service. Our systems, processes and flexible policies support our goal of providing customers with a positive experience.

We finance your entire solution. Unlike others, we allow you to bundle everything you need from hardware and software to service contracts, installation costs, training fees, and sales tax. If you decide weeks or months later to add to your solution, we can consolidate everything into a single invoice.

Our Premier Client services provide large accounts with special handling services to ensure these complex transactions are serviced properly. As a premier client, you have a dedicated finance specialist who manages your account through its life, from first invoice through asset return or purchase. This specialist develops an in-depth understanding of your invoice and payment requirements. For you, this dedication provides a high-quality, easy, and positive financing experience.

For your region-specific offers, please ask your Lenovo sales representative or your technology provider about the use of Lenovo Financial Services. For more information, see the following Lenovo website:

<https://www.lenovo.com/us/en/landingpage/lenovo-financial-services/>

Seller training courses

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

1. **VTT: Edge – The SE350 EOL is Coming, Prepare Yourself and Your Customer September 2024**
2024-09-10 | 60 minutes | Employees Only

As of March 2025, the Lenovo ThinkEdge SE350 will be EOL. Join Geoff Hunt and Chris Laffey as they discuss how to help your ThinkEdge SE350 customers transition to other offerings, with a special focus on ThinkEdge SE350 V2 and SE360 V2. Topics will include:

- Positioning the SE350 V2 and SE360 V2 as alternates for the EOL SE350
- A technical view of the generational differences

Published: 2024-09-10

Length: 60 minutes

Employee link: Grow@Lenovo

Course code: DVEDG215

2. **Think AI Weekly: Lenovo Validated Design for Public Safety and Security Edge AI**
2024-09-05 | 60 minutes | Employees Only

In this session a panel from the Lenovo ISG/IDG ThinkEdge Team discuss vertical solutions enabled by edge computing. Alejandro Perez, Trent Richardson, and Chris Arenas focus on the Lenovo Validated Design for Public Safety and Security while reviewing the process and importance of Lenovo Validated Designs for the Edge

Published: 2024-09-05

Length: 60 minutes

Employee link: Grow@Lenovo

Course code: DTAIW117

3. VTT Edge: Lenovo Validated Design for Public Safety and Security Edge & AI July 2024
2024-08-05 | 60 minutes | Employees Only

The Lenovo ThinkEdge Team is collaborating with eco-system partners to design and validate Edge AI solutions across verticals. Join this session to learn about these efforts and the architecture of the first Lenovo Validated Design for Public Sector Safety and Security. The session will cover the following topics:

- Overview of the Lenovo Validated Designs (LVD) for Vertical Edge
- Public Sector Safety and Security LVD
- Business Key drivers and solution benefits
- Architecture and Technology Overview
- Relevant use cases
- Components and sizing details
- Validation results and pricing model

Published: 2024-08-05

Length: 60 minutes

Employee link: [Grow@Lenovo](#)

Course code: DVEDG214

4. Partner Technical Webinar - ThinkEdge Portfolio
2024-08-02 | 60 minutes | Employees and Partners

July 26, 2024 - Lenovo SA's (Alex Docherty, Marcus White, and Eugene Grandberry) discuss strategy around the ThinkEdge Portfolio.

Published: 2024-08-02

Length: 60 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: 072624

5. 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

Published: 2024-06-21

Length: 60 minutes

Employee link: [Grow@Lenovo](#)

Course code: DTAO101

6. VTT Edge: Lenovo Customer Solution for ENOC Filling Stations and Retail June 2024
2024-06-10 | 45 minutes | Employees Only

Join Massimo (Max) Angelucci, Lenovo Solution Architect, and Abdulkareem (AK) Alhawajreh, Lenovo Client Account Manager, as they discuss the journey of the sale, the customer business, and their challenges. They cover the considerations and decision points when architecting the solution and why the customer chose Lenovo Edge.

