

Lenovo ThinkAgile VX850 V4

Product Guide

The Lenovo ThinkAgile VX850 V4 is a 2U 4-socket system that features Intel® Xeon® 6 Processors. This system is based on the ThinkSystem SR850 V4 with up to 86 cores per processor, up to 16 TB of TruDDR5 memory with up to 6400 MHz memory speeds, and an extensive selection of internal storage and networking options. VMware offers a unique, software-defined approach to hyperconvergence, leveraging the hypervisor to deliver compute, storage and management in a tightly integrated software stack.

The 2U systems is available as:

- VX850 V4 Hyperconverged System, supporting up to 4 processors

Common uses for this system are high-performance workloads such as databases, including in-memory databases, data lakes, big data analytics, business intelligence, and OLTP, e-mail and collaboration, and workload-balancing clusters.

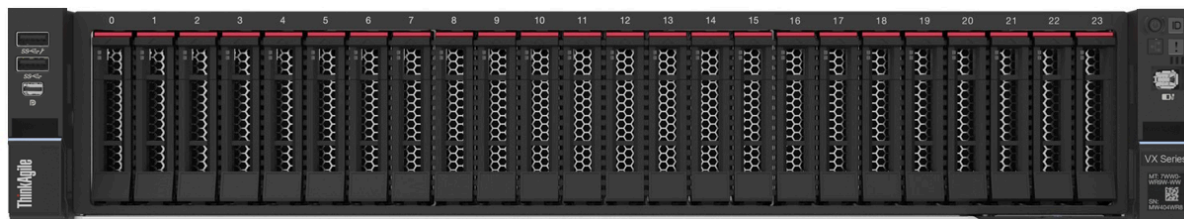


Figure 1. Lenovo ThinkAgile VX850 V4

Did you know?

The ThinkAgile VX850 V4 is built on the Lenovo ThinkSystem SR850 V4 server that features the ultimate in enterprise-class scalability, performance, reliability, management, and security.

The ThinkAgile VX850 V4 solution offers ThinkAgile Premier Support options, providing 24x7 access to technical support, a single point of contact for end-to-end case management, and coordinated hardware and software support to help accelerate problem resolution.

Key features

ThinkAgile features

The ThinkAgile VX850 V4 offers the following key features:

- Factory-integrated, pre-configured ready-to-go system built on proven and reliable Lenovo ThinkSystem servers that provide compute power for a variety of workloads and applications and powered by industry-leading hyperconverged infrastructure software from VMware.
- Provide quick and convenient path to implement a hyperconverged solution powered by VMware Cloud Foundation (VCF) or VMware vSphere Foundation (VVF) software stacks with a single point of contact provided by Lenovo for purchasing, deploying, and supporting the solution. Licenses for VCF or VVF can be obtained by contacting a Broadcom Seller directly or a Broadcom authorized software partner.
- Meet various workload demands with cost-efficient hybrid or performance-optimized all-flash storage configurations.
- Deliver fully validated hardware and firmware that is certified with VMware by Broadcom.
- Lenovo ThinkAgile Premier Support provides a single-point-of-contact for quick 24/7 hardware and software support, problem reporting and resolution.
- The ThinkAgile VX850 V4 can be deployed by Lenovo Professional Services with VMware software licenses, helping simplify implementation and accelerate time to production.

The VMware software running on ThinkAgile VX850 V4 delivers the following key features:

- Distributed architecture that allows "pay-as-you-grow", non-disruptive scaling by adding new nodes to the cluster (scale-out) to increase capacity and performance.
- Advanced capacity management, including deduplication, compression, and erasure coding (RAID 5/6), helps deliver greater storage utilization with dramatically lower storage capacity and costs.
- Automation of VM storage provisioning and control of storage service levels (capacity, performance, availability) with VM-centric policies to load balance storage resources.
- Native HCI security solution with two-factor authentication (SecurID and CAC) and data-at-rest encryption that does not require self-encrypting drives (SEDs).
- Stretched cluster with local and site failure protection between two geographically dispersed sites for higher level of availability with near zero downtime.
- Centralized management with provisioning, administering, and monitoring virtual resources across multiple hosts and clusters from a centralized interface.
- Rapid workload provisioning, simplified data center operations, increased business efficiency, and decreased CAPEX and OPEX costs.
- VM and data protection with agent-less, image-level virtual machine backups and application-aware protection for business-critical Microsoft applications (Exchange, SQL Server, SharePoint) along with WAN-efficient, encrypted backup data replication.
- Reduced unplanned downtime and virtually eliminated planned downtime for server and storage maintenance with live workload migration, high availability, and fault tolerance.
- Enhanced application performance and availability with resource management, load balancing, and access prioritization.
- Intelligent operations management and automation to proactively monitor and manage compute, storage, and networking resources, identify performance bottlenecks, and re-balance workloads by leveraging predictive analytics.

- Capacity planning and optimization guidance to address future needs with performance trends, projections and extended forecasts.
- Manage remote offices and branch offices with rapid provisioning of servers through virtualization, minimization of host configuration drift, and enhanced visibility into regulatory compliance, across multiple sites.

Hardware features

The VX850 V4 is based on the SR850 V4 and has the following hardware features:

Scalability and performance

The VX system offers numerous features to boost performance, improve scalability, and reduce costs:

- Supports Intel® Xeon® 6 Processor
- High-performance scale-out offering where up to 4 processors and 64 DIMMs are housed in 2U of rack space.
- Gold and Platinum processors in the Intel® Xeon® 6 Processor Family supported:
 - Up to 86 cores and 172 threads
 - Core speeds of up to 4 GHz
 - TDP ratings of up to 350W
- Up to four processors, 344 cores, and 688 threads maximize the concurrent execution of multithreaded applications.
- Support for up to 64 TruDDR5 memory DIMMs operating at up to 6400 MHz means you have the fastest available memory subsystem and memory capacity of up to 16 TB with 64x 256 GB 3DS RDIMMs.
- Supports configurations of 2 DIMMs per channel to operate at the 5200 MHz rated speed of the memory DIMMs.
- Up to 24x 2.5-inch SSDs provide a flexible and scalable all-in-one platform to meet your increasing demands.
- Up to 24x NVMe drives are supported, maximizing drive I/O performance in terms of throughput, bandwidth, and latency
- The use of solid-state drives (SSDs) instead of traditional spinning drives (HDDs) improves I/O performance. An SSD can support up to 100 times more I/O operations per second (IOPS) than a typical HDD.
- Supports M.2 drives for convenient operating system boot functions. M.2 drives can be internally mounted or can be mounted at the rear of the server as hot-swap drives. Optional RAID-0 or RAID-1.
- The server is Compute Express Link (CXL) v1.1 Ready. With CXL 1.1 for next-generation workloads, you can reduce compute latency in the data center and lower TCO. CXL is a protocol that runs across the standard PCIe physical layer and can support both standard PCIe devices as well as CXL devices on the same link.
- The server has up to two dedicated industry-standard OCP 3.0 slots supporting a variety of Ethernet network adapters. A simple swap mechanism with a thumbscrew and pull-tab enables tool-less installation and removal of the adapter. The adapter supports shared BMC network sideband connectivity to enable out-of-band systems management.
- The server offers PCI Express 5.0 I/O expansion capabilities that doubles the theoretical maximum bandwidth of PCIe 4.0 (32GT/s in each direction for PCIe Gen 5, compared to 16 GT/s with PCIe Gen 4 and 8 GT/s with PCIe Gen 3). A PCIe 5.0 x16 slot provides 128 GB/s bandwidth.
- Supports up to 9x PCIe slots (6x full height and 3x low profile) plus two OCP 3.0 Ethernet slots to maximize I/O capabilities.

- Supports up to 4x single-width GPUs or 2x double-wide GPUs, for accelerated processing power in a 2U system. For support for more GPUs in a 4-socket server.

Availability and serviceability

The VX850 V4 system is based on a modular service model where all components and options can be removed from the front or rear of the system, even parts that are located in the center of the machine such as fans, memory DIMMs, and processors. The VX850 V4 is designed for 99.99% availability.

The VX system provides many features to simplify serviceability and increase system uptime:

- The server offers Single Device Data Correction (SDDC, also known as Chipkill), Adaptive Double-Device Data Correction (ADDDC, also known as Redundant Bit Steering or RBS), and memory mirroring for redundancy in the event of a non-correctable memory failure.
- The server has two hot-swap drives, supporting RAID redundancy for data protection and greater system uptime.
- Available M.2 boot adapters support RAID-1 (using onboard hardware RAID) which can enable two M.2 drives to be configured as a redundant pair.
- The server has two hot-swap redundant power supplies and six N+1 redundant fans to provide availability for business-critical applications.
- The light path diagnostics feature uses LEDs to lead the technician to failed (or failing) components, which simplifies servicing, speeds up problem resolution, and helps improve system availability.
- The included LCD system information display panel provides greater diagnostic function by listing all error messages and VPD data needed for a service call, thereby speeding problem resolution and increasing system uptime.
- Proactive Platform Alerts (including PFA and SMART alerts): Processors, voltage regulators, memory, internal storage (NVMe SSDs, flash storage adapters), fans, power supplies, RAID controllers, server ambient and subcomponent temperatures. Alerts can be surfaced through the XClarity Controller to managers such as Lenovo XClarity One and VMware vCenter. These proactive alerts let you take appropriate actions in advance of possible failure, thereby increasing server uptime and application availability.
- Solid-state drives (SSDs) offer more reliability than mechanical HDDs for greater uptime.
- The 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 supports diagnostics and can save service data to a USB key drive or remote CIFS share folder for troubleshooting and reducing service time.
- Auto restart in the event of a momentary loss of AC power (based on power policy setting in the XClarity Controller service processor)
- Offers a diagnostics port on the front of the server to allow you to attach an external diagnostics handset for enhanced systems management capabilities.
- Support for the XClarity Mobile app running on a supported smartphone or tablet and connected to the server through the service-enabled USB port, enables additional local systems management functions.
- Three-year or one-year customer-replaceable unit and onsite limited warranty (varies by geography), 9 x 5 next business day. Optional service upgrades are available.

