QuickSpecs

Overview

Microsoft Windows Server 2019

Microsoft Windows Server 2019 is the operating System bridging on-premises and cloud that will help you to grow your business locally and extend operations to the cloud from a position of strength. It maximizes your existing investments and builds on Windows Server security, app innovation, and Hyper-Converged Infrastructure capabilities to help you extend and enrich on-premises investments to include cloud services.

Today, most business owners face daily challenges in running their businesses. One of the most difficult challenges can include managing the highest level of security. Windows Server 2019 is designed to help.

Enhanced security capabilities:

Windows Server 2019 helps to ensure that all apps and system components have just enough access privilege. Discover and address security breaches with assistance from the integrated Windows Defender Advanced Threat Protection¹. Protect VM workloads from unauthorized access, with Shielded Virtual Machines for Windows Server²

Unique Hybrid Platform:

Windows Server 2019 works with your existing on-premises investments to help you extend your on-premise infrastructure to leverage the cloud and add hybrid management capabilities.

Unprecedented hyper-converged infrastructure (HCI):

HCI is one of the latest trends in the server industry today. Organizations are embracing the trend for cost and performance reasons. In hyper-converged deployments, compute, storage, and networking are on the same cluster, simplifying configuration helping to reduce cost and to maximize your hardware investments.

Faster innovation for applications:

Both developers and operations need a modern platform that enable them to deliver innovation at the rate of changing business demands.

Leveraging a 30+ year partnership with Microsoft, HPE helps you maximize advanced features and functionality in Windows Server 2019 to achieve greater security control, modernize your infrastructure to help improve efficiency and productivity, and hybridize your datacenter. To simplify the support process, Hewlett Packard Enterprise delivers Microsoft Windows Server 2019 support for HPE Servers, see the support matrix at http://www.hpe.com/servers/wincert.

Hewlett Packard Enterprise offers Windows Server 2019 OEM license product for the following editions:

- **Datacenter**: ideal for companies of all sizes that have demanding IT workloads, require advanced storage, virtualization, and application deployment
- **Standard**: for businesses that need advanced features, support for distributed office locations, and require a flexible way to virtualize their environment
- **Essentials**: for small companies with basic IT needs purchasing a first server; likely small or no dedicated IT department. Essentials is also a good option for customers who have previously used Windows Server Foundation edition, which is not available for Windows Server 2019.

NOTE: For more information on Hewlett Packard Enterprise's offering of Microsoft Windows Server 2019 products, go to:

http://www.hpe.com/servers/ws2019.

¹Windows Defender Advanced Threat Protection (ATP) requires an Azure subscription

² Shielded Virtual Machines feature requires Windows Server 2019 Datacenter



What's New

- Storage Replica (now limited support also included in Windows Server 2019 Standard)
- Storage Migration Service for easy and automated, wizard-driven migration of legacy Windows file servers
- 24TB RAM support
- 1024 Logical Processor support
- Windows Defender Advanced Threat Protection ATP (Azure subscription required) unified endpoint protection
- Security enhancements:
 - o System Guard Runtime Monitor
 - o Virtual Secure Mode (VSM) Enclaves
 - Shielded Linux VMs
 - o Shielded VM Single Host Binding
- Windows Admin Center (browser-based, out-of-band management tool: free download from Microsoft)
- Azure integration(Azure subscription required):
 - o Azure File Sync
 - Azure Backup
 - Azure Advanced Threat Analytics(ATA)
- Hyper-V:
 - Virtual Persistent Memory (vPMEM)
 - Nested virtualization
 - o Fallback Host Guardian Service (HGS)
 - o Shielded VM Offline Mode
- Updated WSSD Program for validated Storage Spaces Direct(S2D) solutions
- System Insights local predictive analytics
- Common PMEM architecture for all NV-DIMM devices
- PMEM enhancements within Clustering, Virtualization, S2D and ReFS to enable DAX with certain Apps (SQL)
- S2D Networking performance enhancements Guest RDMA
- Telemetry enhancements include HW configuration, System ROM version, OS version, Server roles/Features/Apps, Geographic location, device/driver reliability
- RDS Next Gen enhancements

Microsoft Hardware Specifications for Essentials Edition:

Windows Server 2019 Essentials

CPU Up to 2 Processors; Per server licensing

Min. CPU Req. 1.4 GHz x64

X64 RAM STD/ Max Minimum: 2GB RAM (Recommend: 8GB) / Maximum: 64GB

ECC Ye

NIC multiple NICs supported

Internal optical bay drive allowed Yes

Minimum OS Storage Footprint 160 GB with a 60-GB system partition

SW RAIDYesVideoOptionalKeyboard, MouseOptional

Windows Server 2019 Essentials Edition 1-2PPre-Installed UEFI on HPE Servers

NOTE: Unified Extensible Firmware Interface (UEFI) is an industry standard set of interfaces between the system firmware and the operating system, and between various components of the system firmware. UEFI enables numerous new capabilities, for more information please read the whitepaper **UEFI:** successor to legacy **BIOS**.

NOTE: All Essentials edition part numbers include x64 DVD media and Certificate of Authenticity (COA). Sold only as a configurable option with an HPE Server purchase.

Microsoft Windows Server 2019 Essentials edition FIO UEFI P11071-xxx

Language Code Key for P11071-xxx xxx = B21 English WW

xxx = 291 Japanese APJ

Spanish

Windows Server 2019 Essentials Edition 1-2P OS Not Pre-Installed

xxx = 071

NOTE: All Essentials edition part numbers include x64 DVD media and COA. Sold only as a configurable option with an HPE Server purchase.

Microsoft Windows Server 2019 Essentials edition FIO Not Pre-Installed	P11072-xxx
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English WW Language Code Key for P11072-xxx xxx = B21xxx = 291APJ Japanese APJ xxx = AD1Korean xxx = 051French AMS, EMEA Italian **EMEA** xxx = 061xxx = 041German **EMEA**

AMS, EMEA

Windows Server 2019 Essentials Edition 1-2P Reseller Option Kit

NOTE: Available for purchase from your local HPE authorized reseller. Essentials edition includes x64 DVD media and COA. Reseller must affix the COA to the server and may preinstall the OS before delivery of the server.

Microsoft Windows Server 2019 Essentials edition ROK

P11070-xxx

Language	Code	Key fo	r P11070	-xxx
3 3		•		

xxx = B21	English	WW
xxx = 291	Japanese	APJ
xxx = AD1	Korean	APJ
xxx = 051	French	AMS, EMEA Region
xxx = 061	Italian	EMEA
xxx = 041	German	EMEA
xxx = 071	Spanish	AMS, EMEA
xxx = 331	Dutch	EMEA
xxx = 131	Portuguese	EMEA
xxx = 251	Russian	EMEA
xxx = 241	Polish	EMEA
xxx = 221	Czech	EMEA
xxx = 201	Brazilian Portuguese	AMS
xxx = B71	Swedish	EMEA

Microsoft Hardware Specifications for Standard and Datacenter Editions:

Unless otherwise specified, these minimum system requirements apply to both Standard and Datacenter editions.

Processor

Processor performance depends not only on the clock frequency of the processor, but also on the number of processor cores and the size of the processor cache. The following are the processor requirements for this product:

Minimum:

- 1.4 GHz 64-bit processor
- Compatible with x64 instruction set
- Supports NX and DEP
- Supports CMPXCHG16b, LAHF/SAHF, and PrefetchW
- Supports Second Level Address Translation (EPT or NPT)

Core info at https://technet.microsoft.com/sysinternals/cc835722.aspx, is a tool you can use to confirm which of these capabilities your CPU has.

RAM

The following are the estimated RAM requirements for this product:

Minimum:

- 512 MB (2 GB for server with Desktop Experience installation option)
- ECC (Error Correcting Code) type or similar technology

Storage controller and disk space requirements

Computers that run Windows Server 2019 must include a storage adapter that is compliant with the PCI Express architecture specification. Persistent storage devices on servers classified as hard disk drives must not be PATA. Windows Server 2019 does not allow ATA/PATA/IDE/EIDE for boot, page, or data drives.

The following are the estimated minimum disk space requirements for the system partition.

Minimum: 32GB

Network adapter requirements

Minimum:

- An Ethernet adapter capable of at least gigabit throughput
- Compliant with the PCI Express architecture specification.
- Supports Pre-boot Execution Environment (PXE).

A network adapter that supports network debugging (KDNet) is useful, but not a minimum requirement.

