Microsoft

Discover what's new in Windows Server 2025

Optimize for the future while delivering the security, performance, and agility your organization needs today with Windows Server 2025.

The latest Windows Server helps you adapt to business imperatives on-premises and in the cloud with seamless hybrid, multicloud and edge capabilities. Stay ahead of increasingly sophisticated cybersecurity threats with advanced, multilayered security features that help you manage and protect your environment more efficiently. Windows Server 2025 also offers the high-performing, reliable infrastructure foundation you need, with improvements in scalability, ease of use, and features that enable AI, ML and other innovations.

GET STARTED

Take your next steps to upgrade to Windows Server 2025

→ Evaluate for free

→ Install or upgrade

Advanced, multilayered security

Cyber attacks are growing more sophisticated and cyber criminals continue to take advantage of both technical and human weaknesses in an organization's IT security. Windows Server 2025 offers multilayered, built-in protections from core-to-cloud that are a culmination of years of Microsoft security expertise. Just a few highlights of Windows Server 2025 security and resiliency improvements include:

- Identity management is essential to any security strategy, and **Active Directory** in Windows Server 2025 now supports LDAP encryption by default, Kerberos protocol implementation updated to support stronger encryption, and increased scale: 32K database page size.

- **Enhanced SMB (Server Message Block) capabilities** to improve secure file sharing, including SMB over QUIC now in all editions, SMB Authentication rate limiter to help prevent brute force attacks, and SMB firewall rule hardening.

- Avoid vulnerabilities from weak passwords on service accounts with **Delegated Managed Service Account (DMSA)**, which offers better protection through machine-bound identity and integration with Credential Guard.

- **Virtualization-based security (VBS)**. Help protect from administrator-level cryptographic key theft with VBS key protection; Isolate sensitive workloads with VBS enclaves.

- **Secured core server technology:** Windows Server 2025 continues to raise the bar on hardware security with secured-core server capabilities that help defend against firmware-level attacks.

Why Windows Server on Azure?

With Windows Server and Azure together, your organization can take advantage of all the Microsoft Cloud has to offer while using familiar tools and consistent security, identity, and management features.

Get more with Windows Server on Azure:

A global infrastructure
Helping you meet your specific data residency and compliance requirements; there are 60+ Azure regions – more than any other cloud provider.

Save with Azure Hybrid Benefit
A licensing offer that helps you save when you migrate to Azure. Windows Server customers with Software Assurance can save more than 40% on compute alone, and up to 80% when combined with Azure Reserved VM Instance (details).

Trusted launch VMs and Confidential VMs
Windows Server guests can run on confidential VMs in Azure.

Industry-leading cloud security
Microsoft Defender for Cloud streamlines process of meeting regulatory compliance requirements and monitoring the security of your servers. Available on Azure and with Azure Arc.

Azure VMware Solution
Using VMware for virtualization of Windows Servers? Use Azure VMware Solution to help move or extend VMware environments to Azure while maintaining operational consistency.

Save money when you need Extended Security Updates
Get free Extended Security Updates for 3 years after end of support in Azure, which includes destinations such as Azure Stack HCI and Azure VMware Solution to migrate on your own terms.

Cloud agility anywhere

With Windows Server 2025, it's now easier to bridge on-premises and cloud-based servers and get the power of Azure delivered to your hybrid, multicloud and edge environment with Azure Arc.

By connecting Windows servers to Azure Arc, you can manage complex IT environments and adapt more quickly to rapidly shifting business needs. Advantages include:

- **Faster security updates, with fewer restarts.** Hotpatching is now available for on-premises Windows Server 2025, when connected to Azure Arc*.

- **Enhanced management capabilities** through Azure Arc, including control plane functionality at no extra cost, which includes inventory organization and Azure Resource Graph.

- **Access additional Azure services** through Azure Arc, including Azure Update Manager and Microsoft Defender for Cloud*.

- A new, **flexible pay-as-you-go option** for customers who do not have unlimited virtualization but need to scale up with additional virtual machines.

- **Reduce networking deployment time and configuration drift** with Network ATC in Windows Server 2025.

High-performance, future-ready infrastructure

Help your organization take leaps ahead in performance, scalability, and innovation. Windows Server 2025 combines increased efficiency with a refreshed interface and new capabilities that enable AI and ML.

- **Increased scalability.** Larger virtual machines now support 240 TB of RAM and support for 2048 virtual processors.

- **AI-Ready GPU partitioning** across VMs with live migration and failover clustering; built to support AI workloads and inferencing at the edge.

- **More efficient storage.** ReFS (Resilient File System) optimized deduplication and compression (for active workloads like VMs), Storage Replica performance enhancements.

- **Easier upgrades, better reliability and application compatibility.** Operating system upgrades now available through Windows Update; dynamic processor compatibility for live migration between servers with different processor capabilities.

- **Modern and convenient.** A refreshed interface with a more consistent Windows experience, including WiFi and Winget command line interface package manager.

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