

What's New - May/June 2021

Article

New ThinkAgile VX systems

This month, Lenovo announce eight new ThinkAgile VX appliances and certified nodes

- New ThinkAgile VX systems based on the 1U rack server, ThinkSystem SR630 V2:
 - VX2330 Appliance
 - VX3330 Appliance
 - VX7330-N Appliance
 - VX3331 Certified Node
- New ThinkAgile VX 2U systems based on the 2U rack server, ThinkSystem SR650 V2:
 - VX3530-G Appliance
 - VX5530 Appliance
 - VX7530 Appliance
 - VX7531 Certified Node

For details, see the new ThinkAgile VX product guides:

- Lenovo ThinkAgile VX2330, VX3330, VX3331 and VX7330-N 1U Appliances and Certified Nodes
<https://lenovopress.com/lp1479>
- Lenovo ThinkAgile VX3530-G, VX5530 and VX7530/VX7531 2U Appliances and Certified Nodes
<https://lenovopress.com/lp1480>

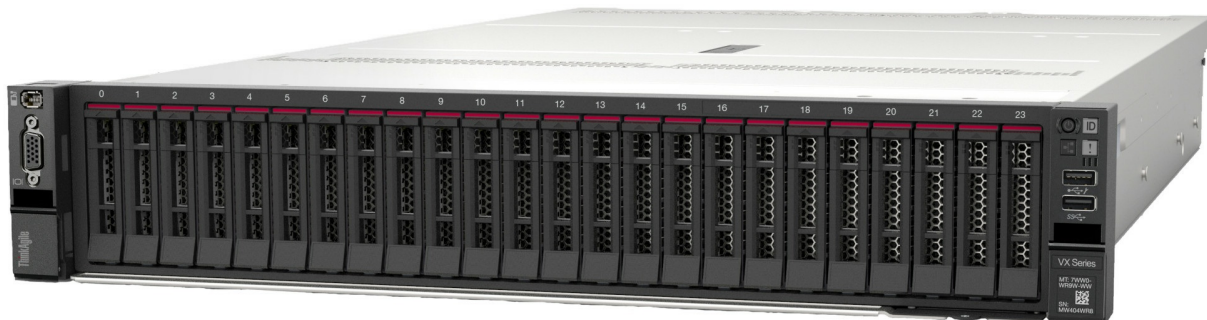


Figure 1. Lenovo ThinkAgile VX system with 2.5-inch drive bays, based on the SR650 V2 server

DM5100F SAN and DM5000F SAN offerings

This week, Lenovo announced the new ThinkSystem DM5100F SAN and DM5000F SAN All Flash storage arrays (AFA) that provide block-only storage connectivity. These new SAN offerings complement the existing DM5100F and DM5000F Unified offerings by providing lower-cost block AFA storage while still supporting customers that require advanced data management capabilities, such as data reduction, quality of service, and native cloud integration.



Figure 2. Lenovo ThinkSystem DM5100F Storage Array

For details about the new SAN offerings, see the following updated product guides and datasheets:

- DM5100F product guide:
<https://lenovopress.com/lp1365-thinksystem-dm5100f-flash-storage-arrays>
- DM5000F product guide:
<https://lenovopress.com/lp0911-lenovo-thinksystem-dm5000f-flash-storage-arrays>
- DM Series All Flash Array datasheet:
<https://lenovopress.com/ds0047-lenovo-dm-series-all-flash-array>

Updated HPC/AI offerings: LeSI, DSS-G and LiCO

Lenovo Scalable Infrastructure (LeSI) is a framework for designing, manufacturing, integrating and delivering data center solutions, with a focus on High Performance Computing (HPC), Technical Computing, and Artificial Intelligence (AI) environments. In this update, we've added the new ThinkSystem V2 "Ice Lake" servers, new hardware components including GPUs, new software, and new services offerings. Read the details in the [LeSI product guide](#).