Published: 2024-06-10

Length: 45 minutes

Employee link: [Grow@Lenovo](#)

Course code: DVEDG213

7. SAP Webinar for Lenovo Sellers: Lenovo Portfolio Update for SAP Landscapes
2024-06-04 | 60 minutes | Employees Only

Join Mark Kelly, Advisory IT Architect with the Lenovo Global SAP Center of Competence as he discusses:

- Challenges in the SAP environment
- Lenovo On-premise Solutions for SAP
- Lenovo support resources for SAP solutions

Published: 2024-06-04

Length: 60 minutes

Employee link: [Grow@Lenovo](#)

Course code: DSAPF101

8. Lenovo Data Center Product Portfolio
2024-05-29 | 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.

Published: 2024-05-29

Length: 20 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: SXXW1110r7

9. The Lenovo-Nutanix Partnership Update for .NEXT
2024-05-22 | 5 minutes | Employees and Partners

This Quick Hit focuses on raising your awareness about the expanded Lenovo and Nutanix partnership for Nutanix .NEXT. The Lenovo + Nutanix combination of hardware, software, and services promises your customers a simple path into AI, and a powerful solution that scales from edge to cloud.

Published: 2024-05-22
Length: 5 minutes
Employee link: [Grow@Lenovo](#)
Partner link: [Lenovo Partner Learning](#)
Course code: SXXW2537a

10. 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.

Published: 2024-05-22
Length: 60 minutes
Employee link: [Grow@Lenovo](#)
Course code: DVCLD212

11. 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

Published: 2024-05-20
Length: 25 minutes
Employee link: [Grow@Lenovo](#)
Partner link: [Lenovo Partner Learning](#)
Course code: DCLDS103r3

12. Think AI Weekly: School Safety at the Edge
2024-05-13 | 60 minutes | Employees Only

Join Alejandro Perez, ISG/IDG Edge Business Development, Allen Holmes with ISG AI Business Development, and Lauren Allen ISG/IDG Go To Market Strategist as they discuss school security, AI computer vision and Lenovo ThinkEdge School solutions.

- AI solution capabilities for campus safety
- Safety solutions with ThinkEdge SE70 and SE450
- Walkthrough of La Jolla and other use cases

Published: 2024-05-13
Length: 60 minutes
Employee link: [Grow@Lenovo](#)
Course code: DTAIW103

13. Partner Technical Webinar - Thinkagile HX Update
2024-05-08 | 60 minutes | Employees and Partners

In this 60-minute replay, Adam Mandelbloom, Technical Product Manager - ISG SDI, educated us with an update on Thinkagile HX. He also touched on "What's New" as well as gave HX strategic positioning.

Published: 2024-05-08
Length: 60 minutes
Employee link: [Grow@Lenovo](#)
Partner link: [Lenovo Partner Learning](#)
Course code: 042624

14. VTT: HCI at the Edge and Dick's Sporting Goods_May 2024
2024-05-08 | 60 minutes | Employees Only

Join Adam Mandelbloom, ISG SDI Technical Product Manager, and Bryan Maskrey, ISG Technical Sales, as they explore Lenovo HCI solutions at the Edge and how one such solution is being positioned to resolve business challenges at a national retail company, Dick's Sporting Goods.

Topics covered will include

- Hyperconverged Edge to Cloud today, and looking forward
- ThinkAgile for AI/ML - Cost effective GPU utilization
- Local Cluster Management integration
- Decision points and architecting the solution for Dick's Sporting Goods

Published: 2024-05-08
Length: 60 minutes
Employee link: [Grow@Lenovo](#)
Course code: DVEDG212

15. 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.

Published: 2024-04-10

Length: 50 minutes

Employee link: [Grow@Lenovo](#)

Course code: DVCLD211

16. VTT Data Management How to sell storage - April 2024

2024-04-10 | 60 minutes | Employees Only

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?

Published: 2024-04-10

Length: 60 minutes

Employee link: [Grow@Lenovo](#)

Course code: DVDAT209

17. Data management Overview

2024-03-14 | 25 minutes | Employees and Partners

After completing this course you will be able to:

1. Know more about the data management trends and challenges
2. Understand the data management portfolio
3. Find out how data drives business value

Published: 2024-03-14

Length: 25 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: DSTOO201

18. VTT: Management of Low-End Edge - March 2024

2024-03-13 | 64 minutes | Employees Only

XClarity Orchestrator supports the management of both ISG XCC-based servers and IDG low-end edge devices. This session will cover the architecture of the current solution, along with a demo. In addition, a proposed new architecture for future support of low-end edge devices will be covered

Published: 2024-03-13

Length: 64 minutes

Employee link: [Grow@Lenovo](#)

Course code: DVSYS207

19. 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

Published: 2024-03-07

Length: 35 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: DCLDT2001r3

20. **Lenovo HX Business Conversations**

2024-03-06 | 20 minutes | Employees and Partners

This course covers business conversations for Lenovo HX Hyperconverged solutions.

