

Microsoft Windows Server 2025



What's new

- Hotpatch: Security updates with no reboot (available for Azure Arc-enabled servers) and multi-layered security; secured-core server technology: Trusted Platform Module 2.0 and systemguard.
- Active Directory (AD): LDAP support for TLS 1.3 helps remove obsolete cryptographic algorithms; Kerberos support for AES SHA256/384; new domain controllers increased to 32K pages; added RootDSE mod.
- WAC for hybrid and on-premises server management; containers extension in WAC; decreased size of WS core container base; simplify containerizing .NET, ASP.Net, Web Deploy, and MSI applications.
- Hyper-V: GPU partitioning (GPU-P) allows to share a GPU across multiple VMs; support for live migration and failover clustering; VM scalability: Support for 240 TB of RAM; support for 2048 LPs.
- Storage Migration Services: Optimized NVMe; lower CPU utilization; software-defined storage enhancements: Resilient File System (ReFS)-optimized deduplication and compression.

Overview

Are evolving security threats, performance issues, and complex hybrid environments making it harder for your organization to scale and innovate?

Microsoft Windows Server 2025 secures and optimizes your infrastructure while ensuring future-readiness and business agility. The latest version of Microsoft's operating system builds on business-proven security and hybrid capabilities, introducing enhanced performance for compute-intensive workloads in machine learning and artificial intelligence.

Optimized for both cloud and on-premises use, Microsoft Windows Server 2025 offers superior integration with Microsoft Azure Arc to maximize your hybrid, multicloud, and edge IT estate.

When paired with HPE servers, Microsoft Windows Server 2025 truly comes into its own optimizing performance and reliability by providing: optimized hardware and software integration, enhanced performance, efficiency and security.

Features

Advanced Security

For hybrid use cases when using Microsoft Windows Server 2025, both on-premises and on Azure: Get crucial updates with less downtime. Hotpatching allows many security updates to be applied without a need to reboot. Add-on service is available for Azure Arc-enabled servers.

Multi-layered security; secured-core server technology: Trusted Platform Module 2.0 and system guard to boot up Windows Server more securely and minimize risk from firmware vulnerabilities.

Windows Defender Credential Guard—virtualization-based security. Windows Defender Exploit Guard offers a set of host intrusion prevention capabilities. Integrated Windows Defender ATP gives access to deep kernel and memory sensors.

- Seamless management of hybrid server environments, storage migration, system insights, protecting VMs, synchronizing file servers, and providing enhanced Active Directory authentication.

Virtualization-based security (VBS) enclaves enable isolation of sensitive workloads; VBS key protection to protect cryptographic keys.

Active Directory: LDAP support for TLS 1.3 helps remove obsolete cryptographic algorithms; Kerberos support AES SHA256/384; new domain controllers increased to 32K pages; added RootDSE mod; Microsoft Windows Server 2025 supports AES-256-GCM and AES-256-CCM cryptographic suites for SMB encryption.

Hybrid Cloud Capabilities

WAC: Hybrid and on-premises server management at no additional cost.

Azure hybrid services tool in WAC and Azure Monitor; seamless management of hybrid server environments, storage migration, system insights (predictive analytics capabilities native to Windows Server), protecting VMs and synchronizing file servers.

For hybrid use cases when using Microsoft Windows Server 2025 both on-premises and on Azure: Azure Monitor can collect data directly from physical or virtual Windows computers into a Log Analytics workspace for detailed analysis and correlation.

High-Performance Infrastructure

Microsoft Windows Server 2025 delivers a modern operating system that enables enhanced virtual machine memory, expanded processor and device support, superior congestion control, and improvements in encryption and networking.

Storage Migration Service provides a graphical tool that inventories data on Windows, Linux®, and NetApp CIFS servers and then transfers the data to newer servers or to Azure virtual machines.

The containers extension in WAC enables the containerization of apps as well as troubleshooting for containers running on a host, such as opening a console connection to a container, checking logs, monitoring resource consumption, and more.

Microsoft drastically decreased the size of the Windows Server core container base image by reducing duplicate payloads and removing unused optional components.

Software-defined storage enhancements: ReFS-optimized deduplication and compression (for active workloads like VMs); save up to 60% of storage for file servers, and up to 90% of storage for VHD/ISO/backups; storage replica compression is now available in all editions of Windows Server.

Technical specifications

Microsoft Windows Server 2025

Length of support	Perpetual License
-------------------	-------------------



For additional technical information, available models and options, please reference the QuickSpecs

Make the right purchase decision.
Contact our presales specialists.

[Find a partner](#)



Chat now (sales)



Share now



Get updates

HPE Services

No matter where you are in your transformation journey, you can count on HPE Services to deliver the expertise you need when, where and how you need it. From strategy and planning to deployment, ongoing operations and beyond, our experts can help you realize your digital ambitions.

Advisory & Professional services

Experts can help you map out your path to hybrid cloud and optimize your operations.

Managed services

HPE runs your IT operations, giving you unified control, so can focus on innovation.

Support services

Optimize your entire IT environment and drive innovation. Manage day-to-day IT operational tasks while freeing up valuable time and resources.

- **HPE Complete Care Service:** a modular service designed to help optimize your entire IT environment and achieve agreed upon IT outcomes and business goals. All delivered by an assigned team of HPE experts.
- **HPE Tech Care Service:** the operational service experience for HPE products. The service provides access to product specific experts, an AI driven digital experience, and general technical guidance to help reduce risk and search for ways to do things better.
- **HPE Multivendor Services:** Single point of accountability for managing on-site hardware and software support for multivendor products. HPE experts help manage your IT across technologies and platforms for HPE and non-HPE technologies, acting as the single point of contact for your IT operational needs.

Lifecycle Services

Address your specific IT deployment project needs with tailored project management and deployment services.

HPE Education Services

Training and certification designed for IT and business professionals across all industries. Create learning paths to expand proficiency in a specific subject. Schedule training in a way that works best for your business with flexible continuous learning options

Defective Media Retention is optional and allows you to retain Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

HPE GreenLake

HPE GreenLake edge-to-cloud platform is HPE's market-leading as-a-Service offering that brings the cloud experience to apps and data everywhere – data centers, multi-clouds, and edges – with one unified operating model, on premises, fully managed in a pay per use model.

If you are looking for more services, like **IT financing solutions**, please [explore them here](#).

Visit **HPE.com**



© Copyright 2025 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

Parts and Materials: HPE will provide HPE-supported replacement parts and materials required to maintain the covered hardware.

Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product quick-specs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.

Active Directory, Arc, Azure, Hyper-V, Microsoft, Windows, and Windows Server are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. Linux is the registered trademark of Linus Torvalds in the U.S. and other countries. All third-party marks are property of their respective owners.

Image may differ from the actual product
[PSN1014856501UAEN](#), April, 2025.