Manageability and security

Powerful systems management features simplify local and remote management of the VX systems:

- The server includes XClarity Controller 3 (XCC3) to monitor server availability. Optional upgrade to XCC3 Premier to provide remote control (keyboard, video, mouse) functions, support for the mounting of remote media files (ISO and IMG image files), boot capture and power capping. XCC3 Premier also offers additional features such as Neighbor Groups, System Guard, a CNSA-compliant security mode, a FIPS 140-3-compliant mode, and enhanced NIST 800-193 support.
- Dedicated Ethernet port at the rear of the server for XCC3 remote management.
- Lenovo XClarity One offers comprehensive hardware management tools that help to increase uptime, reduce costs and improve productivity through advanced server management capabilities.
- An integrated industry-standard Unified Extensible Firmware Interface (UEFI) enables improved setup, configuration, and updates, and simplifies error handling.
- 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
- Support for industry standard management protocols, IPMI 2.0, SNMP 3.0, Redfish REST API, serial console via IPMI
- An integrated hardware Trusted Platform Module (TPM) supporting TPM 2.0 enables advanced cryptographic functionality, such as digital signatures and remote attestation.
- Supports Secure Boot to ensure only a digitally signed operating system can be used. Supported with HDDs and SSDs, as well as M.2 drives.
- Industry-standard Advanced Encryption Standard (AES) NI supports faster, stronger encryption.
- Intel Execute Disable Bit functionality can prevent certain classes of malicious buffer overflow attacks when combined with a supported operating system.
- Intel Trusted Execution Technology provides enhanced security through hardware-based resistance to malicious software attacks, allowing an application to run in its own isolated space, protected from all other software running on a system.
- Additional physical security features are an available chassis intrusion switch and available lockable front bezel.

Energy efficiency

The VX850 V4 system offers the following energy-efficiency features to save energy, reduce operational costs, and increase energy availability:

- The server supports advanced Lenovo Neptune Core direct-water cooling (DWC) capabilities, where heat from the processors is removed from the rack and the data center using an open loop and coolant distribution units, resulting in lower energy costs
- The server can be used in environments up to ASHRAE A4 with ambient temperatures up to 45 °C.
- Energy-efficient planar components help lower operational costs.
- High-efficiency power supplies with 80 PLUS Titanium and Platinum certifications.
- Solid-state drives (SSDs) consume as much as 80% less power than traditional spinning 2.5-inch HDDs.
- Support for Lenovo XClarity Energy Manager provides advanced data center power notification, analysis, and policy-based management to help achieve lower heat output and reduced cooling needs.

- The server uses hexagonal ventilation holes, which can be grouped more densely than round holes, providing more efficient airflow through the system and thus keeping your system cooler.

Components and connectors

The ThinkAgile VX850 V4 is based on the ThinkSystem SR850 V4 server.

The following figure shows the front view of the VX850 V4 systems.

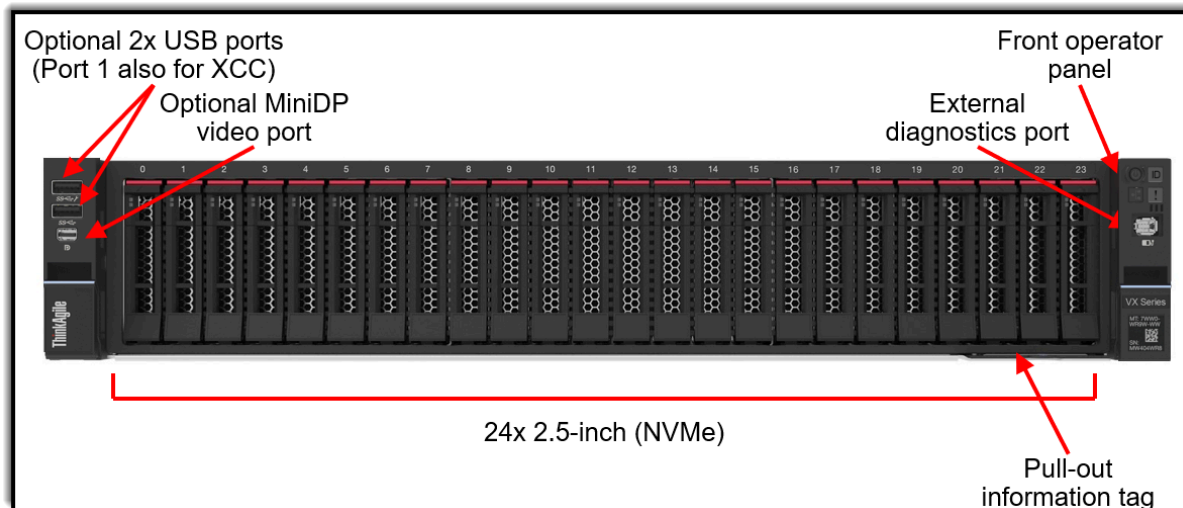


Figure 2. VX850 V4 front view

The front of the ThinkAgile VX850 V4 includes the following components:

- Up to 24x SFF hot-swap drive bays
- One VGA port
- One USB 2.0 port with XClarity Controller access
- One USB 2.0 port
- A Power button
- Status LEDs
- A Pull-out LCD panel

The following figure shows the rear view of the VX systems.

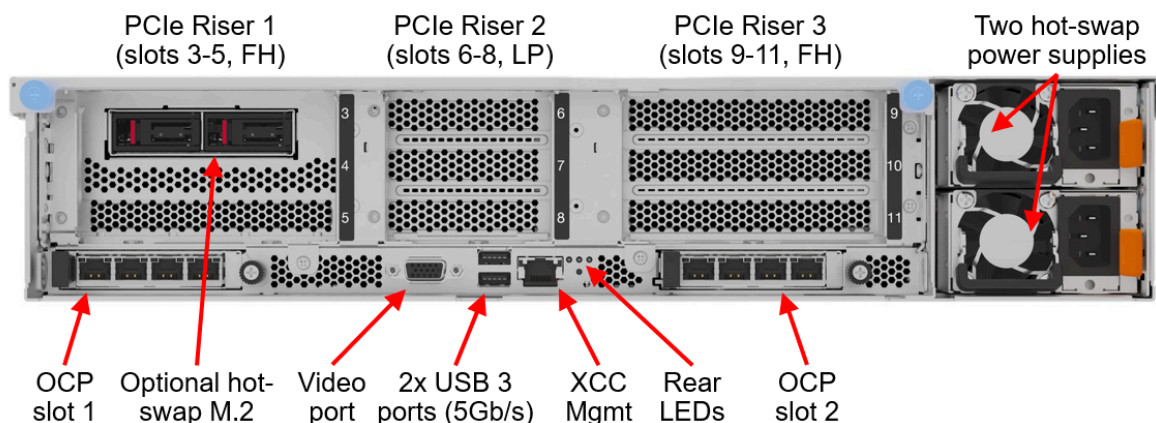


Figure 3. VX850 V4 rear view

The rear of the ThinkAgile VX850 V4 includes the following components:

- PCIe Riser Card 1 (optional): Up to four PCIe slots
- I/O Tray:
 - Three PCIe slots

- One ML2 slot
- Two OCP card slots
- PCIe Riser Card 2 (optional): Up to four PCIe slots
- One 1 GbE port for XClarity Controller
- Three USB 3.0 ports
- One VGA port
- Two hot-swap power supplies (four power supplies shown)

