



Lenovo High Performance File System Solution with WEKA Data Platform

Solution Brief

Accelerate High-Performance and Technical Compute Workloads

Big data has created new opportunities for innovation but also unforeseen problems for data-intensive applications, particularly in artificial intelligence (AI), machine learning (ML), deep learning (DL), financial analytics, genomics, life sciences, and high-performance computing (HPC). These compute and data-intensive applications demand maximum performance even while their datasets scale to extreme capacities. Legacy storage and data management solutions were designed to solve yesterday's problems and cannot take on the storage challenges that organizations running leading-edge applications are facing now or will in the future. These demanding new workloads can place significant stress on legacy solutions, which were not originally designed to handle these new challenges.

The Lenovo High Performance File System Storage Solution with the WEKA® Data Platform, built on Lenovo ThinkSystem SR630 V2, SR635, SR650 V2, and SR655 servers, is a modern data infrastructure solution that is uniquely built to solve big problems that previously had no solution. It eliminates the complexity and compromises associated with legacy data storage and offers unmatched performance at ANY scale while still providing all the necessary enterprise features and benefits at a fraction of the cost. By meeting the stringent storage demands of key industry workloads, the Lenovo and WEKA solution accelerates the process of obtaining insight from mountains of data and enhances the promise of discovering breakthrough innovation and helping solve humanity's greatest challenges.

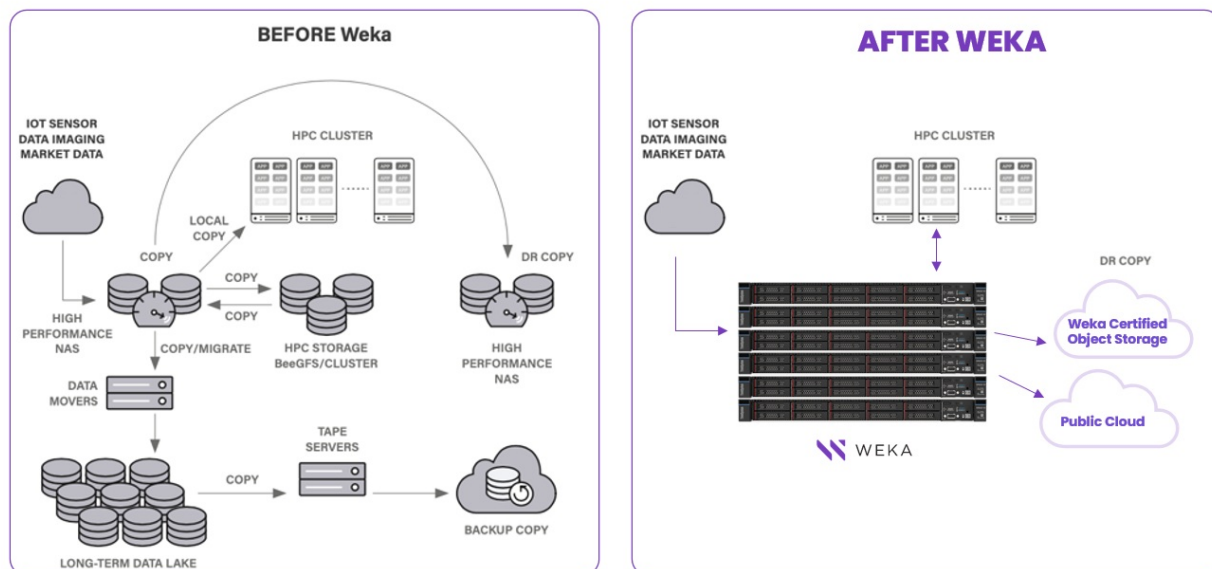


Figure 1. WEKA Unified Data Platform

The workloads that address these challenges require a modern infrastructure with extreme performance in compute, storage, and networking resources. The engineered solution from Lenovo and WEKA addresses these needs and helps you gain the insights needed to gain a competitive advantage, deliver customer value, and grow your business.

The Lenovo ThinkSystem server platforms and the WEKA Data Platform work together to maximize acceleration, reduce training times, and deliver unmatched performance and reliability at scale. This solution is ideal for all of today’s data-intensive applications. This storage solution has proven scalable performance, delivering over 10x more performance than all-flash scale-out NAS and 3x more than locally attached NVMe SSDs. Together, Lenovo and WEKA support high-performance workloads in AI, finance, genomics, and technical computing. Because these workloads consist of billions of files, small and large, the storage system must deliver high throughput, low latency, and excellent metadata performance at extreme scale to keep these high-performance applications saturated with data. This is unattainable by legacy storage systems, but it is made possible with WEKA’s modern NVMe-optimized, distributed, and parallel file system running on reliable and performance optimized Lenovo servers.