Lenovo Distributed Storage Solution for IBM Spectrum Scale (DSS-G) is a software-defined storage (SDS) solution for dense scalable file and object storage suitable for high-performance and data-intensive environments. We've made updates to some of the components used in the DSS-G offerings, including new software features and licensing, new hardware components, and new rack cabinet offerings. Read the details in the [DSS-G product guide](#).

Lenovo Intelligent Computing Orchestration (LiCO) is a software solution that simplifies the use of clustered computing resources for Artificial Intelligence (AI) model development and training. We've just announced [LiCO Version 6.2](#).

Processors for ThinkSystem servers

In May, we announced two new third-generation Intel Xeon Scalable processors (part of the "Ice Lake" family):

- Intel Xeon Platinum 8352M 32C 185W 2.3GHz Processor
- Intel Xeon Platinum 8362 32C 265W 2.8GHz Processor

For details of these processors, including server support, see the Intel Xeon Scalable Processor Reference: <https://lenovopress.com/lp1262-intel-xeon-sp-processor-reference#term=8352M%2520or%25208362>

The new processor are supported by most of the new ThinkSystem V2 "Ice Lake" servers: https://lenovopress.com/search#term=icelake&resource_type=product-guide

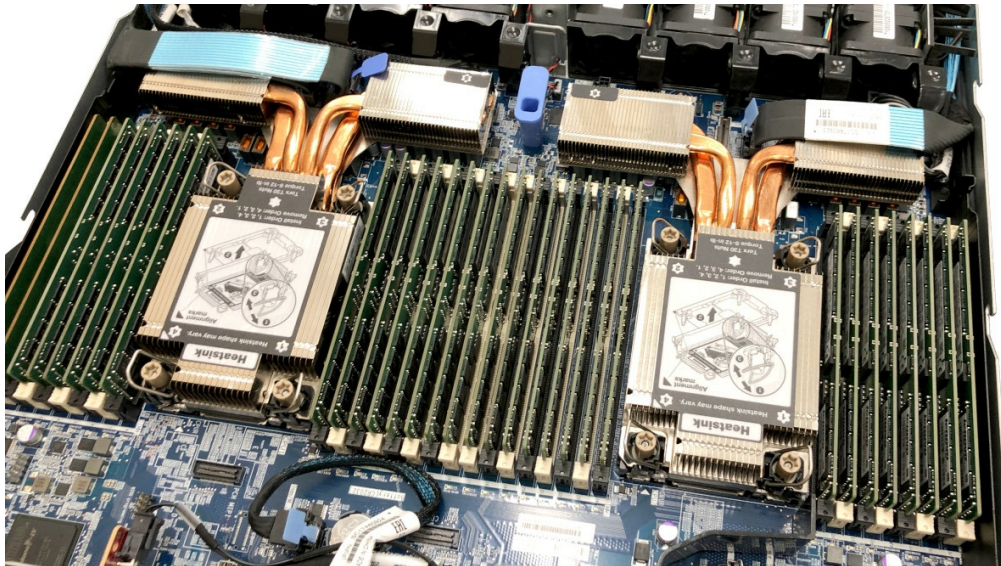


Figure 3. Intel Xeon Scalable processors installed in the ThinkSystem SR630 V2

Continued availability of First Gen Intel Xeon Scalable "Skylake" processors

Intel and Lenovo have extended the availability of many of the First Generation Intel Xeon Scalable processors (formerly codenamed "Skylake") in our ThinkSystem servers. As a result, we have reannounced these processors for use in ThinkSystem servers.

See the following server product guides in the Processors section for details:

- [Lenovo ThinkSystem SD530 Server](#)
- [Lenovo ThinkSystem SN550 Server](#)
- [Lenovo ThinkSystem SN850 Server](#)
- [Lenovo ThinkSystem SR530 Server](#)
- [Lenovo ThinkSystem SR550 Server](#)
- [Lenovo ThinkSystem SR570 Server](#)
- [Lenovo ThinkSystem SR590 Server](#)
- [Lenovo ThinkSystem SR630 Server](#)
- [Lenovo ThinkSystem SR650 Server](#)
- [Lenovo ThinkSystem SR850 Server](#)
- [Lenovo ThinkSystem SR860 Server](#)
- [Lenovo ThinkSystem SR950 Server](#)
- [Lenovo ThinkSystem ST550 Server](#)