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

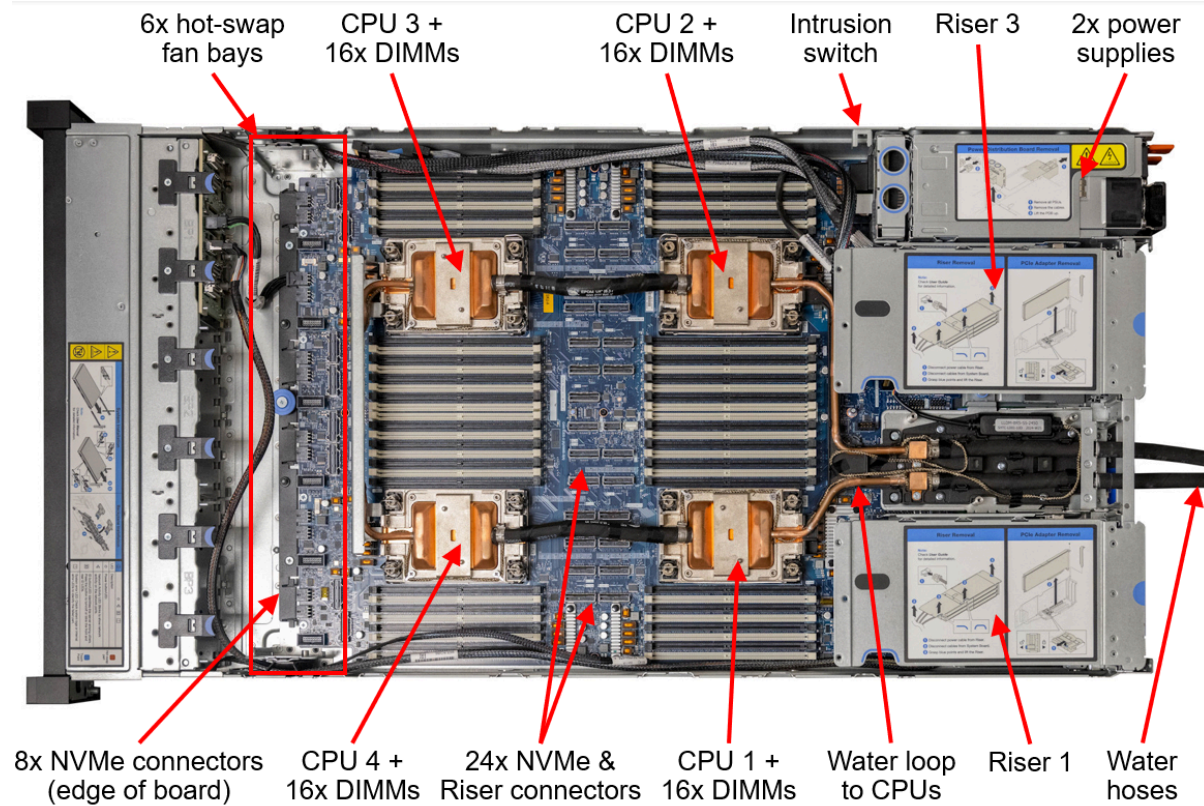


Figure 4. Internal view of the VX850 V4 system

Standard specifications

The ThinkAgile VX850 V4 is based on the ThinkSystem SR850 V4 server.

The following table provides an overview of the VX systems.

Table 1. Overview of VX850 V3 features

	VX850 V4
Target workloads	Cloud, AI/ML, Database, VDI
Base MTM	7DRHCTO1WW
Form Factor	2U
Base platform	ThinkSystem SR850 V4
CPU	2x or 4x Intel® Xeon® 6 (Granite Rapids-SP)
Memory	64x DDR5 6400 MHz (16GB - 256GB)
Hot-swap drive bays	Up to 24x 2.5"
Drive Configuration	All Flash
Boot drives	2x M.2 NVME 2x M.2 SATA 6GB
OCP networking	2x OCP adapters, 1Gb, 10Gb/25Gb, 100 Gb
PCIe networking	Up to 9x adapters 10Gb, 25Gb, 40Gb, 100Gb
GPUs	4x SW GPU 2x DW GPU
Hypervisor	ESXi 9.1 (Factory Installed)

The following table lists the system specifications of the ThinkAgile VX850 V4.

Table 2. System specifications

Attribute	Specification
Machine types	7DRH - VX850 V4
Form factor	2U Rack-mount
Processors	2x or 4x Intel® Xeon® 6 (Granite Rapids-SP)
Chipset	None. Integrated into the processor
Memory	64 DIMM slots with four processors (16 DIMM slots per processor). Each processor has 8 memory channels, with 2 DIMMs per channel (DPC). Lenovo TruDDR5 RDIMMs and 3DS RDIMMs are supported. RDIMMs operate at up to 6400 MHz at 1 DPC and up to 5200 MHz at 2 DPC.
Memory protection	ECC, SDDC (for x4-based memory DIMMs), ADDDC (for x4-based memory DIMMs), and memory mirroring.
Memory capacity	Up to 16TB with 64x 256GB 3DS RDIMMs and four processors (4.0TB per processor)

Attribute	Specification
Drive bays	Up to 24x 2.5-inch hot-swap drive bays: • Front bays can be 2.5-inch (8, 16 or 24 bays) • NVMe only • Up to 24x AnyBay drive bays (support Gen4 NVMe, or Gen5 NVMe drives) M.2 support, for OS boot and drive storage support: • 2x rear hot-swap M.2 drive bays (configurations with full-height slots only), or • Internal M.2 module supporting up to two M.2 drives
Storage controller	• Onboard NVMe ports
Network interfaces	Two dedicated OCP 3.0 SFF slots with a PCIe 5.0 x16 host interface. Support a variety of 2-port and 4-port adapters with up to 100 GbE network connectivity. One port of each installed OCP adapter can optionally be shared with the XClarity Controller (XCC) management processor for Wake-on-LAN and NC-SI support.
PCI Expansion slots	Slots are enabled using riser cards. Slots are either PCIe Gen5 or PCIe Gen4. With a 3-riser configuration, the server has 9x PCIe slots, a mix of low-profile and full-height slots: • Up to 9x slots (7x Gen5 + 2x Gen4) • With 2x DW GPU support: 7x slots (all Gen5)
Ports	Front: External diagnostics port, optional 2x USB 3 (5 Gb/s) port, one supports XCC local management, optional Mini DisplayPort (miniDP) v1.1a video port. Rear: 2x USB 3 (5 Gb/s) ports, 1x VGA video port, 1x RJ-45 1GbE systems management port for XCC remote management. Optional DB-9 COM serial port (installs in a slot). Internal: Optional 1x USB 3 (5 Gb/s) connector for operating system or license key purposes
Cooling	6x hot-swap dual-rotor 60 mm fans (all 6 standard). Fans are N+1 redundant, tolerating a single-rotor failure. One additional fan integrated into each of the two power supplies. For customers with water infrastructure in their data center, the server also supports open-loop water cooling for efficient heat removal.
Power supply	Up to two hot-swap redundant AC power supplies, 80 PLUS Platinum or 80 PLUS Titanium certification. 1300W, 2000W, 2700W and 3200W AC options. All AC power supplies support 230V power. No support for 115V. In China only, all power supply options support 240 V DC. Support for HVDC and -48V DC power supply options.
Video	Embedded graphics with 16 MB memory with 2D hardware accelerator, integrated into the XClarity Controller 3 management controller. Two video ports (rear VGA and optional front Mini DisplayPort); both can be used simultaneously if desired. Maximum resolution is 1920x1200 32bpp at 60Hz.
Hot-swap parts	Drives, power supplies, and fans.
Systems management	Operator panel with status LEDs. Optional External Diagnostics Handset with LCD display. Clarity Controller 3 (XCC3) embedded management based on the ASPEED AST2600 baseboard management controller (BMC) and OpenBMC, XClarity One centralized infrastructure delivery, XClarity Integrator plugins, and XClarity Energy Manager centralized server power management. XCC3 Premier is included which enables remote control functions and other features.
Security features	Chassis intrusion switch, Power-on password, administrator's password, Root of Trust module supporting TPM 2.0 and Platform Firmware Resiliency (PFR). Optional lockable front security bezel.
Software	See Software Section :
Hypervisors	VMware vSphere ESX See Operating system support section for details
Limited warranty	Three-year or one-year (model dependent) customer-replaceable unit and onsite limited warranty with 9x5 next business day (NBD).

Attribute	Specification
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	Width: 447 mm (17.6 in.), height: 87 mm (3.4 in.), depth of 2.5-inch chassis: 906 mm (35.7 inches), depth of E3.S chassis: 946 mm (37.2 in.).
Weight	Maximum weight: 42 kg (92.6 lb)

Models

Factory-integrated models are configured by using the Lenovo Data Center Solution Configurator (DCSC), <http://dcsc.lenovo.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.

Tip: It is highly recommended to engage a Lenovo representative early in a project that includes the ThinkAgile VX Hyperconverged Solutions.

The following table lists the base CTO models.

Table 3. CTO base models

Server model	Standard Open models
	These CTO models are available in all markets.
ThinkAgile VX850 V4	7DRHCTO1WW

Comparison with the ThinkSystem SR850 V4

The ThinkAgile VX850 V4 is based on the ThinkSystem SR850 V4 server. However, there are key differences:

- RAID adapter supported for boot only
- No VROC Support
- No HDDs
- Encryption not supported on SED drives
- Fibre Channel support for use cases like data migration
- No InfiniBand support
- Drives are categorized as ESA configurations. ESA only consists of a storage tier, no cache drives or disk groups required.

For details about the ThinkSystem SR850 V4, see the SR850 V4 product guide:

<https://lenovopress.lenovo.com/lp2230-thinksystem-sr850-v4-server>

To verify what specific hardware components are supported with the VX850 V4, see the DCSC configurator:

<https://dcsc.lenovo.com>

Processors

The VX850 V4 systems support two or four processors.