This software defined storage solution leverages WEKA software to support a hybrid cloud model, allowing enterprises to leverage on-demand public compute resources for cloud-bursting, remote backup, and disaster recovery.

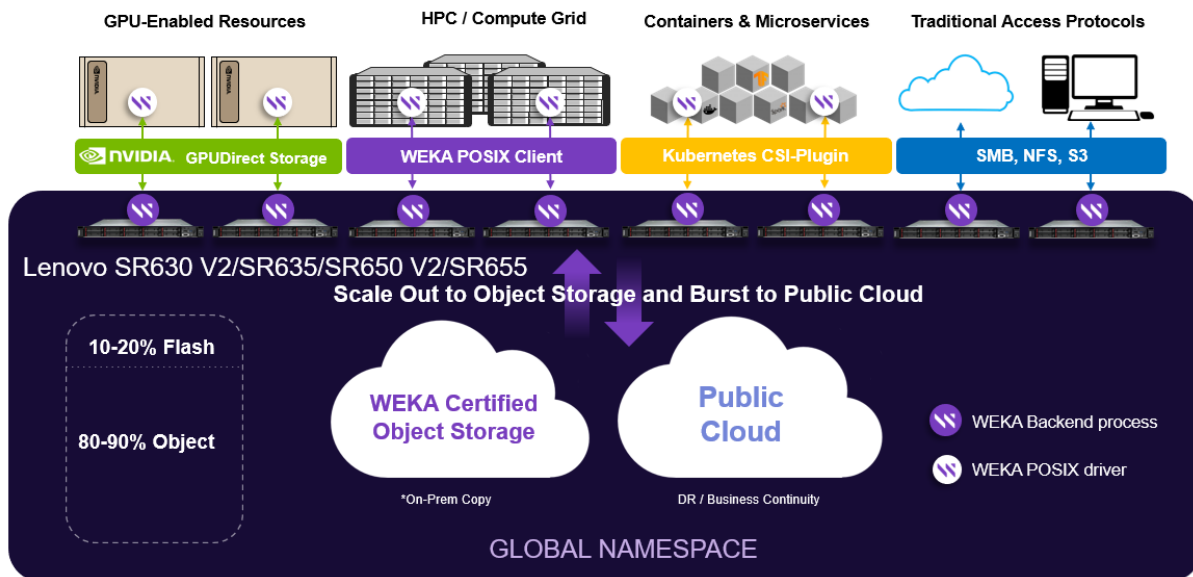


Figure 2. WEKA Data Platform for AI/ML and HPC

Choose A Solution That Delivers Performance, Flexibility, And Value

With Lenovo ThinkSystem servers and WEKA Data Platform software, you can take advantage of a plug-and-play solution that helps extract greater value from data. The solution allows you to start small and flexibly scale to meet your performance and capacity requirements.

The Lenovo ThinkSystem servers offer uncompromising performance, scalability, reliability, and density in your choice of a 1U or 2U form factors. At the core of the WEKA Data Platform is WekaFS, a POSIX-compliant file system that distributes both data and metadata evenly across the entire storage cluster to ensure massively parallel access. This enables the WEKA platform to reduce time to innovation by delivering more data to the applications that need it, faster than any other available solution. With a single namespace that offers on-premises storage and cloud connectivity, the software delivers simplified storage management and data protection. ThinkSystem adapters provide Ethernet and InfiniBand connectivity to deliver up to 200 Gb/sec bandwidth in a single network port, the lowest available latency, and application hardware offloads, satisfying even the most demanding application requirements.

Derive Benefits For Your Business

This high-performance storage solution not only addresses your specific needs based on workload types and performance and capacity requirements, but goes beyond that to provide greater overall benefits for your business:

- Optimization of your IT environments with a modern storage infrastructure and simplified storage management
- Datacenter agility with faster data access and effective resource utilization
- Data transformation for AI, analytics, and technical computing with faster time to value and insight

Lenovo recommends the following minimum entry-level building block for your initial storage deployment, giving you the ability to scale out to greater capacities and performance levels by adding more servers.

