

Microsoft Software Solution Product Guide

Product Guide

Microsoft and Lenovo have been partners for over 25 years. Together we ensure that the latest Microsoft technologies work perfectly with Lenovo ThinkSystem infrastructure and ThinkAgile solutions to provide the most reliable, secure, and high-performing datacenters for our customers. Built with proven Lenovo innovation, Lenovo ThinkSystem servers and ThinkAgile solutions extend Microsoft's operating systems, virtualization technologies, and infrastructure platforms so you can build a highly productive IT environment that can help your business achieve true innovation.

Lenovo has proven experience in developing and delivering Microsoft-based solutions that help customers modernize and simplify their IT infrastructure to dramatically drive down operating costs and open the door to cutting-edge innovations. Built around the latest Lenovo ThinkSystem servers and networking hardware, the Lenovo solution with Microsoft provides businesses with an affordable, interoperable, and reliable industry-leading solution to manage their virtualized workloads.



Did you know?

Lenovo XClarity Integrator integrates Lenovo XClarity Administrator into Microsoft software, providing the functionality you need to manage Lenovo infrastructure right in the console of Microsoft software. Lenovo XClarity Administrator is a centralized resource management solution that reduces complexity, speeds up response, and enhances the availability of Lenovo ThinkSystem infrastructure and ThinkAgile solutions.

Lenovo offers XClarity Integrator for Windows Admin Center, Microsoft Azure Log Analytics and Microsoft System Center. For more information, refer to the Lenovo XClarity Administrator Product Guide, <https://lenovopress.com/tips1200-lenovo-xclarity-administrator>.

Why buy Microsoft licenses from Lenovo?

Lenovo offers various types and forms of Microsoft licensing so organizations and partners can leverage best in class Lenovo servers to build agile IT infrastructure that is reliable, secure, and high performing. Choosing a Microsoft OEM license from Lenovo for most customers is the simplest and most cost-effective license. Microsoft licenses from Lenovo are specifically pre-tested and optimized to install on Lenovo servers. Lenovo offers support for all of its Microsoft subscriptions offerings, giving customers a single point of support for their entire datacenter. For OEM licenses support, please ask for support plans to your Lenovo sales representative.

Lenovo holds more world record benchmarks than anyone with SQL Server from Microsoft. Lenovo is the first company to publish a non-clustered TPC-H@10,000GB benchmark performance result running Microsoft SQL Server. Refer to <https://lenovopress.com/lp0720-sr950-tpch-benchmark-result-2017-07-11>. When you purchase Microsoft SQL Server from Lenovo, you have support and access to the industry-leading Lenovo Engineering team that made this benchmark performance possible.

With co-located engineering organizations and a history of technical collaboration, Microsoft and Lenovo consistently deliver innovative joint solutions for the data center. Lenovo's leadership in reliability, customer satisfaction, and performance, combined with Microsoft's reputation in software and cloud services, continues to deliver innovative data-center solutions and lower total cost of ownership for our joint customers.

With Lenovo, customers have access to decades of datacenter expertise, industry leading support services and the option to leverage Lenovo consultative, professional, and managed service offerings. Lenovo provides customers with the best solution to generate the business results they are looking to achieve, while leveraging a single partner for all aspects of support and services.

Microsoft Subscription Licenses

Microsoft subscription licenses are available via select countries enrolled in the Microsoft CSP program. Check the habilitation of your country with your Lenovo sales representative.

Microsoft offers a variety of Windows Server and SQL server subscription licenses in in both 1-year and 3-years terms. Microsoft subscription licenses provide customers with latest software versions, complete mobility, and continuous support among other benefits. Below is a comparison between perpetual and subscription licenses from Microsoft:

Table 1. Microsoft Subscription Licenses

	Perpetual Licenses	Subscription Licenses
Mobility	No	Yes
Version	Specific	Latest (always)
Updates	Needed	Not applicable
Upgrades	Available	Not applicable
Support	Until EOL	Continuous
Renewal	Not applicable	Required (end-of-Term)

Windows Server Subscriptions

Microsoft offers the following Windows Server subscriptions, both in 1-year and 3-year terms:

- Windows Server CAL (Device)
- Windows Server CAL (User)
- Windows Server RMS CAL (Device)
- Windows Server RMS CAL (User)
- Windows Server Standard (8 Cores)
- Windows Server Remote Desktop (User)

For more information regarding features and applications for WS version, please visit the Microsoft Windows Server page at <https://docs.microsoft.com/en-us/windows-server/administration/server-core/server-core-roles-and-services>. To order Windows Server subscriptions, please refer to the [Microsoft Subscription Licenses](#) section.

SQL Server Subscriptions

Microsoft offers the following SQL Server subscriptions, both in 1-year and 3-year terms:

- Microsoft SQL Server Standard (2 Cores)
- Microsoft SQL Server Enterprise (2 Cores)

For more information regarding SQL Server 2022, please visit the Microsoft SQL Server page at <https://learn.microsoft.com/es-mx/sql/sql-server/what-s-new-in-sql-server-2022?view=sql-server-ver16> To order SQL Server subscriptions, please refer to table “Microsoft Subscription Licenses – Part Numbers” below.

Table 2. Microsoft Subscription Licenses – Part Numbers

Description	Part number
Windows Server	
Windows Server CAL - 1 Device CAL - 1 year Subscription	7S0T0005WW
Windows Server CAL - 1 Device CAL - 3 years Subscription	7S0T0006WW
Windows Server CAL - 1 User CAL - 1 year Subscription	7S0T0007WW
Windows Server CAL - 1 User CAL - 3 years Subscription	7S0T0008WW
Windows Server RMS CAL - 1 Device CAL - 1 year Subscription	7S0T0009WW
Windows Server RMS CAL - 1 Device CAL - 3 years Subscription	7S0T000AWW
Windows Server RMS CAL - 1 User CAL - 1 year Subscription	7S0T000BWW
Windows Server RMS CAL - 1 User CAL - 3 years Subscription	7S0T000CWW
Windows Server Remote Desktop Services CAL-1 User CAL -1 Year Subscription	7S0T000FWW
Windows Server Remote Desktop Services CAL-1 User CAL -3 Year Subscription	7S0T000GWW
Windows Server Standard - 8 Core License Pack - 1 year Subscription	7S0T000DWW
Windows Server Standard - 8 Core License Pack - 3 years Subscription	7S0T000EWW
Microsoft SQL Server	
Microsoft SQL Server Enterprise - 2 Core License Pack - 1 year Subscription	7S0T0001WW
Microsoft SQL Server Enterprise - 2 Core License Pack - 3 year Subscription	7S0T0002WW
Microsoft SQL Server Standard - 2 Core License Pack - 1 year Subscription	7S0T0003WW
Microsoft SQL Server Standard - 2 Core License Pack - 3 year Subscription	7S0T0004WW

Microsoft Azure Plans

The Microsoft Azure cloud platform is more than 200 products and cloud services designed to help you bring new solutions to life—to solve today’s challenges and create the future. Build, run, and manage applications across multiple clouds, on-premises, and at the edge, with the tools and frameworks of your choice.

Only a single Azure Plan is required in order-to-order unlimited number of Azure Cloud Services. Amongst popular and high demand Azure Services are:

- Azure Stack HCI
- Azure Stack HUB
- Azure Backup
- Azure Storage
- Azure File Sync
- Azure Site Recovery
- Azure Monitor
- Azure Update Management
- Azure Virtual Machines
- Azure SQL Server

Please visit the following Azure page for a complete list of available Azure Cloud Services:

<https://azure.microsoft.com/en-us/services/>

All Azure Cloud Services are available by Lenovo through a single part number (PN). This PN registers customers to a Lenovo Azure Tenant portal. Through this portal, customers can activate and manage all Azure Cloud Services for their accounts. The following customer information is required at PoS (point of sale) for Lenovo to provide end-user access to Lenovo Azure Tenant portal:

- Valid contact name
- Valid contact email address
- Valid domain

To order an Azure Plan from Lenovo (support plan available), please refer to table “Azure Plan – Part Numbers” below:

Table 3. Azure Plan – Part Numbers

Description	Part number
Azure Cloud Services	
Azure Plan	7S0T000HWW
Lenovo Support for Azure Cloud – 1 year subscription**	7S0T000LWW

Microsoft is solely responsible for measuring and providing accurate Azure Cloud Services consumed by a customer’s Azure Plan. Lenovo will provide a monthly bill to customers or reseller partners based upon Microsoft’s Azure Plan consumption reports. For more information regarding Azure, please visit:

- [Microsoft Azure](#)
- [Azure Documentation](#)
- [Azure Pricing Estimator](#)

Microsoft Azure Reserved Instances

Microsoft Azure platform also provides a pre-paid discounted variation of a selected number of Azure Cloud Services. These services can be pre-paid for both 1-year and 3-years terms. End-users have the entire term to consume reserved instances of Azure Cloud Services.

Information regarding available Azure Cloud Service Reserved Instances and discounts can be found at [Microsoft's Azure Pricing Estimator page](#).

