

Globally Windows Server 2022 Datacenter

Basic Information

- Place of Origin: Ireland
- Brand Name: Microsoft
- Certification: Microsoft Certified
- Model Number: Windows server 2022
- Minimum Order Quantity: 5 pieces
- Price: Negotiable
- Packaging Details: Factory Sealed Retail box / OEM
- Delivery Time: 48 hours
- Payment Terms: T/T, Western Union, MoneyGram,
- Supply Ability: 5000 pieces/week



Product Specification

- Product Name: Win Server 2022 DAT Retail
- Minimum Hard Drive Space: 2 GB
- Optical Storage: DVD Drive
- Format: Retail
- RAM: 512 MB
- Disk Space: 32 GB
- Highlight: 512 MB RAM Windows server 2022 Datacenter, OEM Box Windows server 2022 Datacenter



Product Description

Globally Windows server 2022 Datacenter OEM Box DVD Drive 100% Online Activation Key

Features of Windows Server 2022 Datacenter:

Feature	Standard edition	Datacenter edition
Core Windows Server functionality	Feature available	Feature available
Hybrid integration	Feature available	Feature available
Windows Server containers	Unlimited	Unlimited
Storage Replica	Limited feature	Feature available
Software-defined networking	Feature not available	Feature available
Software-defined storage	Feature not available	Feature available

Product description Windows Server 2022 Datacenter:

Windows Server 2022 introduces advanced multi-layer security, hybrid capabilities with Azure, and a flexible application platform. As part of this release, Microsoft Windows is bringing secured-core capabilities to help protect hardware, firmware, and Windows Server OS capabilities against advanced security threats. Secured-core server builds on technologies such as Windows Defender System Guard and Virtualization-based Security to minimize risk from firmware vulnerabilities and advanced malware. The release also provides secured connectivity that introduces several capabilities such as faster and more secure encrypted HTTPS connections, industry standard SMB AES 256 encryption and more.

Secured Core Server

Powerful threat protection together to provide multi-layer security across hardware, firmware, and the operating system. It uses the Trusted Platform Module 2.0 and System Guard to boot up Windows Server securely and minimize risk from firmware vulnerabilities. Secured-core server also includes virtualization-based security (VBS) features like Credential Guard and Hypervisor-protected code integrity (HVCI).

Credential Guard

Preventative defense for sensitive assets like credentials, and HVCI applies hardware—rooted security to prevent advanced malware from tampering with the system. Secured connectivity adds an additional layer of security during transport for advanced protection. Windows Server 2022 improves connection security with faster and more secure encrypted hypertext transfer protocol secure (HTTPS) and transport layer security (TLS) 1.3 enabled by default. Customers can also further secure server communications with industry-standard AES-256 encryption, which now supports server message block (SMB) protocol and better controls.

Hybrid capabilities with Azure

We are bringing new capabilities that enable customers to take advantage of cloud innovation with their on-premises investments. Azure Arc and Storage Migration Service are two key hybrid capabilities that work best with Windows Server 2022.

Azure Arc enables customers to manage, secure, and govern Windows Server on-premises, at the edge, or in multi-cloud environments from a single control plane in Azure. Through Azure Arc, customers can easily employ Azure management capabilities such as Azure Policy, Azure Monitor, and Azure Defender for those servers. What's more, a few simple clicks in Windows Admin Center can enable connectivity to Azure Arc. Further, we have enhanced Windows Admin Center v2103 with significantly improved virtual machine management, a simpler event viewer, and many more updates. Windows Admin Center is also available in the Azure portal.

Windows Server 2022

enhances the seamless connectivity of file servers on-premises to file servers on Azure. Updates to Storage Migration Service allow customers to migrate file servers from certain network access storage (NAS) and Windows File Servers to Windows Servers on Azure. Using Storage Migration Service to migrate data to servers allows customers to maintain low latency while reducing their on-premises storage footprint.