6x Lenovo ThinkSystem SR630 V2 or SR635 servers, each configured with the following:

- 256GB or 512GB of memory
- 2x Mellanox ConnectX-6 network adapters
- 4-10x PCIe 4.0 NVMe SSD drives

Lenovo and WEKA deliver a differentiated solution that goes beyond the current market and performance standards for storage and deliver the best solutions for your IT and business challenges.

Minimum Recommended Configuration

The following table lists the minimum recommended configuration for the Lenovo HPFS Solution.

Table 1. Minimum Recommended Configuration

Specification	Recommendation
Server	Lenovo ThinkSystem SR630 V2 (Intel) or Lenovo ThinkSystem SR635 (AMD)
Number of Servers	6
Drives/Server	10
SSD Capacity/Drive	3.84 TB
Usable Capacity (Note 1)	115 TB
CPU	2x Intel Xeon Gold 6326 16C or 1x AMD EPYC 7543P 32C
Networking	High-speed Ethernet or InfiniBand
Software	WEKA
Data Protection	Distributed Data Protection (N+2 or N+4) (Note 2) Drive Virtual Hot Sparing Error Detection: End-to-End Data Protection In-Flight and At-Rest Data Encryption
Protocols	POSIX, NFS, SMB, S3, NVIDIA GPUDirect, and Kubernetes CSI Plugin
Snapshots and Clones	File System Level, up to 24K Snapshots (14K Writable)
Tiering	S3 Compatible Cloud Object Store (Public or Private)
Storage Monitoring	Cloud-based Monitoring and Analytics for Application Tuning and Remote Support
System Management	ThinkSystem XClarity Controller Enterprise
Dimensions per Server	1 Rack Unit, Max Depth: 715 mm
Support Team	Software: 3-Year, Including Same Day Support Hardware: 3-Year, Next Business Day Support
Estimated Performance (Note 3)	Up to 180 GB/sec of Read Throughput up to 14 Million Read IOPS

Notes:

1. 4+2 stripe size with one configured hot spare. Configurations may vary based upon tiering customer network configuration. Please speak with your Lenovo representative for solution guidance appropriate to your environment.
2. N+4 is available only for a cluster with 14 or more servers
3. Performance estimates are for a 6-server cluster on a 200Gb network

Configuration details are subject to change without notice. Additional capacity, drive, and server configurations are available. Please call your Lenovo representative for more information.

ThinkSystem Ready Nodes for WEKA

The following table lists the available Ready Nodes.

Table 2. ThinkSystem Ready Nodes for WEKA

Model	Description
7Y99CTO8WW	ThinkSystem SR635 for WEKA
7Z01CTO8WW	ThinkSystem SR655 for WEKA
7Z71CTO8WW	ThinkSystem SR630 V2 for WEKA
7Z73CTO8WW	ThinkSystem SR650 V2 for WEKA
7D9GCTO8WW	ThinkSystem SR635 V3 for WEKA
7D9ECTO8WW	ThinkSystem SR655 V3 for WEKA
7D73CTO8WW	ThinkSystem SR630 V3 for WEKA
7D76CTO8WW	ThinkSystem SR650 V3 for WEKA

WEKA software licenses

Topics in this section:

- [License types](#)
- [License quantity](#)
- [Calculating the XPS Net Capacity](#)
- [Part numbers: WEKA Extreme Performance and Scale \(XPS\) Edition](#)
- [Part numbers: WEKA Data Tiering Option-DTO](#)
- [Part numbers: WEKA Data Protection Option-DPO](#)
- [Part numbers: WEKA Extreme Performance and Scale \(XPS\) Edition - State, Local, Education \(EDU\)](#)
- [Part numbers: WEKA Data Tiering Option-DTO - State, Local, Education \(EDU\)](#)
- [Part numbers: WEKA Data Protection Option-DPO - State, Local, Education \(EDU\)](#)

License types

WEKA has tiered subscription-based licensing which is licensed per TB per year. Licenses for WEKA are not perpetual. Discounts are provided based on the tiering level and the number of advance years of purchase.

There are three types of licenses which can be applied to a WEKA cluster:

- **WEKA Extreme Performance and Scale (XPS) Edition**
XPS is the core foundation license required for a WEKA deployment which covers licensing of the flash tier embedded within the WEKA servers.
- **WEKA Data Tiering Option-DTO**
WEKA DTO is an additional add-on license on top of XPS. This license is necessary when data is tiered to an object backend behind the XPS layer.
- **WEKA Data Protection Option-DPO**
WEKA DPO is an additional add-on license on top of XPS, this covers data protection functionality of WEKA including snapshot to object, incremental snapshot sync and secure backup features. DPO also includes the tiering functions of DTO.