Other requirements

Computers running this release also must have the following:

DVD drive (if you intend to install the operating system from DVD media)

The following items are not strictly required, but are necessary for certain features:

- UEFI 2.3.1c-based system and firmware that supports secure boot
- Trusted Platform Module
- Graphics device and monitor capable of Super VGA (1024 x 768) or higher-resolution
- Keyboard and Microsoft® mouse (or other compatible pointing device)
- Internet access (fees may apply)

For more detail about Windows Server 2019 System Requirements visit:

https://docs.microsoft.com/en-us/windows-server/get-started-19/sys-reqs-19

Microsoft Windows Server 2019 Standard Edition 16 Core Pre-Installed on HPE Servers

NOTE: Unified Extensible Firmware Interface (UEFI) is an industry standard set of interfaces between the system firmware and the operating system, and between various components of the system firmware. UEFI enables numerous new capabilities, for more information please read the whitepaper **UEFI:** successor to legacy BIOS.

NOTE: Include x64 DVD media and COA. Sold only as a configurable option with an HPE Server purchase.

NOTE: Standard edition provides rights for up to two OSEs or Hyper-V containers when all physical cores in the server are licensed. For every two additional VMs, all the cores in the server have to be licensed again. Additional licenses for Windows Server 2019 Standard are available in packs of two, four, and sixteen cores.

Microsoft Windows Server 2019 Standard Edition Pre-Installed (FIO) UEFI 16 Core

P11059-xxx

Language Code Key for P11059-xxx	xxx = B21 xxx = 291	English Japanese	WW APJ
	xxx = 051	French	AMS & EMEA
	xxx = 061	Italian	EMEA
	xxx = 041	German	EMEA
	xxx = 071	Spanish	AMS & EMEA

Microsoft Windows Server 2019 Standard Edition 16 Core OS Not Pre-Installed

NOTE: Include x64 DVD media and COA. Sold only as a configurable option with an HPE Server purchase.

NOTE: Standard edition provides rights for up to two OSEs or Hyper-V containers when all physical cores in the server are licensed. For every two additional VMs, all the cores in the server have to be licensed again. Additional licenses for Windows Server 2019 Standard are available in packs of two, four, and sixteen cores.

Microsoft Windows Server 2019 Standard edition Not Pre-installed (FIO Npi) 16 Core

P11060-xxx

Language	Code	Key	for
P11060-x	ХХ		

xxx = B21	English	WW
xxx = 291	Japanese	APJ
xxx = 051	French	AMS & EMEA
xxx = 061	Italian	EMEA
xxx = 041	German	EMEA
xxx = 071	Spanish	AMS & EMEA

Microsoft Windows Server 2019 Standard Edition 16 Core Reseller Option Kit (ROK)

NOTE: Available for purchase from your local Hewlett Packard Enterprise Authorized Reseller. Standard edition includes x64 DVD media and COA. Reseller must affix the COA to the server and may preinstall the OS before delivery of the server.

NOTE: Standard edition provides rights for up to two OSEs or Hyper-V containers when all physical cores in the server are licensed. For every two additional VMs, all the cores in the server have to be licensed again. Additional licenses for Windows Server 2019 Standard are available in packs of two, four, and sixteen cores.

Microsoft Windows Server 2019 Standard Edition ROK 16 Core

P11058-xxx

Language	Code	Key	for
P11058-x	хх		

or	xxx = B21	English	WW
	xxx = 291	Japanese	APJ
	xxx = 201	Brazilian Portuguese	AMS
	xxx = AA1	Chinese Simplified	APJ
	xxx = AB1	Chinese Traditional	APJ
	xxx = 051	French	AMS & EMEA
	xxx = 061	Italian	EMEA
	xxx = 041	German	EMEA
	xxx = 071	Spanish	AMS & EMEA
	xxx = AD1	Korean	APJ
	xxx = 331	Dutch	EMEA
	xxx = 251	Russian	EMEA
	xxx = 241	Polish	EMEA
	xxx = 221	Czech	EMEA
	xxx = 131	Portuguese	EMEA
	xxx = B71	Swedish	EMEA

Microsoft Windows Server 2019 Standard Edition Additional License

NOTE: Standard Additional Licenses include COA, will not include an activation key because will be activated with license key from the base OS license. Additional Licenses do not include media.

NOTE: Can be sold with or without an HPE Server – After Point of Sale (APOS).