The following table lists the supported processors.

For details about these processors, including configuration rules, see the SR850 V4 product guide:

<https://lenovopress.lenovo.com/lp2230-thinksystem-sr850-v4-server#processors>

Table 4. Processor choices

Part number	Feature	Description	Maximum supported
			VX850 V4
None	C5R7	Intel Xeon 6714P 8C 165W 4.0GHz Processor	4
None	C5R5	Intel Xeon 6724P 16C 210W 3.6GHz Processor	4
None	C5RC	Intel Xeon 6728P 24C 210W 2.7GHz Processor	4
None	C5RE	Intel Xeon 6738P 32C 270W 2.9GHz Processor	4
None	C5QS	Intel Xeon 6748P 48C 300W 2.5GHz Processor	4
None	C5RF	Intel Xeon 6768P 64C 330W 2.4GHz Processor	4
None	C5RA	Intel Xeon 6788P 86C 350W 2.0GHz Processor	4

Memory

The VX850 V4 systems support the following memory options. The systems support 64 DIMMs with four processors.

For details about these options, including configuration rules, see the SR850 V4 product guide:

<https://lenovopress.lenovo.com/lp2230-thinksystem-sr850-v4-server#memory-options>

Table 5. Memory options

Part number	Feature	Description	Maximum supported
			VX850 V4
RDIMMs			
4X77A90964	C0U9	ThinkSystem 32GB TruDDR5 6400MHz (1Rx4) RDIMM	64
4X77A90966	C0TQ	ThinkSystem 64GB TruDDR5 6400MHz (2Rx4) RDIMM	64
4X77A90997	BZ7D	ThinkSystem 96GB TruDDR5 6400MHz (2Rx4) RDIMM	64
4X77A90993	C0U1	ThinkSystem 128GB TruDDR5 6400MHz (2Rx4) RDIMM	64
3DS RDIMMs			
4X77A90994	C0U0	ThinkSystem 256GB TruDDR5 6400MHz (4Rx4) 3DS RDIMM	64

Internal storage

The VX850 V4 supports up to 24x 2.5-inch hot-swap drive bays, accessible from the front of the system.

The front drive bay is configured using 8-bay backplanes. The available backplane is:

- 8-bay 2.5-inch AnyBay backplane

Table 6. Drive backplanes

Part number	Feature	Description	Maximum supported
			VX850 V4
4XH7B08875	C3RU	ThinkSystem SR850 V4/SR860 V4 8x2.5" AnyBay Backplane Option Kit	3

For details about these components, including configuration rules, see the SR850 V4 product guide:
<https://lenovopress.lenovo.com/lp2230-thinksystem-sr850-v4-server#internal-storage>

For OS boot functions, the system supports two M.2 drives installed on an adapter internal to the server. The following table lists the supported controllers/enablement kits for M.2

For details about these options, including configuration rules, see the SR850 V4 product guide:
<https://lenovopress.com/lp2230-thinksystem-sr850-v4-server#internal-storage>

Table 7. Boot Drive Enablement

Part number	Feature	Description	Maximum supported
			VX850 V4
Internal M.2 (non-hot-swap)			
4Y37B09898	CC7G	ThinkSystem M.2 RAID B550i-2i SATA/NVMe Enablement Kit	1
Rear hot-swap M.2			
4XH7B11701	CCCZ	ThinkSystem M.2 RAID B550p-2HS SATA/NVMe Enablement Kit	1
M.2 Drive Interposer			
None	C1LJ	Hot-Swap M.2 Drive Interposer	2

Internal drive options

There is only one storage architecture, Express Storage Architecture (ESA) when implementing vSAN 9.1.

For more information on vSAN ESA:

<https://lenovopress.lenovo.com/lp1670-improve-storage-performance-with-thinkagile-vx-vmware-vsan-esa-micron-nvme#introduction>

This section lists the supported drives:

- [Boot drives](#)
- [Internal drives for VX850 V4 Drives](#)

Configuration Note:

- Express Storage Architecture (ESA) supports a minimum of 2 drives and a maximum of 24 drives. Please reference the [vSAN ESA ReadyNode Hardware Guidance](#) for additional requirements.
- VMware vSAN certification for Generic NVMe drives: The drives are listed in the [VMware Compatibility Guide](#) (VCG) under the drive vendor company name instead of Lenovo. To check a drive for vSAN certification, search the VCG using the Supplier part number. Part numbers can be found using the Product Guide for the corresponding Drive Family on Lenovo Press https://lenovopress.lenovo.com/servers/options/drives#sort=last_update.

Boot drives

The VX850 V4 systems support the following drive for boot functions.

Table 8. Boot drives

Part number	Feature	Description	Maximum supported
			VX850 V4
M.2 PCIe NVMe Drives			
4XB7B14665	C286	ThinkSystem M.2 VA 480GB Read Intensive NVMe NHS SSD	2
4XB7B14666	C287	ThinkSystem M.2 VA 960GB Read Intensive NVMe NHS SSD	2

Configuration Note:

- ThinkSystem M.2 RAID B550i-2i SATA/NVMe Enablement Kit is required.
- Hot-Swap M.2 Drive Interposer creates a hot swappable boot drive configuration.

Internal drives for VX850 V4 Drives

The following table lists the drives supported in the VX850 V4 Drives. Drives are classified only as ESA.

Table 9. Drives supported in the VX850 V4 Drives

Part number	Feature	Description	Maximum supported
			VX850 V4
2.5-inch SSDs - PCIe 5.0 NVMe			
4XB7B15546	CGSM	ThinkSystem 2.5" U.2 7600 MAX 1.6TB Mixed Use NVMe PCIe 5.0 x4 HS SSD	24
4XB7B15547	CGSL	ThinkSystem 2.5" U.2 7600 MAX 3.2TB Mixed Use NVMe PCIe 5.0 x4 HS SSD	24

Part number	Feature	Description	Maximum supported
			VX850 V4
4XB7B15548	CGSK	ThinkSystem 2.5" U.2 7600 MAX 6.4TB Mixed Use NVMe PCIe 5.0 x4 HS SSD	24
4XB7B15549	CGSJ	ThinkSystem 2.5" U.2 7600 MAX 12.8TB Mixed Use NVMe PCIe 5.0 x4 HS SSD	24
4XB7B15542	CGSR	ThinkSystem 2.5" U.2 7600 PRO 1.92TB Read Intensive NVMe PCIe 5.0 x4 HS SSD	24
4XB7B15543	CGSQ	ThinkSystem 2.5" U.2 7600 PRO 3.84TB Read Intensive NVMe PCIe 5.0 x4 HS SSD	24
4XB7B15544	CGSP	ThinkSystem 2.5" U.2 7600 PRO 7.68TB Read Intensive NVMe PCIe 5.0 x4 HS SSD	24
4XB7B15545	CGSN	ThinkSystem 2.5" U.2 7600 PRO 15.36TB Read Intensive NVMe PCIe 5.0 x4 HS SSD	24

Network adapters

The VX850 V4 systems support the following networking options.

For details about these options, including configuration rules, see the SR850 V4 product guide:

<https://lenovopress.lenovo.com/lp2230-thinksystem-sr850-v4-server#i-o-expansion>

<https://lenovopress.lenovo.com/lp2230-thinksystem-sr850-v4-server#network-adapters>

Table 10. OCP network adapters

Part number	Feature	Description	Maximum supported
			VX850 V4
25 Gb Ethernet			
4XC7A80567	BPPW	ThinkSystem Broadcom 57504 10/25GbE SFP28 4-Port OCP Ethernet Adapter	2

Table 11. PCIe network adapters

Part number	Feature	Description	Maximum supported
			VX850 V4
Gigabit Ethernet			
7ZT7A00484	AUZV	ThinkSystem Broadcom 5719 1GbE RJ45 4-Port PCIe Ethernet Adapter	9
25 Gb Ethernet			
4XC7A99191	C62J	ThinkSystem Nvidia ConnectX-7 10/25GbE SFP28 4-Port PCIe Ethernet Adapter(Generic)	4
4XC7A80566	BNWM	ThinkSystem Broadcom 57504 10/25GbE SFP28 4-port PCIe Ethernet Adapter	4

GPU Adapters

Table 12. GPU adapters

Part number	Feature	Description	Maximum supported
			VX850 V4
Double-wide GPUs			
4X67A90669	BYFH	ThinkSystem NVIDIA L40S 48GB PCIe Gen4 Passive GPU	2
Single-wide GPUs			
4X67A84824	BS2C	ThinkSystem NVIDIA L4 24GB PCIe Gen4 Passive GPU	4

Fibre Channel host bus adapters

Table 13. Fibre Channel host bus adapters

Part number	Feature	Description	Maximum supported
			VX850 V4
32Gb Fibre Channel			
4XC7A96457	C5FC	ThinkSystem Emulex LPe37102 32Gb 2-port SecureHBA PCIe Fibre Channel Adapter(Generic FW)	9
64Gb Fibre Channel			
4XC7A96458	C5FD	ThinkSystem Emulex LPe38102 64Gb 2-port SecureHBA PCIe Fibre Channel Adapter(Generic FW)	9

Operating system support

The ThinkAgile VX850 V4 Certified Node supports the following operating systems:

- ESXi 9.1(Factory Installed)

Configuration Note:

For further details, including any restrictions, see the OS Interoperability Guide:

<https://lenovopress.lenovo.com/osig#term=vx&support=all>

Software

ThinkAgile VX Series offerings support VMware Cloud Foundation (VCF) and VMware vSphere Foundation (VVF) primary software stack options. Subscription Licenses can be purchased by contacting Broadcom Seller directly or a Broadcom authorized software partner. It is recommended that the VMWare subscription license match the length of the Lenovo hardware warranty, 3-year or 5-year durations. In addition to the primary stack options, advanced service options are available for features like vSAN additional capacity, Live Recovery, Firewall with Advanced Threat Prevention and Avi Load Balancer, Private AI Foundation is no longer a standalone add-on but part of the VCF license.