Where a system is currently licensed with XPS+DTO and features of DPO are required, contact your local Lenovo sales team to discuss trade-up options.

XPS licenses are calculated using the Net Capacity of the cluster (usable capacity) and varies depending on the number of servers, RAID encoding, hot spares, and capacity of drives, further details and example calculations are provided below. DTO and DPO licenses are calculated based on the usable capacity of the object store presented to be used by WEKA.

License quantity

To calculate the number of XPS licenses required:

1. Determine the Net Capacity of the WEKA cluster in TB (see below)
2. Use the Net Capacity of the cluster to determine the tiering level
3. Determine how long the license is required for to select the correct part number

Discounted part numbers are available for qualified educational (EDU) customers. Check with your Lenovo sales organization to determine if you are eligible.

Monthly license options are provided to support co-terming when expanding the size of a cluster. For example, to add an additional node providing an additional 100TB of capacity, where the cluster has 2 years and 3 months of support remaining.

Calculating the XPS Net Capacity

The capacity required is the Net Capacity of the cluster. To calculate the XPS net capacity of a WEKA Storage cluster, use the following calculation:

$$\text{SSD Net Capacity} = \text{Raw Capacity} * \frac{\# \text{ Failure Domains} - \text{Hot Spares}}{\# \text{ Failure Domains}} * \frac{\text{Stripe Width}}{\text{Stripe Width} + \text{Protection}} + \text{File System Overhead}$$

Where the File System Overhead is a static value of 0.9. The calculation should then be rounded UP to the nearest whole number to give the SSD Net Capacity license requirement.

When deploying a WEKA Storage cluster using Lenovo ThinkSystem servers, the number of failure domains is typically the number of servers.

For example, when using 6 servers, each with 10x 3.2TB NVMe drives with 4+2P RAID code:

Net Capacity	=	Raw Capacity: 6 servers * 10 drives * 3.2TB	*	6 servers (Failure Domains) – 1 (Hot Spares)	*	4 (Stripe Width)	*	0.9 (File System Overhead)
				6 servers (Failure Domains)		4 (Stripe Width) + 2 (Protection)		
96TB	=	192TB	*	5	*	4	*	0.9
				6		6		

This is exactly 96TB Net Capacity.

Or when using 10 servers, each with 10x 7.68TB NVMe drives with 8+2P RAID code:

Net Capacity	=	Raw Capacity: 10 servers * 10 drives * 7.68TB	*	10 servers (Failure Domains) – 1 (Hot Spares)	*	8 (Stripe Width)	*	0.9 (File System Overhead)
				10 servers (Failure Domains)		8 (Stripe Width) + 2 (Protection)		
497.6TB	=	768TB	*	9	*	8	*	0.9
				10		10		

Round **UP** to the next integer value – 498TB to calculate license Net Capacity requirement.

For more information on calculating Net Capacity, refer to <https://docs.weka.io/overview/ssd-capacity-management>

Part numbers: WEKA Extreme Performance and Scale (XPS) Edition

Table 3. WEKA Extreme Performance and Scale (XPS) Edition

Part number	Description
Up to 1 PB	
7S1G000DWW	WEKA XPS Edition - XPS Per TB per month, up to 1PB 1 Month License w/WEKA support
7S1G0001WW	WEKA XPS Edition - XPS Per TB per year, up to 1PB 1Yr License w/WEKA support
7S1G0004WW	WEKA XPS Edition - XPS Per TB, up to 1PB 2Yr License w/WEKA support
7S1G0007WW	WEKA XPS Edition - XPS Per TB, up to 1PB 3Yr License w/WEKA support
7S1G000AWW	WEKA XPS Edition - XPS Per TB, up to 1PB 5Yr License w/WEKA support
Between 1 PB – 2.5 PB	
7S1G000EWW	WEKA XPS Edition - XPS Per TB per month, b/w 1PB - 2.5PB 1 Month License w/WEKA Support
7S1G0002WW	WEKA XPS Edition - XPS Per TB, b/w 1PB - 2.5PB 1Yr License w/WEKA Support
7S1G0005WW	WEKA XPS Edition - XPS Per TB, b/w 1PB - 2.5PB 2Yr License w/WEKA Support
7S1G0008WW	WEKA XPS Edition - XPS Per TB, b/w 1PB - 2.5PB 3Yr License w/WEKA Support
7S1G000BWW	WEKA XPS Edition - XPS Per TB, b/w 1PB - 2.5PB 5Yr License w/WEKA Support
Above 2.5 PB	
7S1G000FWW	WEKA XPS Edition - XPS Per TB per month, above 2.5 PB 1 Month License w/ WEKA support
7S1G0003WW	WEKA XPS Edition - XPS Per TB, above 2.5 PB 1Yr License w/ WEKA support
7S1G0006WW	WEKA XPS Edition - XPS Per TB, above 2.5 PB 2Yr License w/ WEKA support
7S1G0009WW	WEKA XPS Edition - XPS Per TB, above 2.5 PB 3Yr License w/ WEKA support
7S1G000CWW	WEKA XPS Edition - XPS Per TB, above 2.5 PB 5Yr License w/ WEKA support

