5 Things You Didn't Know About IBM Storwize for Lenovo
Article

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Here are 5 things you might not know about the IBM Storwize offerings for Lenovo.

1. What is IBM Storwize for Lenovo?

Lenovo and IBM have an OEM agreement in place that allows Lenovo to sell IBM Storwize products. Storwize for Lenovo has identical hardware and software features to IBM Storwize offerings — and it runs proven IBM Storwize Family Software (now called IBM Spectrum Virtualize). However, the Storwize for Lenovo family has different machine types and modified machine code. This means you cannot mix Lenovo and IBM-supplied components (such as hard drives and expansion enclosures) within a Storwize system, but you can have separate Storwize systems from Lenovo and IBM within the same infrastructure.

On a worldwide level, Lenovo offers Storwize V3700, V5000 and V7000. Lenovo also offers warranty and service upgrades and serves as a single point of contact for warranty and service requests for Storwize for Lenovo.

2. Why Storwize from Lenovo?

By buying Storwize from Lenovo, you can eliminate the extra complexity associated with managing multiple suppliers for your infrastructure and multiple points of contact for your warranty and service needs.

Lenovo can be your trusted partner that offers one-stop shopping and a single point of contact for delivery of leading-edge technologies and innovations from Lenovo and other leading IT vendors. This means Lenovo can satisfy your wide range of end-to-end hardware infrastructure needs, including servers, storage, networking, services, management software and end-user devices (handheld devices, notebooks and personal computers).

In addition, Storwize for Lenovo includes three years of Software Subscription and Support, so you don't need to buy it separately.

3. How does Storwize for Lenovo interoperate with existing infrastructure?

Storwize for Lenovo provides interoperability that is identical to IBM Storwize. That means Storwize for Lenovo supports a wide range of hosts, operating systems, adapters and switches, which can help smoothly integrate a Storwize for Lenovo product into an existing environment. For a detailed list of end-to-end supported configurations, visit System Storage Interoperation Center and select the corresponding IBM Storwize system.

Also, if you implement a high-availability and disaster-recovery solution that uses Remote Mirroring, Storwize from IBM and Lenovo interoperate between each other. In other words, you can establish a Remote Mirroring relationship between Storwize from Lenovo and Storwize from IBM!

4. Which Storwize storage system is right for me?

I have summarized the features of the Storwize V3700, V5000 and V7000 for Lenovo in the table below so you can choose the most appropriate system based on storage capacity, scalability, performance, availability and other criteria. Note that these features are based on the IBM Storwize Software version 7.5 (June 2015).

Storwize for Lenovo feature comparison

Feature	V3700	V5000	V7000
System specifications			
Lenovo Machine Type	6099	6194	6195
Related IBM Machine Type	2072	2077, 2078	2076
Storage software	Storwize Family Software for V3700	Storwize Family Software for V5000	Storwize Family Software for V7000
Clustering support	No	2-way clustering	4-way clustering
Cache (standard / maximum)	8 GB / 16 GB	Per system: 16 GB / 16 GB Per 2-way cluster: 32 GB / 32 GB	Per system: 64 GB / 128GB Per 4-way cluster: 256 GB / 512 GB
Maximum number of drives	240 SFF drives 120 LFF drives	Per system: 480 SFF drives 240 LFF drives Per 2-way cluster: 960 SFF drives 480 LFF drives	Per system: 504 SFF drives 24 SFF + 240 LFF drives Per 4-way cluster: 1056 SFF drives 96 SFF + 960 LFF drives
Maximum raw storage capacity	960 TB	Per system: 1.92 PB Per 2-way cluster: 3.84 PB	Per system: 1.968 PB Per 4-way cluster: 7.872 PB
Drive interface	6 Gb SAS	6 Gb SAS	12 Gb SAS
Host ports (standard / maximum quantity per one system)			
6 Gb SAS	6 / 14	4 / 4	None
1 Gb iSCSI	4 / 12	4 / 4	6 / 6
10 Gb iSCSI or FCoE	0 / 4	0 / 4	0 / 8
8 Gb FC	0 / 8	0 / 8	0 / 8
16 Gb FC	None	None	0 / 4

Feature	V3700	V5000	V7000
Software features			
Internal Virtualization	Yes	Yes	Yes
Thin Provisioning	Yes	Yes	Yes
FlashCopy	Yes*	Yes (Optional)	Yes (Optional)
Turbo Performance	Yes (Optional)	Not applicable	Not applicable
Easy Tier	Yes (Optional)	Yes (Optional)	Yes (Optional)
Remote Mirroring	Yes (Optional)	Yes (Optional)	Yes (Optional)
External Virtualization	No	Yes (Optional)	Yes (Optional)
Real-time Compression	No	No	Yes (Optional)
Encryption	No	No	Yes (Optional)
Performance (per one system)			
Maximum disk read IOPS**	40,000 (non-Turbo) 70,000 (Turbo)	85,500	240,000
Maximum disk read throughput**	2 GBps (non-Turbo) 3.8 GBps (Turbo)	5.5 GBps	10 GBps
* Up to 64 snapshot targets standard; optional upgrade to up to 2,040 snapshot targets. ** Performance measurements in systems unconstrained by the number of HDDs.			

5. Where can I get more info about Storwize for Lenovo?

Lenovo Press Product Guides describe Storwize storage systems that are available from Lenovo. These product guides provide a technical overview of the offering and essential information to understand the structure of the offering, its key features and specifications, components and options and configuration guidelines. These guides are intended for IT professionals who want to learn more about Lenovo offerings and consider their use in the IT infrastructure solutions.

Here are the links to the Storwize for Lenovo Product Guides from Lenovo Press:

- Storwize V3700
- Storwize V5000
- Storwize V7000

Related product families

Product families related to this document are the following:

- IBM Storage

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