All Azure Cloud Services are available by Lenovo through a single part number (PN). This PN registers customers to a Lenovo Azure Tenant portal. Through this portal, customers can activate and manage all Azure Cloud Services for their accounts. The following customer information is required at PoS (point of sale) for Lenovo to provide end-user access to Lenovo Azure Tenant portal:

- Valid contact name
- Valid contact email address
- Valid domain

To order an Azure Reserved Instances from Lenovo (support plan available), please refer to table "Azure Reserved Instances – Part Numbers" below:

Table 4. Azure Reserved Instances – Part Numbers

Description	Part number
Azure Cloud Services	
Azure Reserved Instance – 1 year Term	7S0T000JWW
Azure Reserved Instance – 3 year Term	7S0T000KWW
Lenovo Support for Azure Cloud – 1 year subscription**	7S0T000LWW

Microsoft is solely responsible for measuring and providing accurate Azure Cloud Services consumed by a customer's Azure Plan. Lenovo will provide a monthly bill to customers or reseller partners based upon Microsoft's Azure Plan consumption reports. For more information regarding Azure, please visit:

- [Microsoft Azure](#)
- [Azure Documentation](#)

Lenovo Support for Azure Plan & Reserved Instances

Lenovo offers support for all Azure Plans and Azure Reserved Instances customers. Basic account support is offered free of charge. Account support includes:

- Billing questions
- Login issues
- Agreements
- Profile updates

For Azure Plans and Azure Reserved Instances technical support, Lenovo offers a 1-year subscription support plan. Technical support includes:

- Support Levels: Lenovo to provide L1/L2 support; Microsoft to provide L3 support
- Dedicated Support Team
- Availability: 24x7
- Geo Support: Support for each participating Geo/Country
- Languages: English Language Only
- Access: Single number to reach Cloud Services software support and ThinkAgile hardware support

To order an Azure Reserved Instances from Lenovo (support plan available), please refer to table “Azure Reserved Instances – Part Numbers” below:

Table 5. Lenovo Support for Azure Plan and Reserved Instances – Part Numbers

Description	Part number
Azure Cloud Services	
Lenovo Support for Azure Cloud – 1 year subscription**	7S0T000LWW

Microsoft OEM Licenses

Windows Server editions and licensing

This section describes the editions and licensing for Windows Server:

- [Windows Server Licensing](#)
- [Core based licensing: Windows Server Standard and Datacenter](#)
- [Client Access License \(CAL\) & Remote Desktop Session \(RDS\) CAL](#)
- [Downgrade rights](#)

Windows Server 2022 are available in the following editions:

- **Essentials Edition:** ideal for small businesses with up to 25 users and 50 Small companies with basic IT needs purchasing a first server; likely a small or no dedicated IT department. CAL (Client Access Licensing) is not required with this edition. Noted that there is a 10 core max for only one CPU.
- **Standard Edition:** Ideal for customers with low density or minimally virtualized environments.
- **Datacenter Edition:** Ideal for highly virtualized and software defined datacenter environments.

* **Note:** Windows Server 2022 is not available in Storage Edition. Customers using Windows Server 2016 Storage Edition should consider the Windows Server 2022 Standard Edition.

Windows Server Licensing

Customers can purchase Windows Server licenses from Lenovo through the following ways:

- **CTO (Configure to Order)** – this is the OEM license (represented by a Microsoft OS-COA label) that is added to the Lenovo server shipment at manufacturing and requires a Windows Server OS to be selected at the same time.
 - **Pre-Install** – The OS is pre-installed onto the Lenovo server at manufacturing and the OS install media is included with the server from manufacturing for possible subsequent customer self-install.
 - **DIB (Drop-in-Box) only** – The OS install media is shipped included in the box with the server at from manufacturing.
- **ROK** – this is the OEM license (represented by a Microsoft OS-COA label) that is sold by Lenovo’s authorized resellers and distributors.
 - **ROK kit** – The OS install media is included with the server from Lenovo’s Partner.

Table 6. Windows Server Licensing

Editions	Licensing model	CAL requirements*
Windows Server Datacenter	Core-based	Windows Server CAL
Windows Server Standard	Core-based	Windows Server CAL
Windows Server Essentials	Processor- based	No CAL required
Windows Storage Server (2016 Only)	Processor- based	No CAL required

* Some additional or advanced functionality such as Remote Desktop Services or Active Directory Rights Management Services will continue to require the purchase of an additive CAL.

Core based licensing: Windows Server Standard and Datacenter

The licensing of Windows Server 2022 Standard and Datacenter editions based on a per physical processor basis. A minimum of 8 cores per processor and 16 cores total must be licensed. All cores must be licensed, even if user-disabled.

The Base License for the Lenovo OEM Microsoft Windows Server Standard and Datacenter editions will cover up to 16 cores per system. Customers who need to license more than 16 cores can easily do so with Additional Licenses. Additional Licenses are available in 2 core packs and 16 core packs.

- Servers are licensed based on the number of processor cores in the physical server. All physical cores in the server must be licensed.
- A minimum of 16 core licenses is required for each server.
- A minimum of 8 core licenses is required for each physical processor.
- Standard Edition provides rights for up to two Operating System Environments (OSE) or Hyper-V containers when all physical cores in the server are licensed. For every two additional OSEs, all the cores in the server have to be licensed again.
- For more information, please refer to the Lenovo Windows Server Core Licensing Calculator: <https://www.lenovosalesportal.com/windows-server-2022-core-licensing-calculator.aspx>

Client Access License (CAL) & Remote Desktop Session (RDS) CAL

The Windows Server 2022 licensing model for Standard and Datacenter requires Client Access Licenses (CALs). Each user and/or device accessing a licensed Windows Server Standard or Datacenter edition requires a Windows Server CAL or a Windows Server and a Remote Desktop Services (RDS) CAL.

A Windows Server CAL is required when a user or device is directly or indirectly accessing Windows Server. A Remote Desktop Service (RDS) CAL is also required for users that need to access programs or the full desktop remotely using Remote Desktop Services (RDSs). Both Windows Server CAL (user or device) and RDS CAL (user or device) are required for remote desktop access. RDS CALs contain a product key for activation. As an exception to these rules, up to two users or devices may access the server software, only for server administration purposes, without requiring either a RDS CAL or a Windows Server CAL.

Each user and device that connects to a Remote Desktop Session host needs a client access license (CAL). There are two types of RDS CALs: Device CALs and User CALs.

Each user CAL permits one user, using any device, to access instances of the server software on their licensed servers. Each device CAL permits one device, used by any user, to access instances of the server software on their licensed servers.

The following table outlines the differences between the two types of RDS CALs.

Also refer to the [Windows Server Licensing FAQ](#) section below.

Table 7. Comparison of per-device and per-user RDS CALs

Per Device RDS CALs	Per User RDS CALs
CALs are physically assigned to each device.	CALs are assigned to a user in Active Directory.
CALs are tracked and enforced by the license server.	CALs are tracked but not enforced by the license server.
CALs can be tracked regardless of Active Directory membership.	CALs cannot be tracked within a workgroup.
You can revoke up to 20% of CALs.	You cannot revoke any CALs.
Temporary CALs are valid for 52-89 days.	Temporary CALs are not available.
CALs cannot be overallocated.	CALs can be overallocated (in breach of the Remote Desktop licensing agreement).

For additional details please see: [https:// www.microsoft.com/en-us/licensing/product-licensing/client-access-license](https://www.microsoft.com/en-us/licensing/product-licensing/client-access-license).

Downgrade rights

Microsoft Windows Server 2022 includes the optional right to use an earlier version of the software in place of the version you have licensed (e.g., downgrade from Windows Server 2022 to Windows Server 2019) by purchasing a applicable Downgrade Kit for the Server 2019 or Server 2016 version that Lenovo makes available.

Downgrade rights allows you to install an older image version of the OS. The license rules of the purchased version still apply (i.e. Server 2022).

A Lenovo downgrade kit includes the OS installation media of the earlier version of Windows Server and an OS specific product key for activation.

Windows Server 2022

This section provides information on Windows Server 2022 from Lenovo:

- [Features](#)
- [Feature codes for configure-to-order](#)
- [Part numbers for Reseller Option Kits](#)

Windows Server 2022 is built on the strong foundation of Windows Server 2019 and brings many innovations on three key themes: security, Azure hybrid integration and management, and application platform.

Features

Enhanced security capabilities

For IT professionals, security and compliance are primary concerns. The new security capabilities in Windows Server 2022 combine other security capabilities in Windows Server across multiple areas to provide defense-in-depth protection against advanced threats. Advanced multi-layer security in Windows Server 2022 provides the comprehensive protection that servers need today.

- **Secure-core server** - A Secured-core server uses hardware, firmware, and driver capabilities to enable advanced Windows Server security features. Many of these features are available in Windows Secured-core PCs and are now also available with Secured-core server hardware and Windows Server 2022.
- **Hardware root-of-trust** - Trusted Platform Module 2.0 (TPM 2.0) secure crypto-processor chips provide a secure, hardware-based store for sensitive cryptographic keys and data, including systems integrity measurements. TPM 2.0 can verify that the server has been started with legitimate code and can be trusted by subsequent code execution.
- **Firmware protection** - Firmware executes with high privileges and is often invisible to traditional anti-virus solutions, which has led to a rise in the number of firmware-based attacks. Secured-core server processors support measurement and verification of boot processes with Dynamic Root of Trust for Measurement (DRTM) technology and isolation of driver access to memory with Direct Memory Access (DMA) protection.

Azure Hybrid Capabilities

You can increase your efficiency and agility with built-in hybrid capabilities in Windows Server 2022 that allow you to extend your data centers to Azure more easily than ever before.

- **Azure Arc enabled Windows Servers**— Azure Arc enabled servers with Windows Server 2022 brings on-premises and multi-cloud Windows Servers to Azure with Azure Arc. This management experience is designed to be consistent with how you manage native Azure virtual machines. When a hybrid machine is connected to Azure, it becomes a connected machine and is treated as a resource in Azure. More information can be found at the [Azure Arc enables servers documentation](#).
- **Windows Admin Center** - Improvements to Windows Admin Center to manage Windows Server 2022 include capabilities to report on the current state of the Secured-core features, and where applicable, allow customers to enable the features. More information on these and many more improvements to Windows Admin Center can be found at the [Windows Admin Center documentation](#).