Part numbers: WEKA Data Tiering Option-DTO

Table 4. WEKA Data Tiering Option-DTO

Part number	Description
Up to 2.5 PB	
7S1G0019WW	WEKA Data Tiering Option-DTO Per TB per month, up to 2.5PB, 1 Month w/WEKA support
7S1G000XWW	WEKA Data Tiering Option-DTO Per TB, up to 2.5PB, 1Yr w/WEKA support
7S1G0010WW	WEKA Data Tiering Option-DTO Per TB, up to 2.5PB, 2Yr w/WEKA support
7S1G0013WW	WEKA Data Tiering Option-DTO Per TB, up to 2.5PB, 3Yr w/WEKA support
7S1G0016WW	WEKA Data Tiering Option-DTO Per TB, up to 2.5PB, 5Yr w/WEKA support
Between 2.5 PB – 5 PB	
7S1G001AWW	WEKA Data Tiering Option-DTO Per TB per month, between 2.5PB-5PB, 1 Month w/WEKA support
7S1G000YWW	WEKA Data Tiering Option-DTO Per TB, between 2.5PB-5PB, 1Yr w/WEKA support
7S1G0011WW	WEKA Data Tiering Option-DTO Per TB, between 2.5PB-5PB, 2Yr w/WEKA support
7S1G0014WW	WEKA Data Tiering Option-DTO Per TB, between 2.5PB-5PB, 3Yr w/WEKA support
7S1G0017WW	WEKA Data Tiering Option-DTO Per TB, between 2.5PB-5PB, 5Yr w/WEKA support
Above 5 PB	
7S1G001BWW	WEKA Data Tiering Option-DTO Per TB per month, above 5PB, 1 Month w/WEKA support
7S1G000ZWW	WEKA Data Tiering Option-DTO Per TB, above 5PB, 1Yr w/WEKA support
7S1G0012WW	WEKA Data Tiering Option-DTO Per TB, above 5PB, 2Yr w/WEKA support
7S1G0015WW	WEKA Data Tiering Option-DTO Per TB, above 5PB, 3Yr w/WEKA support
7S1G0018WW	WEKA Data Tiering Option-DTO Per TB, above 5PB, 5Yr w/WEKA support

Part numbers: WEKA Data Protection Option-DPO

Table 5. WEKA Data Protection Option-DPO

Part number	Description
Up to 2.5 PB	
7S1G0025WW	WEKA Data Protection Option-DPO Per TB per month, up to 2.5PB 1Month w/WEKA support
7S1G001TWW	WEKA Data Protection Option-DPO Per TB, up to 2.5PB 1Yr w/WEKA support
7S1G001WWW	WEKA Data Protection Option-DPO Per TB, up to 2.5PB 2Yr w/WEKA support
7S1G001ZWW	WEKA Data Protection Option-DPO Per TB, up to 2.5PB 3Yr w/WEKA support
7S1G0022WW	WEKA Data Protection Option-DPO Per TB, up to 2.5PB 5Yr w/WEKA support
Between 2.5 PB – 5 PB	
7S1G0026WW	WEKA Data Protection Option-DPO Per TB per month, between 2.5PB-5PB 1Month w/WEKA support
7S1G001UWW	WEKA Data Protection Option-DPO Per TB, between 2.5PB-5PB 1Yr w/WEKA support
7S1G001XWW	WEKA Data Protection Option-DPO Per TB, between 2.5PB-5PB 2Yr w/WEKA support
7S1G0020WW	WEKA Data Protection Option-DPO Per TB, between 2.5PB-5PB 3Yr w/WEKA support
7S1G0023WW	WEKA Data Protection Option-DPO Per TB, between 2.5PB-5PB 5Yr w/WEKA support
Above 5 PB	
7S1G0027WW	WEKA Data Protection Option-DPO Per TB per month, above 5PB 1Month w/WEKA support
7S1G001VWW	WEKA Data Protection Option-DPO Per TB, above 5PB 1Yr w/WEKA support
7S1G001YWW	WEKA Data Protection Option-DPO Per TB, above 5PB 2Yr w/WEKA support
7S1G0021WW	WEKA Data Protection Option-DPO Per TB, above 5PB 3Yr w/WEKA support
7S1G0024WW	WEKA Data Protection Option-DPO Per TB, above 5PB 5Yr w/WEKA support