Course objectives:

- Identify a potential Lenovo HX opportunity
- Conduct effective discovery to reveal the customer's data center needs
- Probe the customer
- Ensure the customer knows you understand their issue(s)

Published: 2024-03-06

Length: 20 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: DCGHXB001

21. **Whats new with ThinkAgile HX AI-Ready solutions and enabling edge to cloud**

2024-02-15 | 70 minutes | Employees Only

Join Scott Ellis, Nutanix Solution Architect, Ritu Jain, Lenovo Product Manager and Adam Mandelbloom, Lenovo Technical Product Manager for a discussion on why many customers are looking for VMware alternatives these days, ThinkAgile HX is a compelling choice, learn how easy it is to migrate from VMWare to Nutanix and some of the benefits it can provide. Another hot topic these days is Artificial intelligence, and many times this takes place at the edge. Learn how Lenovo and Nutanix solve these challenges with compelling edge to cloud solutions.

Published: 2024-02-15

Length: 70 minutes

Employee link: [Grow@Lenovo](#)

Course code: DVCLD209

22. **Business Problems Addressed with Lenovo Data & Analytics Solutions**

2024-01-31 | 20 minutes | Employees and Partners

Data is the quantities, characters, or symbols on which operations are performed by a computer, which is then stored and transmitted in the form of electrical signals and recorded on magnetic, optical, solid state, or mechanical recording media. All different types of organizations rely more and more on their data to gain valuable insights and improve their business. As expected, they will have challenges with gaining this insight. In this course we will discuss those challenges and problems our customers face and describe how Lenovo Data and Analytics Solutions can help customers solve each problem.

After completing this training, you will be able to define the following common problems for databases and big data and describe how Lenovo can help customers solve each problem: scalability, management, performance, protection, security, knowledge/skill, and technology evolution.

After completing this training, you will be able to define the following common problems for databases and big data and describe how Lenovo can help customers solve each problem: scalability, management, performance, protection, security, knowledge/skill, and technology evolution.

Published: 2024-01-31

Length: 20 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: DSOLP200

23. **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

Published: 2024-01-25

Length: 15 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: SXSW1101r2

24. **Family Introduction: Edge Servers**

2024-01-22 | 18 minutes | Employees and Partners

This course introduces the concept of edge servers. Edge servers are used at the edge of an IoT environment, where they perform pre-processing of data, and data forwarding to core environments.

Course Objectives:

- Describe the Internet of Things (IoT)
- Define an edge server
- Discuss edge server features

Published: 2024-01-22

Length: 18 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: SXXW1105

25. Partner Technical Webinar - Tech World 23 Review
2023-12-22 | 60 minutes | Employees and Partners

In this 60-minute replay, Kenny James, Lenovo Channel Sales Engineering Director, joined us to give a Channel CTO's perspective on this year's Tech World 2023 conference where the theme was AI for All.

Published: 2023-12-22
Length: 60 minutes
Employee link: Grow@Lenovo
Partner link: [Lenovo Partner Learning](#)
Course code: 121523

26. Basics of the Edge Ecosystem for Sellers
2023-12-15 | 20 minutes | Employees and Partners

The purpose of this learning module is to familiarize Lenovo field sales, inside sales and partners with the Edge ecosystem and how Lenovo fits into the Edge space.

- Explain the basics of an Edge Ecosystem
- Articulate the inherent challenges of Edge Computing
- Present how Lenovo fits in the Edge Ecosystem

Published: 2023-12-15
Length: 20 minutes
Employee link: Grow@Lenovo
Partner link: [Lenovo Partner Learning](#)
Course code: DTEF101

27. The 10-minute Edge conversation for Lenovo Sellers
2023-12-14 | 20 minutes | Employees and Partners

The purpose of this course is to enable sellers to have a 10 to 15-minute customer conversation addressing the relevancy of Edge solutions to the customer business.