Flexible application platform

Customers use Windows Server to run large-scale and distributed applications. Consequently, we have placed relentless focus on bringing platform capabilities and tools that improve developer velocity and support for business-critical workloads like SQL Server. In this release, we are adding 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, which leads to faster download time and better performance. In addition, you can now run applications that depend on Azure Active Directory with group Managed Services Accounts (gMSA) without domain joining the container host. Furthermore, there are several other enhancements that simplify the Windows Container experience with Kubernetes. These enhancements include support for host-process containers for node configuration, IPv6, and consistent network policy implementation with Calico.

In addition to platform improvements, we have an updated Windows Admin Center tool that makes it easy to containerize .NET applications. Once the application is in a container, you can host it on Azure Container Registry to then deploy it to other Azure services, including Azure Kubernetes Service.

What's new in Windows Server 2022?

Security

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.

Secured-core server

Certified Secured-core server hardware from an OEM partner provides additional security protections that are useful against sophisticated attacks. This can provide increased assurance when handling mission critical data in some of the most data sensitive industries. 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. This is known as a hardware root-of-trust and is used by features such as BitLocker drive encryption.

Virtualization-based security (VBS)

Secured-core servers support virtualization-based security (VBS) and hypervisor-based code integrity (HVCI). VBS uses hardware virtualization features to create and isolate a secure region of memory from the normal operating system, protecting against an entire class of vulnerabilities used in mining attacks. VBS also allows for the use of Credential Guard, where user credentials and secrets are stored in a virtual container that the operating system cannot access directly.

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.

HVCI uses VBS to significantly strengthen code integrity policy enforcement, including kernel mode integrity which checks all kernel mode drivers and binaries in a virtualized environment before they are started, preventing unsigned drivers or system files from being loaded into system memory.

Secure connectivity

Transport: HTTPS and TLS 1.3 enabled by default on Windows Server 2022

Secure connections are at the heart of today's interconnected systems. Transport Layer Security (TLS) 1.3 is the latest version of the internet's most deployed security protocol, which encrypts data to provide a secure communication channel between two endpoints. HTTPS and TLS 1.3 is now enabled by default on Windows Server 2022, protecting the data of clients connecting to the server. It eliminates obsolete cryptographic algorithms, enhances security over older versions, and aims to encrypt as much of the handshake as possible. Learn more about supported TLS versions and about supported cipher suites.

Server Message Block (SMB): SMB AES-256 encryption for the most security conscious

Windows Server now supports AES-256-GCM and AES-256-CCM cryptographic suites for SMB encryption and signing. Windows will automatically negotiate this more advanced cipher method when connecting to another computer that also supports it, and it can also be mandated through Group Policy. Windows Server still supports AES-128 for down-level compatibility.

Secure DNS: Encrypted DNS name resolution requests with DNS-over-HTTPS

DNS Client in Windows Server 2022 now supports DNS-over-HTTPS (DoH) which encrypts DNS queries using the HTTPS protocol. This helps keep your traffic as private as possible by preventing eavesdropping and your DNS data being manipulated. Learn more about configuring the DNS client to use DoH.

SMB: East-West SMB encryption controls for internal cluster communications

Windows Server failover clusters now support granular control of encrypting and signing intra-node storage communications for Cluster Shared Volumes (CSV) and the storage bus layer (SBL). This means that when using Storage Spaces Direct, you can decide to encrypt or sign east-west communications within the cluster itself for higher security.

SMB Direct and RDMA encryption

SMB Direct and RDMA supply high bandwidth, low latency networking fabric for workloads like Storage Spaces Direct, Storage Replica, Hyper-V, Scale-out File Server, and SQL Server. SMB Direct in Windows Server 2022 now supports encryption. Previously, enabling SMB encryption disabled direct data placement; this was intentional, but seriously impacted performance. Now data is encrypted before placement, leading to far less performance degradation while adding AES-128 and AES-256 protected packet privacy.

SMB over QUIC

SMB over QUIC updates the SMB 3.1.1 protocol in Windows Server 2022 Datacenter: Azure Edition and supported Windows clients to use the QUIC protocol instead of TCP. By using SMB over QUIC along with TLS 1.3, users and applications can securely and reliably access data from edge file servers running in Azure. Mobile and telecommuter users no longer need a VPN to access their file servers over SMB when on Windows. More information can be found at the SMB over QUIC documentation.