Application platform

There are several platform improvements for Windows Containers, including application compatibility and the Windows Container experience with Kubernetes. A major improvement includes reducing the Windows Container image size by up to 40%, which leads to a 30% faster startup time and better performance.

With support for Intel Ice Lake processors, Windows Server 2022 supports business-critical and large-scale applications, such as SQL Server, that require up to 48 TB of memory and 2,048 logical cores running on 64 physical sockets. Confidential computing with Intel Secured Guard Extension (SGX) on Intel Ice Lake improves application security by isolating applications from each other with protected memory.

To see more detail about new features on Windows Server 2022, please visit:

<https://docs.microsoft.com/en-us/windows-server/get-started/whats-new-in-windows-server-2022>

Between other new features you can see:

- Nested virtualization for AMD processors

- Storage Migration Service
- Adjustable storage repair speed
- Faster repair and resynchronization
- SMB compression

Windows Server 2022 CTO Feature Codes and Part Numbers

The following tables list the Windows Server 2022 configure-to-order (CTO) Feature Codes and part numbers:

Table 8. Windows Server 2022 configure-to-order (CTO) Feature Codes and part numbers

Region Availability	Description	Feature Code	Lenovo part number
Windows Server 2022 Essentials ordering information (part number / feature code)			
WW	Windows Server 2022 Essentials (10 core) - English (factory installed)	S62N	CTO only
WW	Windows Server 2022 Essentials (10 core) - MultiLang (not preinstalled)	S62U	CTO only
LA, EMEA, NA	Windows Server 2022 Essentials (10 core) - Spanish (factory installed)	S62Q	CTO only
China only	Windows Server 2022 Essentials (10 core) - Chinese Simplified (factory installed)	S62M	CTO only
China only	Windows Server 2022 Essentials (10 core) - Chinese Simplified (not preinstalled)	S62R	CTO only
AP	Windows Server 2022 Essentials -(10 core) Chinese Traditional (not preinstalled)	S62S	CTO only
AP	Windows Server 2022 Essentials (10 core) - Japanese (factory installed)	S62P	CTO only
AP	Windows Server 2022 Essentials (10 core) - Japanese (not preinstalled)	S62T	CTO only
Windows Server 2022 Standard ordering information (part number / feature code)			
WW	Windows Server 2022 Standard (16 core) - English (factory installed)	S627	CTO only
WW	Windows Server 2022 Standard (16 core) - MultiLang (not preinstalled)	S62D	CTO only
LA, EMEA, NA	Windows Server 2022 Standard (16 core) - Spanish (factory installed)	S629	CTO only
China only	Windows Server 2022 Standard (16 core) - Chinese Simplified (factory installed)	S626	CTO only
China only	Windows Server 2022 Standard (16 core) - Chinese Simplified (not preinstalled)	S62A	CTO only
AP	Windows Server 2022 Standard (16 core) - Chinese Traditional (not preinstalled)	S62B	CTO only
AP	Windows Server 2022 Standard (16 core) - Japanese (factory installed)	S628	CTO only
AP	Windows Server 2022 Standard (16 core) - Japanese (not preinstalled)	S62C	CTO only
Windows Server 2022 Standard Additional License ordering information (part number / feature code)			

Region Availability	Description	Feature Code	Lenovo part number
WW	Windows Server 2022 Standard Additional License (16 core) (No Media/Key) (APOS)	S60S	7S05007LWW
WW	Windows Server 2022 Standard Additional License (16 core) (No Media/Key) (POS Only)*	S60U	CTO only
WW	Windows Server 2022 Standard Additional License (16 core) (No Media/Key) (Reseller POS Only)	S60Z	7S05007PWW
WW	Windows Server 2022 Standard Additional License (2 core) (No Media/Key) (POS Only)*	S60T	CTO only
WW except Brazil	Windows Server 2022 Standard Additional License (2 core) (No Media/Key) (APOS)	S60Q	7S05007JWW
WW except Brazil	Windows Server 2022 Standard Additional License (2 core) (No Media/Key) (Reseller POS Only)	S60X	7S05007MWW
Windows Server 2022 Datacenter ordering information (part number / feature code)			
WW	Windows Server 2022 Datacenter (16 core) - English (factory installed) drop in the box	S62F	CTO only
WW	Windows Server 2022 Datacenter (16 core) - MultiLang (not preinstalled)	S62L	CTO only
China only	Windows Server 2022 Datacenter (16 core) - Chinese Simplified (factory installed)	S62E	CTO only
China only	Windows Server 2022 Datacenter (16 core) - Chinese Simplified (not preinstalled)	S62H	CTO only
AP	Windows Server 2022 Datacenter (16 core) - Chinese Traditional (not preinstalled)	S62J	CTO only
AP	Windows Server 2022 Datacenter (16 core) - Japanese (factory installed)	S62G	CTO only
AP	Windows Server 2022 Datacenter (16 core) - Japanese (not preinstalled)	S62K	CTO only
Windows Server 2022 Datacenter Additional License ordering information (part number / feature code)			
WW	Windows Server 2022 Datacenter Additional License (16 core) (No Media/Key) (POS Only)*	S60W	CTO only
WW	Windows Server 2022 Datacenter Additional License (16 core) (No Media/Key) (Reseller POS Only)	S612	7S05007SWW
WW	Windows Server 2022 Datacenter Additional License (2 core) (No Media/Key) (POS Only)*	S60V	CTO only
WW except Brazil	Windows Server 2022 Datacenter Additional License (2 core) (No Media/Key) (Reseller POS Only)	S610	7S05007QWW
Windows Server 2022 CAL ordering information (part number / feature code)			
WW	Windows Server 2022 CAL (1 Device)	S5ZG	7S05007TWW
WW	Windows Server 2022 CAL (1 User)	S5ZH	7S05007UWW
WW	Windows Server 2022 CAL (10 Device)	S5ZN	7S05007ZWW
WW	Windows Server 2022 CAL (10 User)	S5ZP	7S050080WW
WW except Brazil	Windows Server 2022 CAL (5 User)	S5ZL	7S05007XWW
WW	Windows Server 2022 CAL (50 Device)	S5ZQ	7S050081WW
WW	Windows Server 2022 CAL (50 User)	S5ZR	7S050082WW

Region Availability	Description	Feature Code	Lenovo part number
Windows Server 2022 Remote Desktop Services CAL ordering information (part number / feature code)			
WW	Windows Server 2022 Remote Desktop Services CAL 2022 (10 Device)	S602	7S050087WW
WW	Windows Server 2022 Remote Desktop Services CAL (1 Device)	S5ZS	7S050083WW
WW	Windows Server 2022 Remote Desktop Services CAL 2022 (1 User)	S5ZT	7S050084WW
WW	Windows Server 2022 Remote Desktop Services CAL 2022 (10 User)	S603	7S050088WW
WW	Windows Server 2022 Remote Desktop Services CAL 2022 (5 Device)	S5ZU	7S050085WW
WW	Windows Server 2022 Remote Desktop Services CAL 2022 (5 User)	S5ZV	7S050086WW
WW	Windows Server 2022 Remote Desktop Services CAL 2022 (50 Device)	S604	7S050089WW
WW	Windows Server 2022 Remote Desktop Services CAL 2022 (50 User)	S605	7S05008AWW

*POS (point of sale) refers to licenses sold at point of original purchase. These are stacked on base licenses when the number of cores or processors exceeds those covered by the base OS license.

Windows Server 2022 ROK Part Numbers

The following table lists the Reseller Option Kit (ROK) part numbers.

Table 9. Windows Server 2022 ROK Part Numbers

Region Availability	Description	Feature Code	Lenovo part number
Windows Server 2022 Essentials ROK Part Numbers			
WW except Brazil	Windows Server 2022 Essentials ROK (10 core) - MultiLang	S5YR	7S050063WW
China only	Windows Server 2022 Essentials ROK (10 core) - Chinese Simplified	S5YM	7S05005ZWW
AP	Windows Server 2022 Essentials ROK (10 core) - Chinese Traditional	S5YN	7S050060WW
AP	Windows Server 2022 Essentials ROK (10 core) - Japanese	S5YP	7S050061WW
Windows Server 2022 Standard ROK Part Numbers			
WW except Brazil	Windows Server 2022 Standard ROK (16 core) - MultiLang	S5YB	7S05005PWW
China only	Windows Server 2022 Standard ROK (16 core) - Chinese Simplified	S5Y7	7S05005KWW
AP	Windows Server 2022 Standard ROK (16 core) - Chinese Traditional	S5Y8	7S05005LWW
AP	Windows Server 2022 Standard ROK (16 core) - Japanese	S5Y9	7S05005MWW
Windows Server 2022 Datacenter ROK Part Numbers			
WW except Brazil	Windows Server 2022 Datacenter ROK (16 core) - MultiLang	S5YG	7S05005UWW
WW	Windows Server 2022 Datacenter ROK w/Reassignment (16 core) - Multilang	S5YL	7S05005YWW
China only	Windows Server 2022 Datacenter ROK (16 core) - Chinese Simplified	S5YC	7S05005QWW