Memory for ThinkSystem servers

The SR665 server now supports the following 256GB 3DS RDIMMs:

- ThinkSystem 256GB TruDDR4 2933MHz (8Rx4 1.2V) 3DS RDIMM, 4ZC7A08727

The server now supports up to 8TB of system memory by using 32x 256GB 3DS RDIMMs

For details, see the SR665 product guide:

<https://lenovopress.com/lp1269-thinksystem-sr665-server>

Internal storage for ThinkSystem servers

NVMe retimer adapter support on SR665

The SR665 servers now supports the NVMe Retimer adapter for use in storage configurations:

- ThinkSystem 4-Port PCIe Gen4 NVMe Retimer Adapter, 4C57A65446

For details, see the SR665 product guide:

<https://lenovopress.com/lp1269-thinksystem-sr665-server>

NVMe support on the SR850P

The 4-socket SR850P server now supports a 16x NVMe drive bay configuration with support of a new NVMe backplane:

- ThinkSystem 2U 2.5" NVMe 8-Bay Backplane, B4PC

For details, see the SR850P product guide:

<https://lenovopress.com/lp1237-lenovo-thinksystem-sr850p-server>

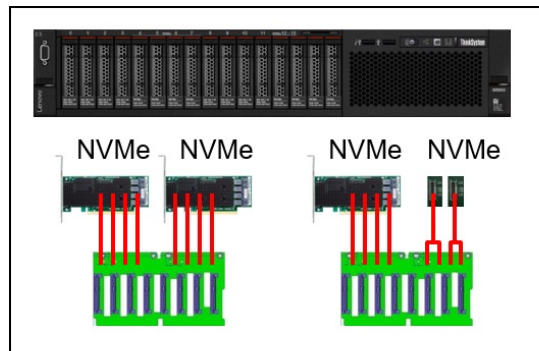


Figure 4. New SR850P storage configuration: 16x NVMe drive bays

Drives for SR650 V2 and SR630 V2

New and existing drives now supported by the SR650 V2 and SR630 V2:

- 2.5-inch NVMe SSD options:
 - ThinkSystem U.2 PM1733 1.92TB Entry NVMe PCIe 4.0 x4 Hot Swap SSD, 4XB7A38196
 - ThinkSystem U.2 PM1733 3.84TB Entry NVMe PCIe 4.0 x4 Hot Swap SSD, 4XB7A38197
 - ThinkSystem U.2 PM1733 7.68TB Entry NVMe PCIe 4.0 x4 Hot Swap SSD, 4XB7A38283
 - ThinkSystem U.2 PM1733 15.36TB Entry NVMe PCIe 4.0 x4 Hot Swap SSD, 4XB7A38284
 - ThinkSystem 2.5" U.2 P5800X 400GB Write Intensive NVMe PCIe 4.0 x4 HS SSD, 4XB7A17158 (SR650 V2 only)
 - ThinkSystem 2.5" U.2 P5800X 800GB Write Intensive NVMe PCIe 4.0 x4 HS SSD, 4XB7A17159 (SR650 V2 only)
- 2.5-inch SAS SSD options
 - ThinkSystem 2.5" PM1643a 960GB Entry SAS 12Gb Hot Swap SSD, 4XB7A38175
 - ThinkSystem 2.5" PM1643a 1.92TB Entry SAS 12Gb Hot Swap SSD, 4XB7A38176
 - ThinkSystem 2.5" PM1643a 3.84TB Entry SAS 12Gb Hot Swap SSD, 4XB7A17054
 - ThinkSystem 2.5" PM1643a 7.68TB Entry SAS 12Gb Hot Swap SSD, 4XB7A17055
- 3.5-inch SAS SSD options
 - ThinkSystem 3.5" PM1643a 960GB Entry SAS 12Gb Hot Swap SSD, 4XB7A77115
 - ThinkSystem 3.5" PM1643a 1.92TB Entry SAS 12Gb Hot Swap SSD, 4XB7A77116
 - ThinkSystem 3.5" PM1643a 3.84TB Entry SAS 12Gb Hot Swap SSD, 4XB7A17058
 - ThinkSystem 3.5" PM1643a 7.68TB Entry SAS 12Gb Hot Swap SSD, 4XB7A17059