The following VMware subscription software license are available for purchase by contacting a Broadcom Seller directly or a Broadcom authorized software partner.:

- Primary Software
 1. VMware Cloud Foundation (VCF)
 2. VMware vSphere Foundation (VVF)

For the current list of available add-ons for the VMware primary software, see the Broadcom feature comparison document. <https://www.vmware.com/docs/vmware-cloud-foundation-9-0-feature-comparison-and-upgrade-paths>.

Configuration notes:

- For more information on ThinkAgile VX Series Hardware needed for the respective VMware license quantities, please use the VMware SW license calculator at <https://lets.lenovo.com/vlets-calculator/>.

Warranty and Support

The VX850 V4 has a 3 or 5-year warranty based on the machine type:

- 7DRH - 3 or 5 year warranty

The ThinkAgile VX Series can be configured with a three- or five-year hardware warranty with 24x7 ThinkAgile Advantage Single Point of Support and various levels of coverage with a well-defined scope of services, including service hours, response time, term of service, and service agreement terms and conditions. The Lenovo local support centers perform Premier determination and resolution for hardware-related issues and escalate to Broadcom, on behalf of the customer, for software-related problem determination. Broadcom will contact the customer and will own the software-related problem resolution until closure.

Our global network of regional support centers offers consistent, local-language support enabling you to vary response times and level of service to match the criticality of your support needs:

- **Standard Next Business Day** – Best choice for non-essential systems requiring simple maintenance.
- **Premier Next Business Day** – Best choice for essential systems requiring technical expertise from senior-level Lenovo Engineers.
- **Premier 24x7 4-Hour Response** – Best choice for systems where maximum uptime is critical.
- **Premier Support Plus 24x7 4-Hour Response** – Best choice for systems where maximum uptime is critical.

For more information, consult our [Lenovo Operational Support Services for Data Centers Services Brochure](#).

Note: Some warranty upgrades may not be available in all markets or regions. For more information, go to <https://lenovocator.com/>. For information about Lenovo warranty upgrade offerings that are available in your region, contact your local Lenovo sales representative or business partner.

Software maintenance

The software maintenance from Broadcom for ThinkAgile VX Series should match the three-, or five-year duration of the selected Lenovo hardware warranty period that entitles customers to submit service requests to troubleshoot VMware software issues and receive code updates, including fixes, patches, and new software releases.

The Lenovo local support centers perform problem determination and resolution for hardware-related issues and escalate to Broadcom, on behalf of the customer for software-related problem determination. Lenovo will contact the customer and will own the software-related problem resolution until closure.

Deployment services

The following optional Lenovo basic installation services are available for the ThinkAgile VX Hyperconverged Solutions:

- Unpacking and inspecting the systems
- Mounting the systems in a rack cabinet
- Connecting the systems to electrical power and network
- Checking and updating firmware to the latest levels
- Verifying operations
- Disposal of the packaging materials (within the customer site)

ThinkAgile VX Hyperconverged Solutions offer the option to include deployment services delivered by Lenovo Professional Services for the ultimate customer experience. However, “Channel Partner Provided” option is also available on DCSC. By choosing this option, Lenovo Customer or Lenovo Business Partner assumes the full responsibility to perform the deployment services for the quoted system. It is strongly recommended that Lenovo Professional Services or approved business partners are used to perform the deployment services.

The following additional Lenovo deployment services are available for the ThinkAgile VX Series with VMware vSphere Foundation solution to get customers up and running quickly. You can use the table below to add these services:

- Conducting remote preparation and planning
- Verifying firmware versions and performing firmware updates, if needed
- Configuring XCC management settings
- Configuring hypervisor settings
- Configuring vSAN
- Configuring VMware vCenter Server and discovering hosts and storage
- Configuring Lenovo XClarity network settings and performing discovery and inventory
- Transferring knowledge
- Developing post-installation documentation

The following Lenovo deployment services are provided with the ThinkAgile VX Series with VMware Cloud Foundation co-engineered solution to get customers up and running quickly:

- Planning and Design
 - Collect technical details for hardware and VMware environment
 - Plan the architecture based on Customer's business and tech requirements
 - Fill the VCF Plan, Prepare Workbook
- Implementation
 - Configure hardware (XCC IP, UEFI), upgrade firmware via OneCLI or BoMC
 - Deploy & Configure ESXi, Cloud Builder & import VCF Workbook, Lenovo xClarity software components
 - Check compliance with VX Best Recipes
- Handover
 - BAU updates based on VCF releases and VX Best Recipes
 - VMware Async Patch Tool (if required)
- Readiness Handover
 - Create handover document and knowledge transfer
 - Includes details for each deployed component

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

- **Onsite Deployment:** Install, configure, and validate solution on-site, and conduct knowledge transfer.
- **Remote Deployment:** Install, configure, and validate solution remotely, and conduct knowledge transfer.
- **Remote Health Check:** Report & remediation of hardware and cluster health issues, including firmware and software updates.

Table 14. ThinkAgile Deployment offerings

Part number	Description
Onsite deployment services	
5MS7C42581	TA VMWare Appliance (VX) 1x Onsite Deployment Per node
Remote deployment services	
5MS7C42902	ThinkAgile Deployment VX Remote 1x Per Node
Remote Health Check	
5MS7C43014	TA VMWare Appliance (VX) 1x Health Check Remote Per Node

For more information, refer to the Data Center Implementation Services web page:

<https://www.lenovo.com/us/en/data-center/services/implementation-services/>

Lenovo TruScale

Lenovo TruScale XaaS is your set of flexible IT services that makes everything easier. Streamline IT procurement, simplify infrastructure and device management, and pay only for what you use – so your business is free to grow and go anywhere.

Lenovo TruScale is the unified solution that gives you simplified access to:

- The industry's broadest portfolio – from pocket to cloud – all delivered as a service
- A single-contract framework for full visibility and accountability
- The global scale to rapidly and securely build teams from anywhere
- Flexible fixed and metered pay-as-you-go models with minimal upfront cost
- The growth-driving combination of hardware, software, infrastructure, and solutions – all from one single provider with one point of accountability.

For information about Lenovo TruScale offerings that are available in your region, contact your local Lenovo sales representative or business partner.

Regulatory compliance

The VX850 V4 conform to the following standards:

- ANSI/UL 62368-1
- IEC 62368-1 (CB Certificate and CB Test Report)
- FCC - Verified to comply with Part 15 of the FCC Rules, Class A
- CSA C22.2 No. 62368-1
- CISPR 32, Class A, CISPR 35
- Argentina IEC 60950-1
- Japan VCCI, Class A
- Taiwan BSMI CNS15936, Class A; CNS15598-1; Section 5 of CNS15663
- CE, UKCA Mark (EN55032 Class A, EN62368-1, EN55024, EN55035, EN61000-3-2, EN61000-3-3, (EU) 2019/424, and EN IEC 63000 (RoHS))
- Korea KN32, Class A, KN35
- Russia, Belorussia and Kazakhstan, TP EAC 037/2016 (for RoHS)
- Russia, Belorussia and Kazakhstan, EAC: TP TC 004/2011 (for Safety); TP TC 020/2011 (for EMC)
- Australia/New Zealand AS/NZS CISPR 32, Class A; AS/NZS 62368.1
- Energy Star 3.0
- China CELP certificate, HJ 2507-2011
- Japanese Energy-Saving Act
- Mexico NOM-019
- TUV-GS (EN62368-1, and EK1-ITB2000)
- India BIS 13252 (Part 1)
- EU2019/424 Energy Related Product (ErP Lot9)

Lenovo Financial Services

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

- **Flexible**

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

- **100% Solution Financing**

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

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

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

- **24/7 Asset management**

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

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

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

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

Seller training courses

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

1. **VTT: Beyond Kubernetes - Driving AI and Enterprise Innovation with Red Hat OpenShift**

2026-10-01 | 65 minutes | Employees Only

Discover how Red Hat OpenShift is redefining the hybrid cloud landscape. This presentation will provide Lenovo with a comprehensive overview of the OpenShift ecosystem, breaking down its architecture and highlighting the critical differences between enterprise-ready OpenShift and upstream Kubernetes. We will explore high-impact use cases, from seamless container orchestration and developer empowerment to cutting-edge OpenShift Virtualization and Red Hat AI integrations. Finally, we will preview the highlights of the next major OpenShift release and host an interactive discussion on strategic partnership opportunities, exploring how Lenovo and Red Hat can collaborate to shape the future of the OpenShift community.