Part numbers: WEKA Extreme Performance and Scale (XPS) Edition - State, Local, Education (EDU)

Table 6. WEKA Extreme Performance and Scale (XPS) Edition - State, Local, Education (EDU)

Part number	Description
Up to 1 PB	
7S1G000UWW	WEKA XPS Edition - XPS Per TB per month, up to 1PB 1 Month License w/WEKA support EDU
7S1G000GWW	WEKA XPS Edition - XPS Per TB, up to 1PB 1Yr License w/WEKA support EDU
7S1G000KWW	WEKA XPS Edition - XPS Per TB, up to 1PB 2Yr License w/WEKA support EDU
7S1G000NWW	WEKA XPS Edition - XPS Per TB, up to 1PB 3Yr License w/WEKA support EDU
7S1G000RWW	WEKA XPS Edition - XPS Per TB, up to 1PB 5Yr License w/WEKA support EDU
Between 1 PB – 2.5 PB	
7S1G000VWW	WEKA XPS Edition - XPS Per TB per month, b/w 1PB - 2.5PB 1 Month License w/WEKA Support EDU
7S1G000HWW	WEKA XPS Edition - XPS Per TB, b/w 1PB - 2.5PB 1Yr License w/WEKA Support EDU
7S1G000LWW	WEKA XPS Edition - XPS Per TB, b/w 1PB - 2.5PB 2Yr License w/WEKA Support EDU
7S1G000PWW	WEKA XPS Edition - XPS Per TB, b/w 1PB - 2.5PB 3Yr License w/WEKA Support EDU
7S1G000SWW	WEKA XPS Edition - XPS Per TB, b/w 1PB - 2.5PB 5Yr License w/WEKA Support EDU
Above 2.5 PB	
7S1G000WWW	WEKA XPS Edition - XPS Per TB per month, above 2.5 PB 1 Month License w/ WEKA support EDU
7S1G000JWW	WEKA XPS Edition - XPS Per TB, above 2.5PB 1Yr License w/ WEKA support EDU
7S1G000MWW	WEKA XPS Edition - XPS Per TB, above 2.5PB 2Yr License w/ WEKA support EDU
7S1G000QWW	WEKA XPS Edition - XPS Per TB, above 2.5 PB 3Yr License w/ WEKA support EDU
7S1G000TWW	WEKA XPS Edition - XPS Per TB, above 2.5 PB 5Yr License w/ WEKA support EDU

Part numbers: WEKA Data Tiering Option-DTO - State, Local, Education (EDU)

Table 7. WEKA Data Tiering Option-DTO - State, Local, Education (EDU)

Part number	Description
Up to 2.5 PB	
7S1G001QWW	WEKA Data Tiering Option-DTO Per TB per month, up to 2.5PB, 1 Month w/WEKA support EDU
7S1G001CWW	WEKA Data Tiering Option-DTO Per TB, up to 2.5PB, 1Yr w/WEKA support EDU
7S1G001FWW	WEKA Data Tiering Option-DTO Per TB, up to 2.5PB, 2Yr w/WEKA support EDU
7S1G001JWW	WEKA Data Tiering Option-DTO Per TB, up to 2.5PB, 3Yr w/WEKA support EDU
7S1G001MWW	WEKA Data Tiering Option-DTO Per TB, up to 2.5PB, 5Yr w/WEKA support EDU
Between 2.5 PB – 5 PB	
7S1G001RWW	WEKA Data Tiering Option-DTO Per TB per month, b/w 2.5PB-5PB, 1 Month w/WEKA support EDU
7S1G001DWW	WEKA Data Tiering Option-DTO Per TB, between 2.5PB-5PB, 1Yr w/WEKA support EDU
7S1G001GWW	WEKA Data Tiering Option-DTO Per TB, between 2.5PB-5PB, 2Yr w/WEKA support EDU
7S1G001KWW	WEKA Data Tiering Option-DTO Per TB, between 2.5PB-5PB, 3Yr w/WEKA support EDU
7S1G001NWW	WEKA Data Tiering Option-DTO Per TB, between 2.5PB-5PB, 5Yr w/WEKA support EDU
Above 5 PB	
7S1G001SWW	WEKA Data Tiering Option-DTO Per TB per month, above 5PB, 1 Month w/WEKA support EDU
7S1G001EWW	WEKA Data Tiering Option-DTO Per TB, above 5PB, 1Yr w/WEKA support EDU
7S1G001HWW	WEKA Data Tiering Option-DTO Per TB, above 5PB, 2Yr w/WEKA support EDU
7S1G001LWW	WEKA Data Tiering Option-DTO Per TB, above 5PB, 3Yr w/WEKA support EDU
7S1G001PWW	WEKA Data Tiering Option-DTO Per TB, above 5PB, 5Yr w/WEKA support EDU