Learning Objectives:

- Prepare for the initial customer conversation
- Hold a 10-minute Edge Operational Technology (OT) conversation
- Take the appropriate steps to progress the sale

Published: 2023-12-14
Length: 20 minutes
Employee link: Grow@Lenovo
Partner link: [Lenovo Partner Learning](#)
Course code: DTEF103

28. Intel and Lenovo Bringing AI Everywhere
2023-12-13 | 50 minutes | Employees Only

Join Patrick Cassleman of Intel as he discusses how Lenovo and Intel can partner to help customers develop and deploy sustainable AI hardware and software from the edge to the cloud. Patrick will discuss Intel's full AI portfolio, plus available features and tools to help your customers attain sustainable AI.

Published: 2023-12-13
Length: 50 minutes
Employee link: Grow@Lenovo
Course code: DVEDG209

29. FY24Q3 Hybrid Cloud Update
2023-12-11 | 15 minutes | Employees and Partners

This update is designed to help you discuss the features and customer benefits of Lenovo ThinkAgile systems that use the 5th Gen Intel® Xeon® processors. Lenovo has also introduced a new service, Lenovo TruScale Hybrid Cloud for Edge, which provides agile and reliable infrastructure as a service where you need it, when you need it. New Professional Services for AI with NVIDIA provides customers with expert guidance for designing and implementing tailored AI solutions. Reasons to call your customer and talk about refreshing their infrastructure are also included as a guideline.

Published: 2023-12-11
Length: 15 minutes
Employee link: Grow@Lenovo
Partner link: [Lenovo Partner Learning](#)
Course code: SXXW2523a

30. VTT: Lenovo in the Era of the Edge-June 2023
2023-12-04 | 60 minutes | Employees and Partners

Join Richard Jenkins from the Lenovo Edge Computing Business Development group as he discusses how Lenovo fits in the era of the Edge. Topics covered in this VTT session include:

- customer use cases at the Edge
- the needed consortium to build an Edge Solution
- Lenovo edge portfolio
- The advantages of LOC-A and XClarity at the Edge

Published: 2023-12-04
Length: 60 minutes
Employee link: Grow@Lenovo
Partner link: [Lenovo Partner Learning](#)
Course code: DVEDG201

31. VEEAM Solutions Sales Training
2023-09-27 | 20 minutes | Employees and Partners

In this course you will learn about Hyper-availability for the Always-On Enterprise.

By the end of this training, you should be able to:

Identify and explain the core products and solutions offered by Veeam.
Explain the key benefits and value propositions of integrating Veeam solutions with Lenovo products.

Published: 2023-09-27
Length: 20 minutes
Employee link: Grow@Lenovo
Partner link: [Lenovo Partner Learning](#)
Course code: DSTOO100

32. Intro to Edge: 3Ws of Edge Computing for Lenovo Sellers
2023-09-14 | 13 minutes | Employees and Partners

This course provides fundamental concepts and a learning foundation for those who are new to the data center and to computing at the Edge. It defines where is the Edge, identifies what are the business drivers for edge computing, and discusses why is edge computing important to Lenovo. September 2023

Published: 2023-09-14
Length: 13 minutes
Employee link: Grow@Lenovo
Partner link: [Lenovo Partner Learning](#)
Course code: DTEF100

33. Lenovo Solutions for the Edge - Who Are the Customers?
2023-09-14 | 25 minutes | Employees and Partners

This course is focused on enabling sellers to identify opportunities for Lenovo Edge and Edge AI Solutions. Topics include a general overview of the Lenovo Edge portfolio and recognizing how edge computing can benefit customers.

Course Objectives:

- Identify Lenovo Edge Opportunities
- Recognize how an Edge solution would benefit your customer
- Provide a general overview of Lenovo solutions at the Edge
- Identify key points for your customer Edge conversation

Published: 2023-09-14
Length: 25 minutes
Employee link: Grow@Lenovo
Partner link: [Lenovo Partner Learning](#)
Course code: DTEF102

34. A Seller's Guide to Nutanix OEM 2.0
2023-08-24 | 90 minutes | Employees Only

In this Sales Team webinar, Mike Tilt, Ritu Jain and Brandon Saxton will cover the new Nutanix 2.0 pricing and packaging options to guide sellers on what the different types of offers, sales process and how to sell Nutanix 2.0. You will get an overview of OEM 2.0, Sales Process, PNP Pricing and Zone Information, and additional resources on Upgrade & Renewal SKUs and process.