Region Availability	Description	Feature Code	Lenovo part number
China only	Windows Server 2022 Datacenter ROK w/Reassignment (16 core) - Chinese Simplified	S5YH	7S05005VWWW
AP	Windows Server 2022 Datacenter ROK (16 core) - Chinese Traditional	S5YD	7S05005RWWW
AP	Windows Server 2022 Datacenter ROK (16 core) - Japanese	S5YE	7S05005SWWW
AP	Windows Server 2022 Datacenter ROK w/Reassignment (16 core) - Chinese Traditional	S5YJ	7S05005WWW
AP	Windows Server 2022 Datacenter ROK w/Reassignment (16 core) - Japanese	S5YK	7S05005XWWW
Windows Server 2022 Downgrade KIT ROK Part Numbers			
WW	Windows Server Datacenter 2022 to 2016 Downgrade Kit-Multilanguage ROK	S5ZF	7S05006TWWW
WW	Windows Server Datacenter 2022 to 2019 Downgrade Kit-Multilanguage ROK	S5Z3	7S05006FWWW
WW	Windows Server Essentials 2022 to 2016 Downgrade Kit-Multilanguage ROK	S5Z7	7S05006KWWW
WW	Windows Server Essentials 2022 to 2019 Downgrade Kit-Multilanguage ROK	S5YV	7S050067WWW
WW	Windows Server Standard 2022 to 2016 Downgrade Kit-Multilanguage ROK	S5ZB	7S05006PWWW
WW	Windows Server Standard 2022 to 2019 Downgrade Kit-Multilanguage ROK	S5YZ	7S05006BWWW
China only	Windows Server Datacenter 2022 to 2016 Downgrade Kit-Chin Simp ROK	S5ZC	7S05006QWWW
China only	Windows Server Datacenter 2022 to 2019 Downgrade Kit-Chin Simp ROK	S5Z0	7S05006CWWW
China only	Windows Server Essentials 2022 to 2016 Downgrade Kit-Chin Simp ROK	S5Z4	7S05006GWWW
China only	Windows Server Essentials 2022 to 2019 Downgrade Kit-Chin Simp ROK	S5YS	7S050064WWW
China only	Windows Server Standard 2022 to 2016 Downgrade Kit-Chin Simp ROK	S5Z8	7S05006LWWW
China only	Windows Server Standard 2022 to 2019 Downgrade Kit-Chin Simp ROK	S5YW	7S050068WWW
AP	Windows Server Datacenter 2022 to 2016 Downgrade Kit-Chin Trad ROK	S5ZD	7S05006RWWW
AP	Windows Server Datacenter 2022 to 2016 Downgrade Kit-Japanese ROK	S5ZE	7S05006SWWW
AP	Windows Server Datacenter 2022 to 2019 Downgrade Kit-Chin Trad ROK	S5Z1	7S05006DWWW
AP	Windows Server Datacenter 2022 to 2019 Downgrade Kit-Japanese ROK	S5Z2	7S05006EWWW
AP	Windows Server Essentials 2022 to 2016 Downgrade Kit-Chin Trad ROK	S5Z5	7S05006HWWW
AP	Windows Server Essentials 2022 to 2016 Downgrade Kit-Japanese ROK	S5Z6	7S05006JWWW

Region Availability	Description	Feature Code	Lenovo part number
AP	Windows Server Essentials 2022 to 2019 Downgrade Kit-Chin Trad ROK	S5YT	7S050065WW
AP	Windows Server Essentials 2022 to 2019 Downgrade Kit-Japanese ROK	S5YU	7S050066WW
AP	Windows Server Standard 2022 to 2016 Downgrade Kit-Chin Trad ROK	S5Z9	7S05006MWW
AP	Windows Server Standard 2022 to 2016 Downgrade Kit-Japanese ROK	S5ZA	7S05006NWW
AP	Windows Server Standard 2022 to 2019 Downgrade Kit-Chin Trad ROK	S5YX	7S050069WW
AP	Windows Server Standard 2022 to 2019 Downgrade Kit-Japanese ROK	S5YY	7S05006AWW

Downgrade kits are available at Point of Sale from Lenovo Factory and Business Partners. The provided Lenovo Part Number is orderable by Business Partners / Distributors only.

Windows Server Licensing FAQ

Additional information about licensing.

1. Q: What types of Windows licenses does Lenovo offer?

A: Lenovo offers OEM licenses for Windows Server, SQL Server as well as the associated CAL products. Please refer to the product list found at: <https://dcsc.lenovo.com/#!/software>.

2. Q: What is the difference between ROK and DIB and Pre-installed offerings?

A: ROK – the Reseller Option Kit is sold by Lenovo’s authorized resellers and distributors. It is comprised of OS installation media and a MS COA label affixed to the server chassis. Resellers may provide additional OS installation services to the customer.

DIB (Drop-In-Box) – Lenovo factory direct offering that ships OS installation media and a MS COA label affixed to the server chassis (for customers choosing do-it-yourself installations).

Pre-installed – Lenovo factory direct offering that ships OS installation media and MS COA label affixed to the server chassis and the OS factory installed in generic fashion onto the server’s mass storage using recent device drivers.

3. Q: How is Windows Server 2022 licensed?

A: Microsoft is licensing Datacenter and Standard editions by physical processor cores.

Datacenter Edition provides rights to run unlimited OSEs and unlimited Windows Server containers when all physical cores on the server are licensed.

Standard Edition provides rights to run up to two OSEs or two Hyper-V containers and unlimited Windows Server containers when all physical cores on the server are licensed.

With Windows Server Datacenter/Standard:

- o Each physical server is required to be licensed for all physical cores
- o Each physical processor is required to be licensed with a minimum of 8 physical cores
- o Each physical server is required to be licensed with a minimum of two processors, totaling a minimum of 16 physical cores
- o Core licenses are sold in packs of two (that is, a 2-pack Core License)

Essentials Edition remains on the processor-based licensing starting with the 2022 version may only be used on servers with 1 CPU (the 2019 version of Essentials allowed 1-2CPU)

To calculate the appropriate core licenses needed for your server, please visit:
<https://www.lenovosalesportal.com/windows-server-2022-core-licensing-calculator.aspx>

4. **Q: What are CALs and do I need them?**

A: CALs (Client Access Licenses) are separately purchased licenses that allow Users or Devices to access resources on a licensed Windows Server OS environment.

Essentials Edition provides support for up to 25 Users; no additional CALs are needed.

Datacenter and Standard Edition include no CALs as part of the Base license. Customers must purchase User or Device CALs appropriate for their needs.

>For more detailed information, please reference:

<https://www.microsoft.com/en-us/licensing/product-licensing/client-access-license>

5. **Q: What is a “Base license” versus an “Additional license”?**

A: The 16 core Datacenter and Standard edition Base licenses provide the minimum OS licensing basis for a physical server. Each server requires at least one Base license.

Additional core licenses must be purchased depending on the server’s processor configuration.

To calculate the appropriate core licenses needed for your server, please visit:

<https://www.lenovosalesportal.com/windows-server-2022-core-licensing-calculator.aspx>

6. **Q: How are the MS OEM OS licenses delivered?**

A: Base licenses for Datacenter, Standard and Essentials include a Certificate of Authenticity (COA), product key (PK), product software (OS installation DVD), and the Microsoft Software License (formerly known as EULA). Lenovo or Lenovo Resellers will affix the base license COA label to the server chassis (exception being offerings for Windows Server Datacenter w/ Reassignment where the COA remains with the SW Shipgroup that contains the OS installation media).

Additional licenses for Datacenter and Standard include a Certificate of Authenticity (COA), and the Microsoft Software License (formerly known as EULA). The Additional license-COA label is contained affixed to a card in the shrinkwrapped SW Shipgroup (there is no product key included).

OS-CALs for Datacenter and Standard include a Certificate of Authenticity (COA), and the Microsoft Software License (formerly known as EULA). The CAL-COA label is contained affixed to a card in the shrinkwrapped SW Shipgroup (there is no product key included).

RDS-CALs for Datacenter and Standard include a Certificate of Authenticity (COA), product key (PK), and the Microsoft Software License (formerly known as EULA). The RDS-COA label is affixed to a card contained in the shrinkwrapped SW Shipgroup (there is a unique 5x5 product key printed on the RDS CAL label).

Extreme care must be taken to safekeep the provided COA labels (whether they are affixed to the server chassis or contained on the provided SW shipgroup) since there is no way to “reissue” or “replace” these COA labels.

7. **Q: Which licenses are available for purchase after point of sale (APOS)?**

A: Currently Microsoft limits the sale of OEM Base OS license offerings for Essentials, Standard and Datacenter editions to “at Point of Sale” (of the server hardware). However, additional licenses for Standard Edition are also available as “APOS” versions to facilitate customer’s changing need for HW upgrades or adding additional VMs.

Please refer to the product list found at the following page:

<http://dcsc.lenovo.com/#/software>

OS CALs and **RDS CALs** are available for purchase after point of sale.

8. **Q: What are my downgrade rights?**

A: Lenovo offers various “Downgrade” offerings at point of sale. Please refer to the product list found at <http://dcsc.lenovo.com/#/software>. If you are considering making use of your Downgrade rights, it is recommended to purchase these Downgrade kits at the same time as the server purchase.

For After Point of Sale Downgrade options, please reference this support page:
<https://support.lenovo.com/us/en/solutions/ht101582>

9. **Q: Are RDS CALs version specific?**

A: Yes, RDS CALs version must match that of the RDS Host Server’s OS.

For further information please see:
<https://docs.microsoft.com/en-us/windows-server/remote/remote-desktop-services/rds-client-access-license>

10. **Q: Are OS CALs version specific?**

A: CALs are only backwards version compatible, e.g. Windows Server 2022 CAL can be used to access Windows Server 2022 and previous versions.

For further information please see:
<https://www.microsoft.com/en-us/licensing/product-licensing/client-access-license>

11. **Q: Lenovo provided OS media will not install under VMware ESXi.**

A: When attempting to install Microsoft Windows Server using Lenovo-provided installation media into a virtualized computing environment created by VMware ESXi, the install may fail and an error message similar to this is shown:

"Please check with your computer manufacturer to resolve any issues you are having with this computer. These tools are built to only run on Lenovo computers. Since this system is not recognized as a valid system, the installation cannot continue."