Part numbers: WEKA Data Protection Option-DPO - State, Local, Education (EDU)

Table 8. WEKA Data Protection Option-DPO - State, Local, Education (EDU)

Part number	Description
Up to 2.5 PB	
7S1G002LWW	WEKA Data Protection Option-DPO Per TB per month, up to 2.5PB 1Month w/WEKA support EDU
7S1G0028WW	WEKA Data Protection Option-DPO Per TB, up to 2.5PB 1Yr w/WEKA support EDU
7S1G002BWW	WEKA Data Protection Option-DPO Per TB, up to 2.5PB 2Yr w/WEKA support EDU
7S1G002EWW	WEKA Data Protection Option-DPO Per TB, up to 2.5PB 3Yr w/WEKA support EDU
7S1G002HWW	WEKA Data Protection Option-DPO Per TB, up to 2.5PB 5Yr w/WEKA support EDU
Between 2.5 PB – 5 PB	
7S1G002MWW	WEKA Data Protection Option-DPO Per TB per month, b/w 2.5PB-5PB 1Month w/WEKA support EDU
7S1G0029WW	WEKA Data Protection Option-DPO Per TB, between 2.5PB-5PB 1Yr w/WEKA support EDU
7S1G002CWW	WEKA Data Protection Option-DPO Per TB, between 2.5PB-5PB 2Yr w/WEKA support EDU
7S1G002FWW	WEKA Data Protection Option-DPO Per TB, between 2.5PB-5PB 3Yr w/WEKA support EDU
7S1G002JWW	WEKA Data Protection Option-DPO Per TB, between 2.5PB-5PB 5Yr w/WEKA support EDU
Above 5 PB	
7S1G002NWW	WEKA Data Protection Option-DPO Per TB per month, above 5PB 1Month w/WEKA support EDU
7S1G002AWW	WEKA Data Protection Option-DPO Per TB, above 5PB 1Yr w/WEKA support EDU
7S1G002DWW	WEKA Data Protection Option-DPO Per TB, above 5PB 2Yr w/WEKA support EDU
7S1G002GWW	WEKA Data Protection Option-DPO Per TB, above 5PB 3Yr w/WEKA support EDU
7S1G002KWW	WEKA Data Protection Option-DPO Per TB, above 5PB 5Yr w/WEKA support EDU

WEKA Installation/Professional Services

The following table lists the available installation/professional services.

Table 9. WEKA Installation/Professional Services

Part number	Description
7S1G002PWW	WEKA Installation (up to 30 nodes, remote)
7S1G002QWW	WEKA Professional Services (1 business day, remote)

Operating system software

Lenovo recommends the use of Red Hat Enterprise Linux (RHEL) as the operating system to use on WEKA storage servers. When coupled with a premium subscription, the software includes Long Term Support (LTS) updates to the operating system helping to ensure security updates are available for the operating system without the need for regular minor version upgrades. The following table outlines the options for Lenovo ThinkSystem servers. One subscription is needed per storage server.