Tags: Red Hat, Openshift, Open Shift, Kubernetes, AI, Cloud, Hybrid Cloud,

Published: 2026-10-01

Length: 65 minutes

Start the training:

Employee link: Grow@Lenovo

Course code: DVCLD236

2. **Position Lenovo ThinkAgile Solutions for AI**

2026-09-29 | 18 minutes | Employees and Partners

Discover how to confidently position Lenovo ThinkAgile Solutions for AI to address today's evolving enterprise challenges. In this introductory course, learners will explore the key business and technology factors driving AI adoption, understand the value proposition of ThinkAgile Hyper-Converged Infrastructure (HCI), and examine how ThinkAgile solutions support modern AI workloads.

Through real-world use cases and deployment scenarios, you will learn how ThinkAgile Solutions for AI help organizations simplify infrastructure, accelerate AI initiatives, and achieve business outcomes with a scalable, integrated approach. By the end of this course, you will be able to identify customer challenges, articulate the benefits of ThinkAgile HCI, and recommend ThinkAgile-based AI solutions that align with customer needs.

Published: 2026-09-29

Length: 18 minutes

Start the training:

Employee link: Grow@Lenovo

Partner link: [Lenovo 360 Learning Center](#)

Course code: DTAP200

3. Family Portfolio: ThinkAgile Systems

2026-09-29 | 35 minutes | Employees and Partners

Gain a foundational understanding of the Lenovo ThinkAgile portfolio and the infrastructure platforms that power it. In this course, you will explore the ThinkSystem and ThinkEdge server families that serve as the foundation for ThinkAgile solutions, learn the differences between Certified Nodes and Integrated Systems, and examine the key capabilities of the FX, HX, MX, and VX product families.

By the end of the course, you will be able to identify the core ThinkAgile offerings, differentiate deployment models, and articulate the unique features and benefits of each solution family to support customer conversations and solution recommendations.

Published: 2026-09-29

Length: 35 minutes

Start the training:

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo 360 Learning Center](#)

Course code: DSDO102

4. Lenovo Client Virtualization Solutions

2026-09-01 | 30 minutes | Employees and Partners

This training provides tech sellers and partners with the details of the customer challenges and needs that make the case for the Lenovo client virtualization solutions. By the end of this course, you will learn the components that makeup our solutions, cover the details of the three LCV (Lenovo Client Virtualization) offerings, and discover when they are used and how they benefit customers.

Published: 2026-09-01

Length: 30 minutes

Start the training:

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo 360 Learning Center](#)

Course code: DCV213r3

5. **Data Storage Solutions Primer**

2026-07-30 | 45 minutes | Employees Only

This course is part of the Lenovo ISG (Infrastructure Solutions Group) Primer Series - a learning program designed to help Client Managers build foundational knowledge, strengthen customer conversations, and recognize opportunities with greater confidence.

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

- Understand how storage connects to modern IT and business outcomes
- Explain the importance of storage in data-centric environments
- Identify opportunities and align storage solutions to customer needs

Last Update: July 30, 2026

Published: 2026-07-30

Length: 45 minutes

Start the training:

Employee link: [Grow@Lenovo](#)

Course code: DSTOO104

6. VTT: A Deep Dive into Architecting and Positioning ThinkAgile Disaggregated Solutions with Microsoft and VMware

2026-06-25 | 60 minutes | Employees Only

Join Catherine Maina, Lenovo Sr. Product Manager, Brian Faleiro, Lenovo Sr. Product Management Specialist and Chandrakandh Mouleeswaran, Lenovo Sr. Software Engineer for this technical deep dive on designing, positioning, and demonstrating ThinkAgile Disaggregated Solutions with Microsoft and VMware. As enterprises move beyond traditional HCI toward more flexible, composable infrastructure models, understanding disaggregation at both an architectural and operational level is critical to winning complex deals.

This webinar goes beyond the basics to examine how ThinkAgile Disaggregated Solutions decouple compute and storage resources using software-defined intelligence—enabling independent scaling, optimized resource utilization, and improved workload alignment across hybrid environments. Through a detailed exploration of system architecture, integration points, and deployment models, you will gain the technical fluency required to engage in meaningful customer conversations, map solutions to workload requirements, and address architectural objections with confidence

Key technical topics include:

- Reference architecture of ThinkAgile Disaggregated Solutions (compute, storage, fabric, and management layers) with Microsoft and VMware
- Software stack overview, including orchestration, automation, and API-driven control planes
- Data services capabilities: performance, resiliency, scaling, and lifecycle management
- Integration with virtualization platforms, Kubernetes ecosystems, and hybrid cloud strategies
- Networking considerations, including east-west traffic patterns and fabric design
- Deployment models and design patterns for common workloads (VDI, databases, AI/ML, and cloud-native apps)
- Performance tuning and resource optimization strategies
- Competitive technical differentiation vs HCI and composable infrastructure alternatives

What you'll gain:

- A clear understanding of how to architect and size disaggregated environments
- Technical validation points to support proof-of-concept (POC) and customer demos
- Talking points to address latency, complexity, and manageability concerns
- Practical guidance to align customer workload requirements with optimal solution design

Published: 2026-06-25

Length: 60 minutes

Start the training:

Employee link: Grow@Lenovo

Course code: DVCLD233

7. Partner Technical Webinar - Disaggregated Solutions for ThinkAgile

2026-06-01 | 60 minutes | Employees and Partners

In this 60 minute replay, Catherine Maina and Brian Faleiro, Lenovo WW PMs for ThinkAgile, presented the newly updated options for external storage on ThinkAgile. And Pawan Misra, Lenovo NA PM for ThinkAgile gave an update on ThinkAgile MX in the TCE program.

Published: 2026-06-01

Length: 60 minutes

Start the training:

Employee link: Grow@Lenovo

Partner link: [Lenovo 360 Learning Center](#)

Course code: MAY2926

8. VTT Cloud Architecture - ThinkAgile in the Field: Real-World Insights to Shape Our Next-Gen Portfolio

2026-02-25 | 80 minutes | Employees Only

Join Adam Mandelbloom, Lenovo Technical Marketing Manager and members of the ThinkAgile Product Marketing Team leading this roundtable discussion on how Lenovo continues evolving the ThinkAgile portfolio, it's critical that our product roadmap is grounded in real-world field experience. This interactive webinar brings together technical sellers from across the organization to share frontline insights, uncover unmet customer needs, and align on the architectural direction for the next generation of ThinkAgile solutions.

We'll begin by clarifying key terminology—such as our positioning of HCI as Storage Virtualization and refining our shared definition of Edge—to ensure consistent messaging and understanding across teams. From there, we'll explore the customer challenges, deal patterns, and platform-level blockers that shape how ThinkAgile performs in the market today.

Key Topics We Will Cover:

Portfolio Performance & Customer Needs

- Where is the ThinkAgile portfolio winning—and where is it losing?
- What core problems are customers trying to solve with ThinkAgile?
- How do customers decide between 1 socket, 2 socket, and 2+ socket configurations?

Gaps, Opportunities & Portfolio Decisions

- What ThinkAgile configurations or capabilities do you wish we offered but currently don't?
- Which ThinkAgile platforms or variants should we consider retiring?
- Deal blockers related to power limitations, GPU options, or licensing restrictions
- Competitive losses broken down by architecture or platform type

Strategic Closing Discussion

- What is the one critical bet Lenovo must get right for the next generation of ThinkAgile?

Tags: Microsoft, Nutanix, Technical Sales, ThinkAgile, VMware

Published: 2026-02-25

Length: 80 minutes

Start the training:

Employee link: Grow@Lenovo

Course code: DVCLD231

9. OneIQ Overview and Demo

2026-02-10 | 35 minutes | Employees and Partners

In this 35-minute video, Peter Grant, Head of Customer Experience for OneIQ, presents and overview and demo of OneIQ for Lenovo Partners.

Tags: Sales Tools

Published: 2026-02-10

Length: 35 minutes

Start the training:

Employee link: Grow@Lenovo

Partner link: [Lenovo 360 Learning Center](#)

Course code: ONEIQ101

10. VTT Cloud Architecture: The Lenovo ThinkAgile Demo Toolkit - Maximizing Resources and Driving Customer Confidence

2026-01-22 | 63 minutes | Employees and Partners

Seeing is believing when it comes to showcasing the value of ThinkAgile.

As a technical seller, solution architect or pre-sales engineer you know that a successful demonstration can be the linchpin of the sales cycle. ThinkAgile offers simplicity, scalability, and TCO reduction, but conveying these benefits effectively requires more than just a demo environment—it requires a strategy and a mastery of the resources at your disposal.

Did you know we have various pre-built demos and environments available for use with your customers?

This exclusive, Lenovo focused webinar is your master class on leveraging our existing HCI demo assets. We will dive into what's available, how to use it for maximum impact, and gather your crucial feedback to refine our future technical sales tools.