Please reference the following solution:
<https://support.lenovo.com/us/en/solutions/HT506366>

12. **Q: Where is my Activation code?**

A: If your SW offering requires an activation code (see #6), then it is printed on a COA label similar to the one pictured here:



Most OEM **Base OS COAs** must be adhered to the server chassis, depending on the server chassis, the COA label can be found on the top, or the side chassis (typically adjacent to agency labels):



However, due to space constraints, the COA may also be found on the bottom chassis:



Base OS license products “with reassignment” rights are an exception: its COA is attached to a card that is delivered alongside the server shipment.

Note that OEM COAs are “tied” to the hardware with which they were originally purchased with and cannot be transferred to another system unless Microsoft Software Assurance is added within 90 days of buying the server or when reassignment rights are specified within the product terms (e.g. included in “ Windows Server 2022, Windows Server 2019 and 2016 Datacenter w/Reassignment Rights” SKU).

CAL offerings do not include an activation code, their CAL-COA labels are proof of purchase only.

RDS CAL offerings do include an activation code on their RDS-COA label which is affixed to a card contained in the shrink-wrapped SW Shipgroup.

13. Q: Can I use my OEM activation code on an image installed with Evaluation or Retail OS images?

A: By Microsoft design, the 25-character activation code (a.k.a. “5x5”) that is printed on the Lenovo OS COA label is designed to only work with OS installations that were performed using the provided Lenovo installation media.

However, Microsoft has published an unsupported method for license conversion which is provided here for additional reference:

<https://docs.microsoft.com/en-us/windows-server/get-started/supported-upgrade-paths#converting-a-current-evaluation-version-to-a-current-retail-version>

Please note that Lenovo is not able to assist with such license conversion workarounds.

14. Q: The activation code on my COA label is damaged.

A: Should the 25-character activation code on the COA label become illegible please contact Lenovo Data Center support at <https://datacentersupport.lenovo.com/us/en/supportphonenumber> and reference the “Damaged COA Replacement Process”.

Note: This process requires a digital picture of the damaged COA to start the replacement process that Lenovo will engage in with Microsoft. Lenovo cannot “replace” or “reissue” COA labels that have been lost.

15. Q: I lost my OS installation media or my media is defective.

A: Lenovo offers replacement of the Lenovo branded OS installation media should it be lost or becomes defective. Please contact Lenovo Data Center Support at: <https://datacentersupport.lenovo.com/us/en/supportphonenumber>

16. **Q: Can I reassign a Lenovo OEM Licenses in the case of new hardware or a disaster recovery scenario?**

A: Lenovo does offer a Datacenter license that includes reassignment rights, which can be reassigned to a new server every 90 days; in the same manner as volume licensing. Lenovo also offers Datacenter and Standard OEM licenses which are more cost effective, and do not have reassignment rights. Should the customer purchase one of these licenses and require reassignment rights they would need to purchase Software Assurance from a Microsoft volume license reseller.

Note: Software Assurance must be purchased within 90 days of the OEM product and can only be applied to the most recent form of the OS.

17. **Q: Does Lenovo sell Microsoft Windows Storage Server 2016?**

A: Yes, Lenovo still offers Windows Storage Server 2016 Standard (processor based licensing) that can be added to a configuration through DCSC, and through the channel via Lenovo part number. (e.g. ROK p/n 01GU599 – Windows Storage Server 2016 – Multilag). Please check with your Lenovo sales representative for other languages that are available.)

SQL Server licensing

Lenovo offers the following types of licenses for **SQL Server 2022 Standard Edition**:

- **CTO (Configure To Order):** OEM license that is added to the Lenovo server shipment at manufacturing.
 - “Core based” (No SQL CALs required)
 - “Server + CAL based” (SQL CALs required)
- **ROK (Reseller Option Kit):** Sold by Lenovo’s authorized resellers and distributors. SQL Server 2022 is offered as a bundled offering with a Windows Server OS such as Windows Server 2022 Standard (16 Core) or Datacenter (16 Core)
 - “Server + CAL based” (SQL CALs required)

Note: Both Windows CALs and SQL Server CALs need to be considered. Client Access Licenses (CALs) can be per-user or per-device.

Each **user CAL** permits one user, using any device, to access instances of the server software on their licensed servers. Each **device CAL** permits one device, used by any user, to access instances of the server software on their licensed servers.

Note that the maximum compute capacity for SQL standard is 4 sockets / 24 physical or virtual cores and 128 GB Memory for DB engines. As such, please take this into consideration during configuration of the server hardware.

If the users / devices connecting to the database are large and unknown, Core based licenses should be considered. For Customer environments with a known number of user/ devices, Server + CAL licensing is recommended. The SQL CALs should be chosen based on the users/ devices connecting to database.

SQL Server 2022

This section provides information on SQL Server 2022 Standard Edition from Lenovo:

- [Features](#)
- [Feature codes for configure-to-order](#)
- [Part numbers for Reseller Option Kits](#)

Features

Learn more about SQL Server 2022 Standard Edition features on this page: <https://learn.microsoft.com/en-us/sql/sql-server/editions-and-components-of-sql-server-2022?view=sql-server-ver15>

SQL Server 2022 Standard Edition CTO Feature Codes

The following tables list the configure-to-order (CTO) feature codes to order SQL Server 2022.

Please, check on the Country/Geo and the language to identify the part that best suite you.

Table 10. SQL Server Standard 2022 parts and Feature code

GEO	Description	FC	Lenovo PN
MICROSOFT SQL SERVER 2022 STANDARD CTO (Core Licensing)			
Brazil	Microsoft SQL Server 2022 Standard 4 core - Brazilian	SA4U	For config only
China	Microsoft SQL Server 2022 Standard 4 core - ChnSimp	SA4V	For config only
AP, China	Microsoft SQL Server 2022 Standard 4 core - ChnTrad	SA4W	For config only
WW except Brazil	Microsoft SQL Server 2022 Standard 4 core - English	SA4X	For config only
NA, EMEA	Microsoft SQL Server 2022 Standard 4 core - French	SA4Y	For config only
EMEA	Microsoft SQL Server 2022 Standard 4 core - German	SA4Z	For config only
EMEA	Microsoft SQL Server 2022 Standard 4 core - Italian	SA50	For config only
AP, China	Microsoft SQL Server 2022 Standard 4 core - Japanese	SA51	For config only
AP, China	Microsoft SQL Server 2022 Standard 4 core - Korean	SA52	For config only
EMEA, NA, LA except Brazil	Microsoft SQL Server 2022 Standard 4 core - Spanish	SA53	For config only
MICROSOFT SQL SERVER 2022 STANDARD CTO (Per Server Licensing)			
Brazil	Microsoft SQL Server 2022 Standard - Brazilian	SA54	For config only
China	Microsoft SQL Server 2022 Standard - ChnSimp	SA55	For config only
AP, China	Microsoft SQL Server 2022 Standard - ChnTrad	SA56	For config only
WW except Brazil	Microsoft SQL Server 2022 Standard - English	SA57	For config only
EMEA, NA	Microsoft SQL Server 2022 Standard - French	SA58	For config only
EMEA	Microsoft SQL Server 2022 Standard - German	SA59	For config only
EMEA	Microsoft SQL Server 2022 Standard - Italian	SA5A	For config only
AP, China	Microsoft SQL Server 2022 Standard - Japanese	SA5B	For config only
AP, China	Microsoft SQL Server 2022 Standard - Korean	SA5C	For config only
EMEA, NA, LA except Brazil	Microsoft SQL Server 2022 Standard - Spanish	SA5D	For config only
MICROSOFT SQL SERVER 2022 Downgrade			
Brazil	SQL Svr Standard Edtn 2022 Downgrade Kit - Brazilian	SA5G	For config only
China	SQL Svr Standard Edtn 2022 Downgrade Kit - ChnSimp	SA5H	For config only
AP, China	SQL Svr Standard Edtn 2022 Downgrade Kit - ChnTrad	SA5J	For config only
WW except Brazil	SQL Svr Standard Edtn 2022 Downgrade Kit - English	SA5K	For config only
EMEA, NA	SQL Svr Standard Edtn 2022 Downgrade Kit - French	SA5L	For config only
EMEA	SQL Svr Standard Edtn 2022 Downgrade Kit - German	SA5M	For config only
EMEA	SQL Svr Standard Edtn 2022 Downgrade Kit - Italian	SA5N	For config only
AP, China	SQL Svr Standard Edtn 2022 Downgrade Kit - Japanese	SA5P	For config only
AP, China	SQL Svr Standard Edtn 2022 Downgrade Kit - Korean	SA5Q	For config only
EMEA, NA, LA except Brazil	SQL Svr Standard Edtn 2022 Downgrade Kit - Spanish	SA5R	For config only
Brazil	SQL Svr Standard Edtn 2022 Downgrade Kit - Brazilian (Reseller POS Only)	SA6S	7S0500ALWW