Figure 5. Intel Optane P5800X SSDs

For details see the product guides:

- P5800X: <https://lenovopress.com/lp1484-thinksystem-p5800x-write-intensive-nvme-ssds>
- PM1643a: <https://lenovopress.com/lp1257-thinksystem-pm1643a-entry-12gb-sas-ssds>
- PM1733: <https://lenovopress.com/lp1300-thinksystem-pm1733-entry-nvme-ssd>

The SSD Comparison Reference is also updated with the new drives and new support:

<https://lenovopress.com/lp1261-lenovo-thinksystem-ssd-portfolio>

See the SR630 V2 and SR650 V2 product guide for more information:

SR630 V2: <https://lenovopress.com/lp1391-thinksystem-sr630-v2-server>

SR650 V2: <https://lenovopress.com/lp1392-thinksystem-sr650-v2-server>

Drives for other systems

We've announced the following new drives:

- SSD for SR645:
 - ThinkSystem 2.5" U.3 CD6 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD, 4XB7A76321
- HDDs for SR655:
 - ThinkSystem SR655 3.5" 18TB 7.2K SAS 12Gb Hot Swap 512e HDD, 4XB7A76340
 - ThinkSystem SR655 3.5" 18TB 7.2K SATA 6Gb Hot Swap 512e HDD, 4XB7A76341
- Client HDDs for ST50:
 - ThinkSystem ST50 3.5" 1TB Client 7.2K SATA 6Gb Non-Hot Swap 512e HDD, 4XB7A76721
 - ThinkSystem ST50 3.5" 2TB Client 7.2K SATA 6Gb Non-Hot Swap 512e HDD, 4XB7A76722



Figure 6. ThinkSystem 2.5" U.3 CD6 7.68TB Read Intensive NVMe PCIe 4.0 x4 HS SSD

We've extended support for the following SAS SSDs - now supported our AMD-based servers, SR635, SR655, SR645 and SR665:

- 2.5-inch SSDs:
 - ThinkSystem 2.5" Nytro 3732 400GB Performance SAS 12Gb Hot Swap SSD, 4XB7A70006
 - ThinkSystem 2.5" Nytro 3732 800GB Performance SAS 12Gb Hot Swap SSD, 4XB7A70005
 - ThinkSystem 2.5" Nytro 3732 1.6TB Performance SAS 12Gb Hot Swap SSD, 4XB7A70004
 - ThinkSystem 2.5" Nytro 3732 3.2TB Performance SAS 12Gb Hot Swap SSD, 4XB7A70003
 - ThinkSystem 2.5" Nytro 3732 800GB Performance SAS 12Gb Hot Swap SSD SED, 4XB7A70007
- 3.5-inch SSDs:
 - ThinkSystem 3.5" Nytro 3732 400GB Performance SAS 12Gb Hot Swap SSD, 4XB7A70011
 - ThinkSystem 3.5" Nytro 3732 800GB Performance SAS 12Gb Hot Swap SSD, 4XB7A70010
 - ThinkSystem 3.5" Nytro 3732 1.6TB Performance SAS 12Gb Hot Swap SSD, 4XB7A70009
 - ThinkSystem 3.5" Nytro 3732 3.2TB Performance SAS 12Gb Hot Swap SSD, 4XB7A70008

We've extended support for the following NVMe drives - now supported the SR860 V2 and SR860 V2:

- Entry (Read Intensive) NVMe SSDs:
 - ThinkSystem U.2 Intel P5500 1.92TB Entry NVMe PCIe 4.0 x4 Hot Swap SSD, 4XB7A17145
 - ThinkSystem U.2 Intel P5500 3.84TB Entry NVMe PCIe 4.0 x4 Hot Swap SSD, 4XB7A17146