Table 10. Operating system software

Part number	Feature code	Description
7S0F0004WW	S0N8	RHEL Server Physical or Virtual Node, 2 Skt Premium Subscription w/Lenovo Support 1Yr
7S0F0005WW	S0N9	RHEL Server Physical or Virtual Node, 2 Skt Premium Subscription w/Lenovo Support 3Yr
7S0F0006WW	S0NA	RHEL Server Physical or Virtual Node, 2 Skt Premium Subscription w/Lenovo Support 5Yr

Seller training courses

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

1. Partner Technical Webinar - Deployment Ready Solutions

2024-02-13 | 60 minutes | Employees and Partners

In this 60-minute replay, Dave Brown and Joe Murphy reviewed the Deployment Ready Solutions feature of DCSC (<https://dcsc.lenovo.com/#/>). Joe showed the DE Fibre Ready Solutions under Storage. Under the Deployment Ready Solutions, Joe showed WEKA Solutions and Dave showed the VEEAM Solutions.

Published: 2024-02-13

Length: 60 minutes

Employee link: Grow@Lenovo

Partner link: [Lenovo Partner Learning](#)

Course code: 020224

2. ThinkSystem High Performance File Offering with WEKA

2023-10-25 | 25 minutes | Employees and Partners

This course introduces you the file system solution with WEKA. By the end of this course, you will be able to: describe what is WEKA, identify the high-performance workloads where WEKA can improve the performance, review the file storage, identify the customer's concerns, and describe the process to sell & win.

Published: 2023-10-25

Length: 25 minutes

Employee link: Grow@Lenovo

Partner link: [Lenovo Partner Learning](#)

Course code: DSOLO203

3. **Benefits and the positioning of Lenovo ThinkSystem file offerings with WEKA, DSS, and DM+ONTAP**

2023-05-08 | 10 minutes | Employees and Partners

Course objectives:

1. Learn about file storage
2. Understand the different types of storage
3. Recognize the Lenovo data management portfolio

Published: 2023-05-08

Length: 10 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: DSOLS207

4. **Partner Technical Webinar - WEKA Data Platform**

2023-03-28 | 60 minutes | Employees and Partners

In this 60-minute replay, Ed Stickney, WEKA Director of Strategic Partnerships and Chak Singamsetti, WEKA Senior Sales Engineer introduced WEKA and the WEKA Data Platform. They presented who is WEKA, the key use cases, the architecture, the competitors and what WEKA looks like in DCSC.

Published: 2023-03-28

Length: 60 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: 032423

5. **ThinkSystem High Performance File offering with WEKA Preview**

2023-02-07 | 3 minutes | Employees and Partners

This preview introduces the ThinkSystem High Performance File offering with WEKA. Lenovo and WEKA are announcing a strategic partnership to deliver enterprise class solutions to accelerate HPC and AI workloads. Lenovo ThinkSystem Software Defined Storage (SDS) Ready Nodes with WEKA Data Platform software deliver a high performance solution that supports every step of the organizations' data lifecycle – from ingest and pre-processing, to analyzing, storing, and archiving. Note: This course is presented as audio only. There are no slides or video.

Published: 2023-02-07

Length: 3 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: SXXW2515a

6. **Technical Champions Webinar: WEKA - Delivering the Data Platform for the Modern Workload**

2023-01-26 | 93 minutes | Employees Only

Have you heard about WEKA lately and are wondering what exactly “WEKA” is? Maybe your customer’s data needs (both performance and capacity) are spiraling out of control, as is the complexity of managing multiple data platforms?

Join Ed Stickney and Chak Singamsetti as they clear up the confusion and provide the training and tools you’ll need to become a WEKA-selling powerhouse. Ed will cover an overview of WEKA, sales positioning, licensing, and more. Chak will take over in the second half for a deeper dive into WEKA’s technological differentiation and how to build Lenovo-WEKA solutions.

In addition to being a value differentiator and a new market space for Lenovo, this is an EXCITING offering that will provide you with a new and different conversation with your customers. Please join us for what will certainly be an informative and profitable enablement investment in your future.

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Employee link: Grow@Lenovo

Course code: DSOLS206

For more information

To learn more about Lenovo Data Management solutions, please visit our [Data Management solutions](#) web page. More details on the WEKA Data Platform software can be found at weka.io. You can also contact your Lenovo sales representative or authorized channel partner.

Related product families

Product families related to this document are the following:

- [Software-Defined Storage](#)
- [ThinkSystem SR630 V2 Server](#)
- [ThinkSystem SR630 V3 Server](#)
- [ThinkSystem SR635 Server](#)
- [ThinkSystem SR635 V3 Server](#)
- [ThinkSystem SR650 V2 Server](#)
- [ThinkSystem SR650 V3 Server](#)
- [ThinkSystem SR655 Server](#)
- [ThinkSystem SR655 V3 Server](#)

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