China	SQL Svr Standard Edtn 2022 Downgrade Kit - ChnSimp (Reseller POS Only)	SA6T	7S0500AMWW
AP, China	SQL Svr Standard Edtn 2022 Downgrade Kit - ChnTrad (Reseller POS Only)	SA6U	7S0500ANWW
WW except AR,BR,CO,GR,PE,PH,TH	SQL Svr Standard Edtn 2022 Downgrade Kit - English (Reseller POS Only)	SA6V	7S0500APWW
NA, EMEA except GR	SQL Svr Standard Edtn 2022 Downgrade Kit - French (Reseller POS Only)	SA6W	7S0500AQWW
EMEA except GR	SQL Svr Standard Edtn 2022 Downgrade Kit - German (Reseller POS Only)	SA6X	7S0500ARWW
EMEA except GR	SQL Svr Standard Edtn 2022 Downgrade Kit - Italian (Reseller POS Only)	SA6Y	7S0500ASWW
AP, China	SQL Svr Standard Edtn 2022 Downgrade Kit - Japanese (Reseller POS Only)	SA6Z	7S0500ATWW
AP, China	SQL Svr Standard Edtn 2022 Downgrade Kit - Korean (Reseller POS Only)	SA70	7S0500AUWW
EMEA, NA, LA except BR,AR,CO,GR, PE	SQL Svr Standard Edtn 2022 Downgrade Kit - Spanish (Reseller POS Only)	SA71	7S0500AVWW
MICROSOFT SQL 2022 CLIENT ACCESS LICENSES CTO (CALs)			
WW except AR,BR,CO,GR,PE,PH,TH	Microsoft SQL Server 2022 Client Access License (1 Device)	SA7A	7S0500B4WW
Argentina	Microsoft SQL Server 2022 Client Access License (1 Device) (AR only)	SA7B	7S0500B5WW
Brazil	Microsoft SQL Server 2022 Client Access License (1 Device) (BR only)	SA7C	7S0500B6WW
Colombia	Microsoft SQL Server 2022 Client Access License (1 Device) (CO only)	SA7D	7S0500B7WW
Greece	Microsoft SQL Server 2022 Client Access License (1 Device) (GR only)	SA7E	7S0500B8WW
Peru	Microsoft SQL Server 2022 Client Access License (1 Device) (PE only)	SA7F	7S0500B9WW
Philippines	Microsoft SQL Server 2022 Client Access License (1 Device) (PH only)	SA7G	7S0500BAWW
Thailand	Microsoft SQL Server 2022 Client Access License (1 Device) (TH only)	SA7H	7S0500BBWW
WW except AR,BR,CO,GR,PE,PH,TH	Microsoft SQL Server 2022 Client Access License (1 User)	SA7J	7S0500BCWW
Argentina	Microsoft SQL Server 2022 Client Access License (1 User) (AR only)	SA7K	7S0500BDWW
Brazil	Microsoft SQL Server 2022 Client Access License (1 User) (BR only)	SA7L	7S0500BEWW
Colombia	Microsoft SQL Server 2022 Client Access License (1 User) (CO only)	SA7M	7S0500BFWW
Greece	Microsoft SQL Server 2022 Client Access License (1 User) (GR only)	SA7N	7S0500BGWW
Peru	Microsoft SQL Server 2022 Client Access License (1 User) (PE only)	SA7P	7S0500BHWW

Philippines	Microsoft SQL Server 2022 Client Access License (1 User) (PH only)	SA7Q	7S0500BJWW
Thailand	Microsoft SQL Server 2022 Client Access License (1 User) (TH only)	SA7R	7S0500BKWW
WW except AR,BR,CO,GR,PE,PH,TH	Microsoft SQL Server 2022 Client Access License (5 Device)	SA7S	7S0500BLWW
Argentina	Microsoft SQL Server 2022 Client Access License (5 Device) (AR only)	SA7T	7S0500BMWW
Brazil	Microsoft SQL Server 2022 Client Access License (5 Device) (BR only)	SA7U	7S0500BNWW
Colombia	Microsoft SQL Server 2022 Client Access License (5 Device) (CO only)	SA7V	7S0500BPWW
Greece	Microsoft SQL Server 2022 Client Access License (5 Device) (GR only)	SA7W	7S0500BQWW
Peru	Microsoft SQL Server 2022 Client Access License (5 Device) (PE only)	SA7X	7S0500BRWW
Philippines	Microsoft SQL Server 2022 Client Access License (5 Device) (PH only)	SA7Y	7S0500BSWW
Thailand	Microsoft SQL Server 2022 Client Access License (5 Device) (TH only)	SA7Z	7S0500BTWW
WW except AR,BR,CO,GR,PE,PH,TH	Microsoft SQL Server 2022 Client Access License (5 User)	SA80	7S0500BUWW
Argentina	Microsoft SQL Server 2022 Client Access License (5 User) (AR only)	SA81	7S0500BVWW
Brazil	Microsoft SQL Server 2022 Client Access License (5 User) (BR only)	SA82	7S0500BWWW
Colombia	Microsoft SQL Server 2022 Client Access License (5 User) (CO only)	SA83	7S0500BXWW
Greece	Microsoft SQL Server 2022 Client Access License (5 User) (GR only)	SA84	7S0500BYWW
Peru	Microsoft SQL Server 2022 Client Access License (5 User) (PE only)	SA85	7S0500BZWW
Philippines	Microsoft SQL Server 2022 Client Access License (5 User) (PH only)	SA86	7S0500C0WW
Thailand	Microsoft SQL Server 2022 Client Access License (5 User) (TH only)	SA87	7S0500C1WW
ADDITIONAL LICENSE CTO			
WW except Brazil	Microsoft SQL Server 2022 Standard Additional Server License	SA5E	For config only
WW except Brazil	Microsoft SQL Server 2022 Standard 2 Core Additional License	SA5F	For config only
WW except AR,BR,CO,GR,PE,PH,TH	MS SQL Svr 2022 Standard Addl Svr Lic (Reseller POS Only)	SA72	7S0500AWWW
Argentina	MS SQL Svr 2022 Standard Addl Svr Lic (Reseller POS Only) (AR only)	SA73	7S0500AXWW
Brazil	MS SQL Svr 2022 Standard Addl Svr Lic (Reseller POS Only) (BR only)	SA74	7S0500AYWW

Colombia	MS SQL Svr 2022 Standard Addl Svr Lic (Reseller POS Only) (CO only)	SA75	7S0500AZWW
Greece	MS SQL Svr 2022 Standard Addl Svr Lic (Reseller POS Only) (GR only)	SA76	7S0500B0WW
Peru	MS SQL Svr 2022 Standard Addl Svr Lic (Reseller POS Only) (PE only)	SA77	7S0500B1WW
Philippines	MS SQL Svr 2022 Standard Addl Svr Lic (Reseller POS Only) (PH only)	SA78	7S0500B2WW
Thailand	MS SQL Svr 2022 Standard Addl Svr Lic (Reseller POS Only) (TH only)	SA79	7S0500B3WW

SQL Server Standard Edition 2022 Downgrade Kit includes installation material for SQL 2019 as well as SQL 2017.

SQL Server 2022 Standar Edition ROK Part Numbers

The following tables list the Reseller Option Kit (ROK) part numbers to order SQL Server 2022.

Table 11. SQL Server 2022 ROK Part Numbers

GEO	Description	Feature Code	Lenovo PN
SQL Server 2022 Standard ROK Part Numbers			
Brazil	Microsoft SQL Server 2022 Standard with Windows Server 2022 Standard ROK (16 core) - Brazilian	SA5S	7S05009LWW
China	Microsoft SQL Server 2022 Standard with Windows Server 2022 Standard ROK (16 core) - ChnSimp	SA5T	7S05009MWW
AP, China	Microsoft SQL Server 2022 Standard with Windows Server 2022 Standard ROK (16 core) - ChnTrad	SA5U	7S05009NWW
WW except AR, BR, CO, GR, PE, PH, TH	Microsoft SQL Server 2022 Standard with Windows Server 2022 Standard ROK (16 core) - English	SA5V	7S05009PWW
NA, EMEA except GR	Microsoft SQL Server 2022 Standard with Windows Server 2022 Standard ROK (16 core) - French	SA5W	7S05009QWW
EMEA except GR	Microsoft SQL Server 2022 Standard with Windows Server 2022 Standard ROK (16 core) - German	SA5X	7S05009RWW
EMEA except GR	Microsoft SQL Server 2022 Standard with Windows Server 2022 Standard ROK (16 core) - Italian	SA5Y	7S05009SWW
AP, China	Microsoft SQL Server 2022 Standard with Windows Server 2022 Standard ROK (16 core) - Japanese	SA5Z	7S05009TWW
AP, China	Microsoft SQL Server 2022 Standard with Windows Server 2022 Standard ROK (16 core) - Korean	SA60	7S05009UWW
EMEA, NA, LA except BR, AR, CO, GR, PE	Microsoft SQL Server 2022 Standard with Windows Server 2022 Standard ROK (16 core) - Spanish	SA61	7S05009VWW
WW except AR, BR, CO, GR, PE, PH, TH	Microsoft SQL Server 2022 Standard with Windows Server 2022 Standard ROK (16 core) - Multilang	SA62	7S05009WWW
Argentina	Microsoft SQL Server 2022 Standard with Windows Server 2022 Standard ROK (16 core) - Multilang (AR only)	SA63	7S05009XWW
Colombia	Microsoft SQL Server 2022 Standard with Windows Server 2022 Standard ROK (16 core) - Multilang (CO only)	SA64	7S05009YWW