This session moves beyond product features to focus entirely on execution and resource utilization.

- Catalog of HCI Demo Resources: Get a comprehensive, up-to-date tour of all available assets, including:

- Pre-recorded Demo Videos for different workloads (VDI, Lifecycle Management).
- Clickable, Interactive Product Tours for early-stage discovery.
- Reference Architecture Demos illustrating hybrid cloud and multi-site deployments.

Your Voice, Our Future Demos (Feedback Session): This is your opportunity to directly influence the tools you use every day. We will dedicate time to:

- Reviewing the effectiveness of current demos in competitive scenarios.
- Gathering direct feedback on what critical use cases or feature gaps need to be covered in future demo development.
- Discussing any technical or logistical issues encountered while using the current environments.

Tags: Microsoft, Nutanix, Software Defined Infrastructure (SDI), ThinkAgile, VMware

Published: 2026-01-22

Length: 63 minutes

Start the training:

Employee link: Grow@Lenovo

Partner link: [Lenovo 360 Learning Center](#)

Course code: DVCLD229

11. Data Protection

2025-12-23 | 25 minutes | Employees and Partners

This course focuses on data protection and on Lenovo's protection portfolio - tools, platforms, and trusted ecosystem partners.

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

- Explain why data protection is a critical business priority by recognizing the real-world impact of data loss on operations, finances, and trust.
- Apply core data protection principles to assess customer risk and identify gaps using a structured protection strategy.
- Connect customer protection needs to Lenovo-native and partner solutions to position the right data protection approach.

Tags: Microsoft, Nutanix, VMware

Published: 2025-12-23

Length: 25 minutes

Start the training:

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo 360 Learning Center](#)

Course code: DSTOP203

12. Data Modernization

2025-12-22 | 20 minutes | Employees and Partners

This course focuses on storage modernization and how Lenovo's evolving portfolio helps you lead smarter conversations, deliver stronger business value, and help you confidently position Lenovo as your customers' trusted infrastructure partner.

This course is built to help you lead smarter customer conversations about storage modernization.

The three main objectives are:

- Learn why modernization is urgent - and what happens if customers delay
- Find out how to help customers choose between Enterprise & HCI based on performance, scale, & operations
- Discover how to match Flash and Unified Storage to Real-World Customer Needs.

Tags: Sales, Storage

Published: 2025-12-22

Length: 20 minutes

Start the training:

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo 360 Learning Center](#)

Course code: DSTOP202

13. Lenovo VTT Cloud Architecture: How VCF 9 delivers a Modern Sovereign Private Cloud with Intel Xeon 6 on ThinkAgile VX

2025-08-22 | 84 minutes | Employees and Partners

Join Lenovo, Intel and VMware by Broadcom SMEs and learn how the next generation of VMware Cloud Foundation 9.0 is the ideal platform for customers to implement a modern private cloud. They will demonstrate simplified deployment, operations and cloud developer experience to run traditional, mission critical workloads as well as new AI workloads and containerized applications all in one unified, resilient and secure platform. VCF 9 is supported on the latest Intel Xeon 6 processors that are now available on ThinkAgile VX V4 systems

Tags: Architecture, Engineering & Construction, Artificial Intelligence (AI), Cloud, ThinkAgile, VMware

Published: 2025-08-22

Length: 84 minutes

Start the training:

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo 360 Learning Center](#)

Course code: DVCLD226

14. Unlock the full potential of AI in your organization with a private and secure solution that leverages your own data

2025-06-26 | 61 minutes | Employees and Partners

Join Scott Stricker, World-Wide Leader for Advanced Services within the VMware Cloud Foundation Division and Alex Fanous Advanced Services Architects VMware Cloud Foundation Org at VMware by Broadcom as they lead us in this session. We'll explore the critical need for a private AI solution that enables enterprises to serve AI models with confidence, while maintaining control over their sensitive data and adhering to operational governance & standards. We'll discuss the benefits of a Lenovo-VMware joint solution, including robust lifecycle management, agility, and the ability to deliver AI outcomes that drive business success. We'll also delve into real-world use cases and identify the new personas within our customers' business that will be the consumers of these AI services, and how they can benefit from a private AI foundation. Join us for this technical deep dive into the solution, including a live demonstration, to see how you can harness the power of AI while protecting your organization's most valuable assets and wrangle the cost of today's most expensive workload.

Tags: Artificial Intelligence (AI), Cloud, Software Defined Infrastructure (SDI), ThinkAgile

Published: 2025-06-26

Length: 61 minutes

Start the training:

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo 360 Learning Center](#)

Course code: DVCLD224

15. **ThinkAgile VX in 3 minutes**

2025-06-18 | 5 minutes | Employees and Partners

Learn about ThinkAgile VX in under 3 minutes. The business challenges it solves and how it can increase the size of your sales opportunities.

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

- 1) Learn how to sell Lenovo ThinkAgile VX
- 2) Describe what differentiates ThinkAgile VX from other VMware offerings

Tags: Sales, Sales Tools, Technical Sales, ThinkAgile

Published: 2025-06-18

Length: 5 minutes

Start the training:

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo 360 Learning Center](#)

Course code: DVXS101

16. **Lenovo Data Center Product Portfolio**

2025-06-11 | 20 minutes | Employees and Partners

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

Course objectives:

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

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

Published: 2025-06-11

Length: 20 minutes

Start the training:

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo 360 Learning Center](#)

Course code: SXXW1110r8

17. **Think AI Weekly: Simplifying AI Deployments with ThinkAgile**

2025-04-11 | 54 minutes | Employees Only

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

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

Tags: Artificial Intelligence (AI), ThinkAgile

Published: 2025-04-11

Length: 54 minutes

Start the training:

Employee link: [Grow@Lenovo](#)

Course code: DTAIW137

18. **ThinkAgile VX - How to sell**

2024-12-18 | 15 minutes | Employees and Partners

This module will introduce you to the ThinkAgile VX product line. It also introduces the latest updates to the VMware software packages available with the ThinkAgile VX product line.

Course Objectives:

1. Find out more about the competitive advantage of ThinkAgile VX.
2. Learn about the hardware and software solutions in the ThinkAgile VX line.
3. Understand the business needs and how you can sell more.

Tags: ThinkAgile, VMware

Published: 2024-12-18

Length: 15 minutes

Start the training:

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo 360 Learning Center](#)

Course code: DVXS100

19. **Selling On Prem Value - Private Cloud and Private AI**

2024-12-13 | 40 minutes | Employees Only

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

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

Published: 2024-12-13

Length: 40 minutes

Start the training:

Employee link: [Grow@Lenovo](#)

Course code: DVMB101

20. **ThinkAgile Solutions for AI - Security and Compliance Considerations**

2024-10-01 | 15 minutes | Employees and Partners

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

Upon completion of this training, you will be able to:

- Describe security features of ThinkAgile for AI data protection.
- Explain how to mitigate risk and address compliance considerations in AI deployments.

Last Updated: September 2024

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

Published: 2024-10-01

Length: 15 minutes

Start the training:

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo 360 Learning Center](#)

Course code: DCLDAI203

21. Integration of ThinkAgile and AI

2024-09-11 | 25 minutes | Employees and Partners

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

Upon completion of this training, you will be able to:

- Highlight the advantages of using ThinkAgile for AI workloads
- Explore how ThinkAgile platforms are specifically optimized for AI

Last Updated: September 2024

Tags: Artificial Intelligence (AI), ThinkAgile

Published: 2024-09-11

Length: 25 minutes

Start the training:

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo 360 Learning Center](#)

Course code: DCLDAI204

22. Key Features of Lenovo ThinkAgile Solutions for AI

2024-09-10 | 15 minutes | Employees and Partners

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

In this course, you will learn how to:

- Present compute capabilities for AI processing
- Articulate optimized storage solutions with ThinkAgile for high-speed AI performance
- Identify essential networking considerations for ThinkAgile AI workloads
- Present ThinkAgile AI Ready solutions

Last Updated: September 2024

Tags: Artificial Intelligence (AI), ThinkAgile

Published: 2024-09-10

Length: 15 minutes

Start the training:

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo 360 Learning Center](#)

Course code: DCLDAI201

23. **ThinkAgile Solutions for AI - Sales Strategies and Messaging**

2024-09-06 | 15 minutes | Employees and Partners

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

In this course, you'll learn how to:

- Identify customer pain points.
- Recommend ThinkAgile Solutions for AI tailored to those needs. And lastly,
- Communicate the benefits of ThinkAgile for AI to key stakeholders.

Last Updated: September 2024

Tags: Artificial Intelligence (AI), ThinkAgile

Published: 2024-09-06

Length: 15 minutes

Start the training:

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo 360 Learning Center](#)

Course code: DCLDAI202

24. **Lenovo VTT Cloud Architecture - Unlock Gen AI with VMware Private AI Foundation with NVIDIA**

2024-07-16 | 60 minutes | Employees and Partners

In today's rapidly evolving digital landscape, businesses are hungry for the transformative power of Artificial Intelligence (AI). They see AI as the key to streamlining operations and unlocking exciting new opportunities. However, widespread adoption has been hampered by concerns surrounding privacy, the complexity of implementation, and the hefty costs associated with deploying and managing AI solutions at an enterprise level.