Course Objectives

- Defining Nutanix 2.0 Pricing and Packaging
- Describing OEM 2.0 Sales Process
- Identifying resources and support

Published: 2023-08-24
Length: 90 minutes
Employee link: Grow@Lenovo
Course code: DSXNS101

35. Empowering Technical Sellers: Excelling In Transactional Workloads

2023-08-18 | 60 minutes | Employees and Partners

This training abstract outlines a comprehensive program designed to equip technical sellers with the knowledge and expertise required to effectively promote and sell Lenovo and Nutanix solutions for transactional workloads. By focusing on the unique capabilities and advantages of Lenovo and Nutanix infrastructure in handling high-performance transactional applications, this training program empowers technical sellers to engage with customers, understand their specific workload requirements, and articulate the value proposition of Lenovo and Nutanix offerings in this domain.

The training program encompasses the following key areas:

1. Transactional Workloads Overview:
2. Lenovo and Nutanix Solutions for Transactional Workloads:
3. Product Portfolio Deep Dive:
4. Addressing Customer Requirements:
5. Solution Positioning and Sales Techniques:
6. Competitor Analysis:

Through this training, technical sellers will acquire the expertise necessary to engage with customers, understand their transactional workload requirements, and effectively position Lenovo and Nutanix solutions as the ideal choice for high-performance, mission-critical applications. By understanding the intricacies of Lenovo and Nutanix offerings in the transactional workload space, technical sellers will be empowered to drive successful sales engagements, build strong customer relationships, and contribute to the growth and success of their organization.

Published: 2023-08-18

Length: 60 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: DHXD201

36. Empowering Technical Sellers: Accelerating Lenovo and Nutanix Cloud Native-Container Application Solutions

2023-08-18 | 60 minutes | Employees and Partners

This training abstract outlines a comprehensive program specifically designed to equip technical sellers with the knowledge and expertise needed to effectively promote and sell Lenovo and Nutanix cloud native/container application solutions. By focusing on the integration of Lenovo and Nutanix technologies with modern application development practices, this training enables tech sellers to engage with customers, understand their requirements, and articulate the unique value proposition of Lenovo and Nutanix offerings in the cloud native and containerization landscape.

The training encompasses the following key areas:

1. Cloud Native and Containerization Fundamentals:
2. Lenovo and Nutanix Solutions Overview:
3. Product Portfolio Deep Dive:
4. Addressing Customer Needs:
5. Solution Positioning and Sales Techniques:
6. Competitor Analysis:
7. Technical Demonstration and Proof-of-Concept:

Throughout the training, tech sellers will gain the expertise necessary to engage with customers, understand their unique requirements, and effectively position Lenovo and Nutanix solutions as the go-to choice for cloud native and containerized application needs. By learning the intricacies of Lenovo and Nutanix offerings, technical sellers will be equipped to drive successful sales engagements, strengthen customer relationships, and contribute to the overall growth and success of the organization.

Published: 2023-08-18

Length: 60 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: DHXC201

37. ThinkAgile Accelerating Cloud Agility: HX Series Technical Presentation

2023-07-28 | 40 minutes | Employees and Partners

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

Published: 2023-07-28

Length: 40 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: DHXT201

38. 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

Published: 2023-07-11

Length: 40 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: DCLDS104r2

39. What's New with Nutanix 2.0? Portfolio and Licensing
2023-06-08 | 15 minutes | Employees and Partners

Nutanix has updated and simplified their licensing for our joint customers. This course is created to give sales and partners representatives an overview for the recent Nutanix licensing changes and their current options.

Course Objectives:

After completing this course, you should be able to:

- Describe the new Nutanix licensing rollout
- List the new pricing and packaging options

Published: 2023-06-08

Length: 15 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: DHXL001

40. Partner Technical Webinar - HX vs VX vs MX Panelist Discussion
2023-04-11 | 60 minutes | Employees and Partners

In this 60-minute replay, Joe Murphy moderated a panelist discussion on ThinkAgile SHI. Baker Hull, VMware represented VX; Mike Tilt, Lenovo Technical Sales Manager presented HX; Phil Searles, Lenovo Solution Architect represented MX; and Brandon Saxton, Lenovo NA Product Manager for ThinkAgile made up the panelist. The focus was less on the differences but how to elevate the conversation to get to the best solution. No slides were presented.