Greece	Microsoft SQL Server 2022 Standard with Windows Server 2022 Standard ROK (16 core) - Multilang (GR only)	SA65	7S05009ZWW
Peru	Microsoft SQL Server 2022 Standard with Windows Server 2022 Standard ROK (16 core) - Multilang (PE only)	SA66	7S0500A0WW
Philippines	Microsoft SQL Server 2022 Standard with Windows Server 2022 Standard ROK (16 core) - Multilang (PH only)	SA67	7S0500A1WW
Thailand	Microsoft SQL Server 2022 Standard with Windows Server 2022 Standard ROK (16 core) - Multilang (TH only)	SA68	7S0500A2WW
SQL Server 2022 Datacenter ROK Part Numbers			
China	Microsoft SQL Server 2022 Standard with Windows Server 2022 Datacenter ROK (16 core) - ChnSimp	SA6A	7S0500A4WW
AP, China	Microsoft SQL Server 2022 Standard with Windows Server 2022 Datacenter ROK (16 core) - ChnTrad	SA6B	7S0500A5WW
WW except AR,BR,CO,GR,PE,PH,TH	Microsoft SQL Server 2022 Standard with Windows Server 2022 Datacenter ROK (16 core) - English	SA6C	7S0500A6WW
NA, EMEA except GR	Microsoft SQL Server 2022 Standard with Windows Server 2022 Datacenter ROK (16 core) - French	SA6D	7S0500A7WW
EMEA except GR	Microsoft SQL Server 2022 Standard with Windows Server 2022 Datacenter ROK (16 core) - German	SA6E	7S0500A8WW
EMEA except GR	Microsoft SQL Server 2022 Standard with Windows Server 2022 Datacenter ROK (16 core) - Italian	SA6F	7S0500A9WW
AP, China	Microsoft SQL Server 2022 Standard with Windows Server 2022 Datacenter ROK (16 core) - Japanese	SA6G	7S0500AAWW
AP, China	Microsoft SQL Server 2022 Standard with Windows Server 2022 Datacenter ROK (16 core) - Korean	SA6H	7S0500ABWW
EMEA, NA, LA except BR,AR,CO,GR, PE	Microsoft SQL Server 2022 Standard with Windows Server 2022 Datacenter ROK (16 core) - Spanish	SA6J	7S0500ACWW
WW except AR,BR,CO,GR,PE,PH,TH	Microsoft SQL Server 2022 Standard with Windows Server 2022 Datacenter ROK (16 core) - Multilang	SA6K	7S0500ADWW
Argentina	Microsoft SQL Server 2022 Standard with Windows Server 2022 Datacenter ROK (16 core) - Multilang (AR only)	SA6L	7S0500AEWW
Colombia	Microsoft SQL Server 2022 Standard with Windows Server 2022 Datacenter ROK (16 core) - Multilang (CO only)	SA6M	7S0500AFWW
Greece	Microsoft SQL Server 2022 Standard with Windows Server 2022 Datacenter ROK (16 core) - Multilang (GR only)	SA6N	7S0500AGWW
Peru	Microsoft SQL Server 2022 Standard with Windows Server 2022 Datacenter ROK (16 core) - Multilang (PE only)	SA6P	7S0500AHWW
Philippines	Microsoft SQL Server 2022 Standard with Windows Server 2022 Datacenter ROK (16 core) - Multilang (PH only)	SA6Q	7S0500AJWW
Thailand	Microsoft SQL Server 2022 Standard with Windows Server 2022 Datacenter ROK (16 core) - Multilang (TH only)	SA6R	7S0500AKWW

Lenovo Compatibility

The Lenovo Server Operating System Interoperability Guide (OSIG) is a comprehensive source of information about operating system compatibility with Lenovo servers. It includes servers in the ThinkSystem, ThinkAgile, System x, ThinkServer, NeXtScale, Flex System and BladeCenter product families and covers servers that are currently supported by Lenovo under warranty.

For more information, please visit the OSIG page: <http://lenovopress.com/osig>. **Use the dropdown menus to filter and finetune your search.** In each of the search results, the support statement column contains clickable links that open a popup window with details about the support.

For Lenovo option compatibility, the Lenovo ServerProven® program validates selected products for compatibility with all Lenovo ThinkSystem servers. Through the ServerProven Program, Lenovo works with industry leaders to test their equipment with Lenovo products.

For compatibility information, please visit: <http://static.lenovo.com/us/en/serverproven/index.shtml>. For more details, please click on the Lenovo product. For compatibility with OS, please click on the green + button to expand the section.

XClarity Integrator

Lenovo XClarity Integrator enables XClarity Administrator to integrate into your existing IT applications, providing the functionality you need to manage Lenovo infrastructure right in the console of the software tools that you already use. XClarity Administrator is a centralized resource management solution that reduces complexity, speeds response, and enhances the availability of Lenovo ThinkSystem infrastructure and ThinkAgile solutions.

For more information on XClarity Administrator, visit:
<https://lenovopress.com/tips1200-lenovo-xclarity-administrator>

XClarity Integrator for Microsoft System Center

Lenovo XClarity Integrator for Microsoft System Center expands Microsoft System Center server management capabilities by integrating Lenovo hardware management functionality, providing affordable, basic management of physical and virtual environments to reduce the time and effort required for routine system administration.

Lenovo XClarity Integrator integrates with the following Microsoft System Center tools:

- Microsoft System Center Configuration Manager
- Microsoft System Center Operations Manager
- Microsoft System Center Virtual Machine Manager
- Microsoft Admin Center

Download XClarity Integrator for Microsoft System Center
from: <https://support.lenovo.com/us/en/solutions/lvno-manage>

XClarity Integrator for Windows Admin Center

Lenovo XClarity Integrator for Windows Admin allows you to manage your Lenovo infrastructure from the console of Windows Admin Center. Windows Admin Center is a locally deployed, browser-based app for managing servers, clusters, hyper-converged infrastructure, and Windows 10 PCs.

The Windows Admin Center is a free download separate from Windows Server 2022, available from Microsoft:
<https://docs.microsoft.com/en-us/windows-server/manage/windows-admin-center/understand/windows-admin-center>

Download XClarity Integrator for Windows Admin Center from:
<https://support.lenovo.com/us/en/solutions/HT507549>

XClarity Integrator for Microsoft Azure Analytics

Lenovo XClarity Integrator for Microsoft Azure Log Analytics lets you analyze events from Lenovo XClarity Administrator and the devices that it manages. These insights can help systems administrators find potential problems in their environment.

Download XClarity Integrator for Microsoft Azure Analytics from:
<https://support.lenovo.com/us/en/solutions/ht506712>

Support from Lenovo

Lenovo's Enterprise Server Software Support (ESS) service provides comprehensive, single-source support for a wide range of server operating systems and Microsoft server applications. Lenovo provides 24x7x365 service for critical problems, and support during business hours for noncritical problems.

For more information, see the following web page:
<https://support.lenovo.com/us/en/solutions/ht504357>

Microsoft Solutions from Lenovo

Lenovo offers a broad range of Microsoft based solutions in varying levels of integration to meet different customer requirements and business needs. Solutions range from the turnkey factory-integrated, pre-configured ready-to-go Lenovo ThinkAgile SX series of appliances to build-your-own Engineered Solutions based on Lenovo's proven reference architecture and everything in between.

ThinkAgile MX Certified Nodes

Storage Spaces Direct is a feature of Windows Server 2016, 2019 and 2022 Datacenter Editions, provided at no extra cost and can be used to build a Hyper-Converged Storage solution. It also supports "Disaggregated Mode", with no available VM's, to create a Software Defined Storage environment.

Storage Spaces Direct is software defined storage, using pre-validated Lenovo server configurations with local-attached drives to create software-defined storage at a fraction of the cost of traditional SAN or NAS arrays. Its converged or hyper-converged architecture radically simplifies procurement and deployment, while features such as caching, storage tiers, and erasure coding, together with the latest hardware innovations such as RDMA networking and NVMe drives, deliver unrivaled efficiency and performance.

Storage Spaces Direct is included in 2022 Datacenter Editions.

ThinkAgile MX Certified nodes combine the Microsoft Storage Spaces Direct technology included in Windows Server 2022 Datacenter with industry leading Lenovo servers to give HCI building blocks to build your infrastructure solutions. ThinkAgile MX Certified Nodes are designed for deploying highly available, highly scalable hyper-converged infrastructure (HCI) and software-defined storage (SDS) from Microsoft on Lenovo enterprise platforms.

ThinkAgile MX Certified Nodes are built on industry-leading Lenovo ThinkSystem servers that feature enterprise-class reliability, management, and security. The ThinkAgile MX Certified Nodes offer ThinkAgile Advantage Single Point of Support for quick 24/7 problem reporting and resolution. The ThinkAgile MX Certified Nodes can be optimized for various types of workloads, including general purpose workloads for small and medium businesses, virtual desktop infrastructure (VDI), server virtualization, enterprise applications, databases, and data analytics.

Related links:

- [ThinkAgile MX Product page](#)
- [ThinkAgile MX3520 Appliances and MX 2U Certified Nodes \(Intel Xeon SP Gen 2\)](#)
- [ThinkAgile MX3530 and MX3531 2U Appliances and Certified Nodes \(Intel Xeon SP Gen 3\)](#)
- [ThinkAgile MX3330 and MX3331 1U Appliances and Certified Nodes \(Intel Xeon SP Gen 3\)](#)
- [ThinkAgile MX1020 appliances and MX1021 Certified Nodes for Microsoft Azure Stack HCI](#)
- [ThinkAgile MX Datasheet](#)
- [ThinkAgile MX 3D Tour](#)

ThinkAgile SX for Microsoft Azure Stack

Lenovo ThinkAgile SX for Microsoft Azure Stack is a turnkey, rack-scale solution optimized with a resilient, high-performing, and secure software-defined infrastructure. Lenovo and Microsoft worked together to engineer the solution components—the Azure Stack software and Lenovo software-defined infrastructure—to make sure they perform seamlessly. ThinkAgile SX for Microsoft Azure Stack is a pre-integrated, engineered solution that comes direct from Lenovo—ready to go—with all features, support, and deployment services included.