- Mainstream (Mixed Use) NVMe SSDs:
 - ThinkSystem U.2 Intel P5600 1.6TB Mainstream NVMe PCIe 4.0 x4 Hot Swap SSD, 4XB7A17152
 - ThinkSystem U.2 Intel P5600 3.2TB Mainstream NVMe PCIe 4.0 x4 Hot Swap SSD, 4XB7A17153
 - ThinkSystem U.2 Intel P5600 6.4TB Mainstream NVMe PCIe 4.0 x4 Hot Swap SSD, 4XB7A17154
 - ThinkSystem U.3 Kioxia CM6-V 1.6TB Mainstream NVMe PCIe4.0 x4 Hot Swap SSD, 4XB7A17112
 - ThinkSystem U.3 Kioxia CM6-V 3.2TB Mainstream NVMe PCIe4.0 x4 Hot Swap SSD, 4XB7A17113
 - ThinkSystem U.3 Kioxia CM6-V 6.4TB Mainstream NVMe PCIe4.0 x4 Hot Swap SSD, 4XB7A17114
 - ThinkSystem U.3 Kioxia CM6-V 800GB Mainstream NVMe PCIe 4.0 x4 Hot Swap SSD, 4XB7A64175

See the individual server product guides for details.

The SSD Comparison Reference is updated with the new drives and new support:

<https://lenovopress.com/lp1261-lenovo-thinksystem-ssd-portfolio>

The HDD Summary Reference has also been updated with the new drives, along with details about the limitations on the ST50 client drives:

<https://lenovopress.com/lp1059-lenovo-thinksystem-hdd-summary>

Network adapters for ThinkSystem servers

Ethernet adapters

The following PCIe and OCP Ethernet adapters are now supported by the SR645, SR665, SR630 and SR650:

- ThinkSystem Intel E810-DA2 10/25GbE SFP28 2-Port PCIe Ethernet Adapter
- ThinkSystem Intel E810-DA2 10/25GbE SFP28 2-Port OCP Ethernet Adapter (SR645 only)

The following PCIe and OCP Ethernet adapters are now supported by the SR630, SR650, SR670, SR850P and SR950:

- ThinkSystem Mellanox ConnectX-6 Lx 10/25GbE SFP28 2-Port PCIe Ethernet Adapter (except SR670)
- ThinkSystem Mellanox ConnectX-6 Dx 100GbE QSFP56 2-port PCIe Ethernet Adapter

The following PCIe and OCP Ethernet adapters are now supported by the SR650 V2 and SR630 V2:

- ThinkSystem Mellanox ConnectX-4 Lx 10/25GbE SFP28 2-port OCP Ethernet Adapter, 4XC7A08246
- ThinkSystem Mellanox ConnectX-4 Lx 10/25GbE SFP28 2-port PCIe Ethernet Adapter, 4XC7A08249

Details about these adapters in the ConnectX-4 product guide:

<https://lenovopress.com/lp0098-mellanox-connectx-4>

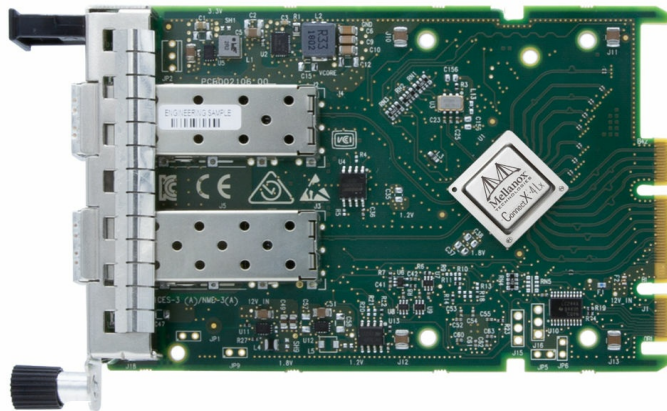


Figure 7. ThinkSystem Mellanox ConnectX-4 Lx 10/25GbE SFP28 2-port OCP Ethernet Adapter