Join Chris Gully and Baker Hull, Solutions Architects from VMware by Broadcom, as they discuss how Lenovo, NVIDIA, and VMware By Broadcom are partnering to deliver a private, secure, scalable, and flexible AI infrastructure solution that helps enterprise customers build and deploy AI workloads within their own private cloud infrastructure, ensure the control of sensitive data and compliance with regulatory requirements, ultimately driving faster time to value and achieving their AI objectives.

Tags: Artificial Intelligence (AI), Cloud, Nvidia, ThinkAgile, VMware

Published: 2024-07-16

Length: 60 minutes

Start the training:

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo 360 Learning Center](#)

Course code: DVCLD214

25. **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

Tags: SAP, ThinkAgile, ThinkEdge, ThinkSystem

Published: 2024-06-04

Length: 60 minutes

Start the training:

Employee link: [Grow@Lenovo](#)

Course code: DSAPF101

26. **Start the Conversation - Lenovo Cloud Strategy**

2024-05-20 | 25 minutes | Employees and Partners

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

Course Objectives:

- Understand why customers choose the cloud
- Describe the Lenovo Cloud Strategy
- Be able to start the customer cloud conversation

Tags: Cloud, Technology solutions

Published: 2024-05-20

Length: 25 minutes

Start the training:

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo 360 Learning Center](#)

Course code: DCLDS103r3

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

2024-04-10 | 60 minutes | Employees and Partners

In this course, you will know:

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

Tags: Data Management, Storage

Published: 2024-04-10

Length: 60 minutes

Start the training:

Employee link: Grow@Lenovo

Partner link: [Lenovo 360 Learning Center](#)

Course code: DVDAT209

28. Technical Overview: ThinkAgile HCI and Cloud Platforms

2024-03-07 | 35 minutes | Employees and Partners

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

Learning Objectives:

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

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

Published: 2024-03-07

Length: 35 minutes

Start the training:

Employee link: Grow@Lenovo

Partner link: [Lenovo 360 Learning Center](#)

Course code: DCLDT2001r3

29. VTT Cloud Architecture: Google Cloud Platform with Anthos on ThinkAgile VX - October 2023
2023-10-11 | 54 minutes | Employees and Partners

Join Chandrakandh Mouleeswaran, Lenovo Senior Software Engineer and Cristian Ghetau, Lenovo Software Engineer for a discussion on Google Cloud Platform (GCP) with Anthos solution based on the Lenovo ThinkAgile VX VMware vSAN certified platform. They will cover a technical overview of Google Kubernetes Engine (GKE) On-prem, which is a containerized workload orchestration software. We will cover the functional aspects of Anthos core components including the Kubernetes, Istio service mesh, Anthos config management, Hybrid and multi-cloud management, and Google cloud marketplace. We will also provide an architecture overview and deployment of Anthos on top of Lenovo ThinkAgile VX hyperconverged infrastructure (HCI) platform. Cristian and Chandrakandh will cover customer use cases for Anthos, including Continuous Integration/Continuous Delivery (CI/CD), Micro-services and Service Mesh, Hybrid Cloud and Multi-cloud management, and Anthos Config Management.

Tags: Cloud, Software Defined Infrastructure (SDI), Technology solutions, ThinkAgile, VMware

Published: 2023-10-11

Length: 54 minutes

Start the training:

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo 360 Learning Center](#)

Course code: DVCLD205

30. 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.

Tags: Sales

Published: 2023-09-27

Length: 20 minutes

Start the training:

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo 360 Learning Center](#)

Course code: DSTOO100

31. VTT Cloud Architecture - Application Migration September 2023

2023-09-12 | 35 minutes | Employees Only

This VTT Cloud Architecture training aims to equip participants with the knowledge necessary to help your customers successfully migrate applications to a cloud infrastructure. With the increasing adoption of cloud computing, organizations are looking to harness the benefits of private and hybrid clouds, such as enhanced security, control, and customization. However, migrating applications to cloud requires careful planning, architectural considerations, and a deep understanding of the migration process.

In this training, we will delve into cloud infrastructure and learn about the key components involved in application migration. We will explore various migration strategies, including lift-and-shift, re-platforming, and re-architecting, and understand the factors that influence the selection of an appropriate migration approach. We will also cover best practices for evaluating application readiness, assessing dependencies, identifying potential challenges and risks, and solution design considerations.

We will discuss using migration tools, technologies specific to cloud environments and automation techniques for streamlining the migration process, ensuring minimal disruption to business operations.

Tags: Cloud, Software Defined Infrastructure (SDI), Technical Sales, VMware

Published: 2023-09-12

Length: 35 minutes

Start the training:

Employee link: Grow@Lenovo

Course code: DVCLD204

32. VTT Cloud Architecture - DevOps Cloud Story August 2023

2023-08-17 | 60 minutes | Employees Only

Understanding how architecture is deployed to support DevOps environment in the cloud. Tanzu/Containers vs VM's. When it best to use each? Modern Application deployment in containers. In the beginning, public cloud IaaS was delivered exclusively via virtual machines. But today, new virtualization methods are taking hold, including containers and serverless computing. As cloud computing principles become more embedded in application development and infrastructure operations, containers and serverless will become increasingly attractive deployment vehicles for code. From requirements to installation.

Tags: Cloud, Infrastructure as a Service (IaaS), ThinkAgile, VMware

Published: 2023-08-17

Length: 60 minutes

Start the training:

Employee link: Grow@Lenovo

Course code: DVCLD203

33. **ThinkAgile Accelerating Cloud Agility: Understanding ThinkAgile VX**

2023-07-28 | 50 minutes | Employees and Partners

Brian Faleiro, Lenovo Technical Product Manager, discusses ThinkAgile VX use cases, where the solution can be positioned. He reviews recent technical improvements and discusses deployment and lifecycle management, 'why ThinkAgile VX', what are the requirements that customers are looking for and how we are solving those requirements.

Tags: ThinkAgile

Published: 2023-07-28

Length: 50 minutes

Start the training:

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo 360 Learning Center](#)

Course code: DVXT201

34. **ThinkAgile VX Series - Technical Presentation**

2023-07-12 | 60 minutes | Employees and Partners

Join us in this comprehensive course on ThinkAgile VX Series, where you will gain a deep understanding of its technical overview and components. Dive into the world of Data Processing Units (DPUs) and explore their technical aspects, including their role and benefits. Unlock the potential of ThinkAgile VX Series through a detailed exploration of its versatile use cases, ranging from Hybrid Cloud deployment to VDI, Kubernetes, and AI/ML applications. Moreover, you will learn about effective deployment strategies and lifecycle management processes.

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

- Understand the technical overview of ThinkAgile VX Series
- Gain knowledge about DPU (Data Processing Unit) and its technical aspects
- Explore various use cases of ThinkAgile VX Series, including Hybrid Cloud deployment, VDI (Virtual Desktop Infrastructure), Kubernetes, and AI/ML (Artificial Intelligence/Machine Learning)
- Describe deployment strategies and lifecycle management processes for ThinkAgile VX Series

Tags: Cloud, ThinkAgile

Published: 2023-07-12

Length: 60 minutes

Start the training:

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo 360 Learning Center](#)

Course code: DVXSV104

35. **VTT Cloud Architecture - Why Cloud? July 2023**

2023-07-12 | 90 minutes | Employees Only

Theresa Thompson and Luke Huckaba from VMware discuss the VMware and Lenovo Partnership for cloud solutions addresses common IT constraints, such as slow time to value, limited resources and incompatible systems. Cloud is an enabler of digital business. How do we reduce the operational burden of running and maintaining hardware and software for cloud and prepare our customers for workload migrations and which are suitable for a cloud environment. How to align cloud Initiative outcomes with business goals.

Tags: Cloud, Software Defined Infrastructure (SDI), ThinkAgile, VMware

Published: 2023-07-12

Length: 90 minutes

Start the training:

Employee link: [Grow@Lenovo](#)

Course code: DVCLD202

36. **Cloud and HCI or Somewhere in Between**

2023-07-11 | 40 minutes | Employees and Partners

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

Course objectives:

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

Tags: Cloud

Published: 2023-07-11

Length: 40 minutes

Start the training:

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo 360 Learning Center](#)

Course code: DCLDS104r2

Related publications and links

For more information, see these resources:

- Lenovo ThinkAgile VX Series
<https://www.lenovo.com/us/en/data-center/software-defined-infrastructure/ThinkAgile-VX-Series/p/WMD00000340>
- ThinkAgile VX - Best Recipes
<http://datacentersupport.lenovo.com/us/en/solutions/HT505302>
- VMware documentation
<https://docs.vmware.com/>
- ThinkSystem SR850 V4 product guide:
<https://lenovopress.lenovo.com/lp2230-thinksystem-sr850-v4-server>

Related product families

Product families related to this document are the following:

- [4-Socket Rack Servers](#)
- [Hyperconverged Infrastructure](#)
- [ThinkAgile VX Series for VMware](#)

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