With benefits like IT agility, lower TCO, and a transformative customer experience, ThinkAgile SX for Microsoft Azure Stack provides the ease and speed of a public cloud with the security and control of on-premises IT. There is no need to worry about configuring and tweaking settings for virtual or physical infrastructure. Your IT personnel can now focus more on building proficiencies in deploying and operating cloud services—such as IaaS, PaaS, and SaaS—and less on your infrastructure.

ThinkAgile SX for Microsoft Azure Stack is the perfect platform to:

- Deliver Azure cloud services from the security of your own data center
- Enable rapid development and iteration of applications with on-premises deployment tools to help transform your organization
- Unify application development across your entire hybrid cloud environment
- Easily move applications and data across private and public clouds

Related links:

- [ThinkAgile SX for Microsoft Azure Stack Product Page](#)
- [ThinkAgile SX for Microsoft Azure Stack Hub \(SXM4400, SXM6400 – Xeon SP Gen2\) Product guide](#)
- [ThinkAgile SX for Microsoft Azure Stack Datasheet](#)
- [Introducing the Microsoft Azure Stack Development Kit on Lenovo Servers](#)
- [ThinkAgile SX for Microsoft Azure Stack 3D Tour](#)

Engineered Solutions

Lenovo Database Solutions for Microsoft SQL Server bring together the right mix of technology and software to align with a range of data warehouse and transactional database use cases. The configurations integrate a variety of Lenovo Systems and appliances, robust Lenovo Storage options and the capabilities of Microsoft SQL Server 2019 Enterprise and Standard Editions to provide the following benefits:

- Improved time to value with pretested hardware configurations
- Optimized SQL server deployment with a significant reduction in hardware testing and tuning
- Reduced total cost of ownership through better price and performance, rapid deployment, and advanced hardware
- Consolidated storage and matched IT investment-to-information-value with several high-performance storage options

Lenovo ThinkSystem based Microsoft OLAP Database Solutions:

- [Lenovo Database Performance Benchmarks](#)
- [Lenovo Database Solution for Microsoft SQL Server](#)
- [Lenovo Database Solution for Microsoft SQL Server RA](#)
- [Lenovo Database Configuration for Microsoft SQL DWFT – 10 TB](#)
- [Lenovo Database Configuration for Microsoft SQL DWFT – 65 TB HA](#)
- [Lenovo Database Configuration for Microsoft SQL DWFT – 200 TB](#)

Lenovo Database Validated Design for Microsoft SQL Server OLTP on ThinkAgile HX:

- [Workloads using Lenovo ThinkAgile HX Series](#)

Seller training courses

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

1. **VTT Cloud Architecture: ThinkAgile MX – Latest Premier Solutions, AI, from Cloud to Edge, and AVD**
2024-03-12 | 75 minutes | Employees Only

Join Amit Kulkarni, Adam Mandelbloom (Lenovo), and distinguished Microsoft speakers for an exclusive VTT call centered around the Lenovo ThinkAgile MX. Amidst the evolving landscape of technology, Artificial Intelligence stands as a pivotal discussion point, often finding its application at the edge. Explore firsthand how Lenovo and Microsoft navigate these challenges with their compelling edge-to-cloud solutions. Journey into the realm of AVD (Azure Virtual Desktop) and its pivotal role in reshaping the paradigms of remote work.

Introducing Microsoft Premier Solutions, witness firsthand how it stands apart in its approach, offering unparalleled support and expertise to empower an organization's digital journey.

Furthermore, gain invaluable insights into the nuances between Azure Stack HCI 22H2 and 23H2.

Our experts will dissect the differences and elucidate the implications for your infrastructure strategy.

Join us for an enlightening session where industry leaders converge to explore the forefront of innovation and chart a course for digital transformation. Don't miss out on this opportunity to gain a competitive edge in today's rapidly evolving landscape.

Published: 2024-03-12

Length: 75 minutes

Employee link: Grow@Lenovo

Course code: DVCLD210

2. **A Lenovo Seller's Journey in the Cloud Space – Clarifying Your Customer's Challenge**
2024-01-03 | 20 minutes | Employees and Partners

The intention of this learning module is to provide suggestions and guidance for those first customer conversations after the opportunity has been initially identified. In this simulation, the Seller's objective is to learn about the business and qualify the business gap.

After completing this course, you will be able to:

- Verify the customer business need
- Guide the customer conversation to qualify and confirm the business gap
- Determine next steps to progress the sale

Published: 2024-01-03

Length: 20 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: DCLDB217r2

3. **Gaining Insight to Lenovo Cloud Solutions Customers - Practical Scenario**
2024-01-03 | 20 minutes | Employees and Partners

In this course we are going to explore a productive sequence of questions to gather information about the customer's business, business processes, and data flow to help position related Lenovo Cloud Solutions.

This course aims to help Lenovo and Partner Sellers identify customers' business landscape in relation to their intended and/or current IT Cloud eco-system.

Completing this learning content will enable you to:

- Ask questions to uncover your customer's business operations and IT landscape
- Assess and identify possible opportunities for Lenovo Cloud Solutions and Services
- Identify the next step to progress the conversation with the customer

Published: 2024-01-03

Length: 20 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: DCLDO115r2

4. **Gaining Insight to Lenovo Cloud Solutions Customers**
2024-01-03 | 25 minutes | Employees and Partners

In this course we are going to explore how to start the conversation about customer's business and technology.

This course aims to provide the Lenovo and Partner sellers with the foundation to ask fundamental questions about customers' business and technology to help position related Lenovo Cloud Solutions.

After completing this training, you will be able to:

- Ask fundamental questions about your customers' business
- Ask fundamental questions about your customers' technology
- Understand what a company needs to consider to execute a cloud strategy

Published: 2024-01-03

Length: 25 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: DCLDO114r2

5. **The Basics of Cloud Computing**

2024-01-03 | 20 minutes | Employees and Partners

As the first course in the ISG Cloud Solutions curriculum, it goes all-out to help Lenovo and Partner General/Technical sellers by providing the foundational information regarding the cloud technology.

This course aims to increase the seller's ability to articulate basic cloud technology concepts and help position related Lenovo Solutions and services.

Published: 2024-01-03

Length: 20 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: DCLDO111r2

6. **Azure Services**

2023-11-03 | 50 minutes | Employees and Partners

This course covers Azure services in some detail. It consists of five videos with a total runtime of around 48 minutes. Azure includes three products that are associated with business continuity: Azure Backup, Azure Site Recovery, and Azure File Sync. These are each discussed in a comprehensive and instructive video. This course also includes videos that discuss Azure IaaS and VMs and explain Azure Cloud Services offerings.

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

- Review the three products that are associated with business continuity
- Azure Backup, Azure Site Recovery, and Azure File Sync
- Discuss the Azure Infrastructure as a Service (IaaS) and Virtual Machines (VMs)
- Explain the Azure Cloud Services offerings

Published: 2023-11-03

Length: 50 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: SXTW1109

7. **Azure Pricing Model**

2023-11-03 | 10 minutes | Employees and Partners

This course consists of a single video, "Pricing Model". The course covers the currencies used for metering usage, comparisons of Azure costs to those of competitors, and different metering and payment options.

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

- Review the different Azure metering and payment options
- Compare Azure costs to those of competitors

Published: 2023-11-03

Length: 10 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: SXTW1111

8. **Lenovo Solutions Supporting Microsoft Business Continuity Services**

2023-02-01 | 30 minutes | Employees and Partners

This training aims to build familiarity with Lenovo Microsoft solutions for BCDR (Business Continuity and Disaster Recovery) and the relevance of Lenovo Cloud Marketplace, Azure Backup and Azure Site Recovery.

Completing this course will enable the sellers to:

- Describe Lenovo Solutions supporting Microsoft Business Continuity Services
- Identify customers who would benefit from Azure Backup and Azure Site Recovery
- Start the Business Continuity conversation
- Start the customer conversation.

Published: 2023-02-01

Length: 30 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: DMSO200

9. **Lenovo and Microsoft Cloud Solution Provider Program - Overview**

2022-10-27 | 30 minutes | Employees and Partners

This course aims to provide ISG and Partner Inside and Field Sellers with an understanding of the role of Lenovo as a Microsoft Cloud Service Provider (MS CSP) and Azure Services.

Completing this course will enable the sellers to:

- Describe the Microsoft Cloud Services program
- Discuss Lenovo's role in MS CSP Program
- Identify customers who would benefit by purchasing Azure Services from Lenovo
- Start the customer conversation.

Published: 2022-10-27

Length: 30 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: DMSO100

10. **New Lenovo Optimized Solutions**

2022-09-16 | 3 minutes | Employees and Partners

This Quick Hit introduces four new Lenovo Optimized Infrastructure solutions. Three of these are ThinkAgile solutions for Microsoft Azure, in the areas of artificial intelligence, business continuity, and virtual desktop infrastructure. The fourth is a TruScale solution designed for HPC data centers.

Published: 2022-09-16

Length: 3 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: SXXW2507a

11. **Microsoft CSP Solutions Preview**
2022-09-16 | 7 minutes | Employees and Partners

This Quick Hit introduces three new CSP offerings: Microsoft CSP Azure Virtual Desktop Solutions, Microsoft CSP Azure SQL Server AI and Data Insights Solution, and Microsoft CSP Business Continuity Solutions.

Published: 2022-09-16

Length: 7 minutes

Employee link: [Grow@Lenovo](#)

Partner link: [Lenovo Partner Learning](#)

Course code: SXXW2508a

Additional resources

These web pages provide additional information:

- [Microsoft OS Support Center](#)
- [Microsoft Windows Server Catalog](#)

Related product families

Product families related to this document are the following:

- [Microsoft Alliance](#)
- [Microsoft Windows](#)

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