Published: 2023-04-11

Length: 60 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: 033123

41. Partner Technical Webinar - ThinkAgile V3 Overview and SMB Express
2023-02-13 | 60 minutes | Employees and Partners

In this 60-minute replay, Joe Murphy and Dave Brown, Lenovo Solution Architects reviewed the new ThinkAgile V3 solutions. In addition, Dave did a lengthy demo and explanation of the new SMB Express feature of DCSC.

Published: 2023-02-13

Length: 60 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: 021023

42. Family Portfolio: ThinkAgile HX
2022-12-13 | 20 minutes | Employees and Partners

This course is designed to give Lenovo sales an introduction to Lenovo ThinkAgile HX appliances. This course also includes why a customer should choose Lenovo for their hyperconverged products.

Course objectives:

- Learn to identify products and features within the ThinkAgile HX family
- Describe Lenovo innovations that the ThinkAgile HX family uses
- Recognize when a specific product or products should be selected

Published: 2022-12-13

Length: 20 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: SXS2109r3

43. ThinkAgile HX Seller Presentation
2022-11-01 | 25 minutes | Employees Only

Join Ritu Jain, Worldwide Product Manager for ThinkAgile, as she shares how ThinkAgile HX unique values, routes to market, how to position HX, and competitive landscape.

By the end of this training, you should be able to:

- Describe the ThinkAgile HX advantages
- Discover the routes to market & models available to sell
- Explain the HX solution positioning

Published: 2022-11-01

Length: 25 minutes

Employee link: Grow@Lenovo

Course code: DHXSP101

44. ThinkAgile HX Customer Presentation
2022-10-31 | 25 minutes | Employees Only

Join Ritu Jain, Worldwide ThinkAgile Product Manager for ThinkAgile, as she shares trends shaping cloud deployment models, customer Hybrid cloud strategy and how ThinkAgile HX is helping customers in their journey.

By the end of this training, you should be able to:

- Describe the ThinkAgile HX Solution
- Discover the trends in the cloud industry
- Explain how HX is helping customers with evolving trends

Published: 2022-10-31

Length: 25 minutes

Employee link: Grow@Lenovo

Course code: DHXCP101

45. Data Infrastructure Management - DM Series Storage
2022-10-28 | 25 minutes | Employees Only

This course provides a technical overview of the ThinkSystem DM series products. Course DDMO101 – Lenovo ThinkSystem DM & DE Series Overview is recommended prior to this course.

By the end of this course, you should be able to:

- Recognize the components of the Lenovo Data Management portfolio
- Discuss the features of the Lenovo Data Management components
- Describe the features of the SnapCenter software components

Published: 2022-10-28

Length: 25 minutes

Employee link: Grow@Lenovo

Course code: DDM200

46. Lenovo ThinkAgile HX VDI Solution
2022-08-26 | 10 minutes | Employees Only

In this lightboard video, Eric Kern whiteboards Lenovo's ThinkAgile HX VDI Solution. Sellers will learn how it works and customer benefits. Updated August 26th, 2022.

Objectives for this course:

- Understand how the VDI solution leverages the ThinkAgile HX platform with Citrix.
- Describe what actions a system administrator can perform in the Citrix portal.
- Explain how to manage the system remotely from a cloud infrastructure with Citrix.

Published: 2022-08-26

Length: 10 minutes

Employee link: Grow@Lenovo

Course code: DSVC129

47. Lenovo's value-added Solutions Software and SDI -ThinkAgile HX - Best practices for Selling Software/ SDI Process
2022-08-23 | 60 minutes | Employees Only

ThinkAgile HX is one of the most important parts of the ThinkAgile Lenovo Portfolio of SDI, Software Defined Infrastructure but it can be challenging to manage the deal registration and quoting for ThinkAgile HX. Listen in on Part 1 of this recent North America webinar where Mike Tilt, Sales Engineer Director, discusses the overview of ThinkAgile HX sales process and how to obtain Deal protection. He also discusses best practices for interactions with Nutanix sellers and shares personal experiences as a former SDI focused seller.