InfiniBand cables

The following new cables are supported with the Mellanox HDR100 and HDR VPI adapters:

- 3m Mellanox HDR IB Active Copper QSFP56 Cable
- 4m Mellanox HDR IB Active Copper QSFP56 Cable

SR670 V2 update

This month, we updated the capabilities of the SR670 V2 by adding these components:

- New processor options
 - Intel Xeon Platinum 8362 32C 265W 2.8GHz Processor
 - Intel Xeon Platinum 8352M 32C 185W 2.3GHz Processor
- New Mellanox Aux network adapter option to enable the use of SharedIO
 - ThinkSystem Mellanox HDR/200GbE 2x PCIe Aux Kit, 4C57A14179
- New HDD drive option
 - ThinkSystem 3.5" 18TB 7.2K SATA 6Gb Hot Swap 512e HDD, 4XB7A38130

For details, see the SR670 V2 product guide:

<https://lenovopress.com/lp1393-thinksystem-sr670-v2-server>

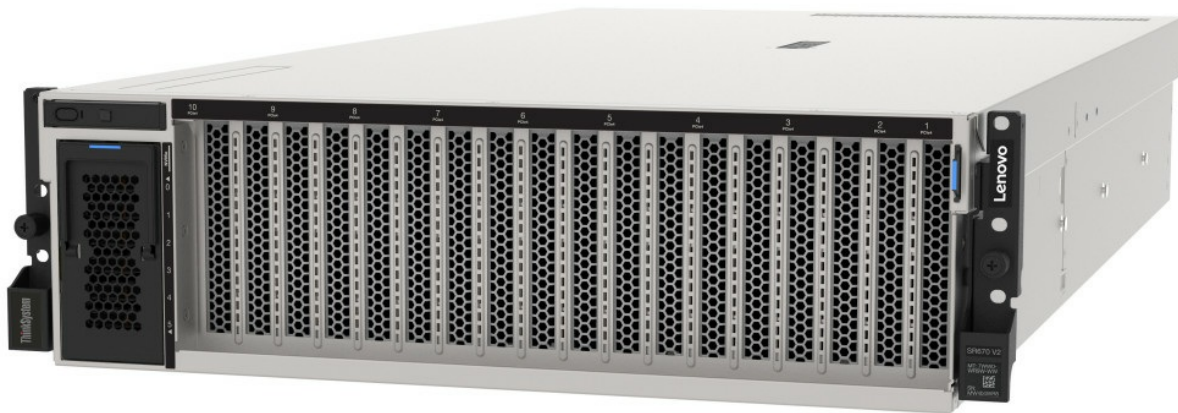


Figure 8. Lenovo SR670 V2 configured to support eight double-wide GPUs

GPUs for ThinkSystem servers

This month, we expanded support of key NVIDIA GPUs:

- The following GPU is now supported in the SR650 server:
 - ThinkSystem NVIDIA A10 24GB PCIe Gen4 Passive GPU, 4X67A71311
- The following GPU is now supported in the SR665 server:
 - ThinkSystem NVIDIA A40 48GB PCIe Gen4 Passive GPU, 4X67A72593

For details of these GPUs, see the ThinkSystem and ThinkAgile GPU Summary:

<https://lenovopress.com/lp0768-thinksystem-thinkagile-gpu-summary>



Figure 9. ThinkSystem NVIDIA A40 48GB PCIe Gen4 Passive GPU

VMware ESXi preload

Most ThinkSystem servers now support VMware ESXi 7.0 U2 as a preload:

- VMware ESXi 7.0 U2 (Factory Installed), feature code BHSR

Related product families

Product families related to this document are the following:

- [DM Series Storage](#)
- [Drives](#)
- [Ethernet Adapters](#)
- [GPU adapters](#)
- [High Performance Computing](#)
- [KVM Switches & Consoles](#)
- [Memory](#)
- [Processors](#)

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