Published: 2022-08-23

Length: 60 minutes

Employee link: Grow@Lenovo

Course code: DCLDO121

48. Lenovo's value-added Solutions Software and SDI -ThinkAgile HX - Best practices for Selling Software/ SDI Process
2022-08-23 | 60 minutes | Employees Only

In this Part 2, a continuation of a recent North American Webinar, Mike Tilt, Sales Engineer Director, continues discussion of ThinkAgile HX sales process and dives into VLS. He also discusses best practices for interactions with Nutanix sellers and shares personal experiences as a former SDI focused seller.

Published: 2022-08-23
Length: 60 minutes
Employee link: Grow@Lenovo
Course code: DCLDO122

49. Lenovo TruScale for Hosted Desktops with Nutanix
2022-08-22 | 15 minutes | Employees and Partners

By exemplifying the case of a customer who wants to move to a remote desktop public cloud solution, this 15-minute course offers an overview of the Lenovo TruScale for Hosted Desktops with Nutanix solution, including benefits, architecture, and value proposition.

Published: 2022-08-22
Length: 15 minutes
Employee link: Grow@Lenovo
Partner link: [Lenovo Partner Learning](#)
Course code: DSOLO109

50. Lenovo's value-added Solutions Software and SDI - ThinkAgile HX Licensing Update from Nutanix
2022-08-22 | 60 minutes | Employees Only

In this continuous series of recorded webinar for ThinkAgile, Ed Stickney, Nutanix Worldwide OEM Sales Strategy and Enablement Leader, reviews with the North American region the recent changes made to the Nutanix simplified licensing model and how it benefits your customers. He also discusses how the new licensing maps to the current licensing and how you can migrate your customers to the new licensing. Ed also provides you valuable feedback from audience questions.

Published: 2022-08-22
Length: 60 minutes
Employee link: Grow@Lenovo
Course code: DCLDO120

51. Partner Technical Webinar - sizing ThinkAgile HX & VX
2022-08-01 | 60 minutes | Partners Only

In this 60-minute replay, we demonstrated how to size ThinkAgile VX and ThinkAgile HX. First Lenovo Solution Architect Joe Murphy reviewed the sizing methodology. Next, Lenovo Solution Architect Richard Smutzer demonstrated how to size ThinkAgile HX using Nutanix's sizing tool. Lenovo Solution Architect David Cianchetta closed the webinar by demonstrating ThinkAgile VX sizing using the VSAN sizer from VMware.

Published: 2022-08-01
Length: 60 minutes
Partner link: [Lenovo Partner Learning](#)
Course code: 072922

52. Partner Technical Webinar - Nutanix and ThinkAgile HX
2022-07-20 | 60 minutes | Partners Only

In this 60-minute replay, Brandon Saxton, Lenovo NA Product Manager, and Brendan McDermott, Senior Sales Engineer, reviewed the Nutanix Lenovo Partnership, the technology and the ThinkAgile HX offerings including both Integrated Systems and Certified Nodes. Based on some questions, a few slides were added at the end to compare ThinkAgile HX with the other ThinkAgile offerings.

Published: 2022-07-20
Length: 60 minutes
Partner link: [Lenovo Partner Learning](#)
Course code: 071522

Related publications and links

For more information, see these resources:

- Lenovo ThinkAgile HX Series
<https://www.lenovo.com/us/en/data-center/software-defined-infrastructure/ThinkAgile-HX-Series/p/WMD00000326>
- Interactive 3D Tour of ThinkAgile HX Series offerings:
<https://lenovopress.com/lp0454-lenovo-thinkagile-hx-series-interactive-3d-tour>
- Lenovo Data Center Solution Configurator (DCSC):
<http://dcsc.lenovo.com>
- Lenovo ThinkAgile product publications (user manuals):
<https://thinkagile.lenovofiles.com/help/index.jsp>
- Nutanix documentation
<https://my.nutanix.com/>
- Lenovo ThinkAgile HX Series Best Recipes
<https://support.lenovo.com/us/en/solutions/HT515725>
- Lenovo Data Center Support
<http://datacentersupport.lenovo.com>

Related product families

Product families related to this document are the following:

- [Edge Computing and Internet of Things \(IoT\)](#)
- [Edge Servers](#)
- [Hyperconverged Infrastructure](#)
- [ThinkAgile HX Series for Nutanix](#)

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