NOTE: End Users can reassign Windows Server Standard Additional licenses to another server that has a Windows Server 2019 Standard base license.

Microsoft Windows Server 2019 Standard Edition Additional License 16 Core				
Language Code Key for P11064-xxx	xxx = A21	English, Czech, German, Spanish, French, Italian, Dutch, Polish, Portuguese, Russian, Swedish, Turkish	EMEA	
	xxx = DN1	English, French, Spanish, Brazilian Portuguese	AMS	
	xxx = 371	English, Korean, Japanese	APJ	
Microsoft Windows Server	2019 Standard Edition Add	litional License 4 Core	P11065-xxx	
Language Code Key for P11065-xxx	xxx = A21	English, Czech, German, Spanish, French, Italian, Dutch, Polish, Portuguese, Russian, Swedish, Turkish	EMEA	
	xxx = DN1	English, French, Spanish, Brazilian Portuguese	AMS	
	xxx = 371	English, Korean, Japanese	APJ	
Microsoft Windows Server	2019 Standard Edition Add	litional License 2 Core	P11066-xxx	
Language Code Key for P11066-xxx	xxx = A21	English, Czech, German, Spanish, French, Italian, Dutch, Polish, Portuguese, Russian, Swedish, Turkish	EMEA	
	xxx = DN1	English, French, Spanish, Brazilian Portuguese	AMS	
	xxx = 371	English, Korean, Japanese	APJ	
	xxx = AA1	Chinese Simplified	APJ	
	xxx = AB1	Chinese Traditional	APJ	

Microsoft Windows Server 2019 Datacenter Edition 16 Core - No Reassignment Rights OS Not Pre-Installed

NOTE: Include x64 DVD media and COA. Sold only as a configurable option with an HPE Server purchase.

NOTE: Datacenter edition permits unlimited OSEs and Hyper-V containers on a server when all physical cores in the server are licensed. Additional Licenses for Windows Server 2019 Datacenter are available in packs of two, four, and sixteen cores.

Microsoft Windows Server 2019 Datacenter Edition Not Pre-installed (FIO Npi) 16 Core - No Reassignment P11063-xxx Rights

Language Code Key for	xxx = B21	English	WW
P11063-xxx	xxx = 291	Japanese	APJ
	xxx = 051	French	AMS & EMEA
	xxx = 061	Italian	EMEA
	xxx = 041	German	EMEA
	xxx = 071	Spanish	AMS & EMEA

Microsoft Windows Server 2019 Datacenter Edition 16 Core - No Reassignment Rights Reseller Option Kit (ROK)

NOTE: Available for purchase from your local Hewlett Packard Enterprise Authorized reseller. Datacenter edition includes x64 DVD media and COA. Reseller must affix the COA to the server and may preinstall the OS before delivery of the server to the end-customer.

NOTE: Datacenter edition permits unlimited OSEs and Hyper-V containers on a server when all physical cores in the server are licensed. Additional Licenses for Windows Server 2019Datacenter are available in packs of two, four, and sixteen cores.

Microsoft Windows Server 2019 Datacenter Edition ROK 16 Core - No Reassignment Rights P11061-xxx					
Language Code Key for	xxx = B21	English	WW		
P11061-xxx	xxx = 291	Japanese	APJ		
	xxx = 201	Brazilian Portuguese	AMS		
	xxx = AA1	Chinese Simplified	APJ		
	xxx = 051	French	AMS & EMEA		
	xxx = 061	Italian	EMEA		
	xxx = 041	German	EMEA		
	xxx = 071	Spanish	AMS & EMEA		
	xxx = AB1	Chinese Traditional	APJ		
	xxx = AD1	Korean	APJ		
	xxx = 331	Dutch	EMEA		
	xxx = 251	Russian	EMEA		
	xxx = 241	Polish	EMEA		
	xxx = 221	Czech	EMEA		
	xxx = 131	Portuguese	EMEA		

Microsoft Windows Server 2019 Datacenter Edition 16 Core - with Reassignment Rights Reseller Option Kit (ROK)

NOTE: Available for purchase from your local Hewlett Packard Enterprise Authorized reseller. Datacenter edition includes x64 DVD media and COA affixed to a license card. Reseller may preinstall the OS before delivery of the server to the end-customer. **NOTE:** Datacenter edition permits unlimited OSEs and Hyper-V containers on a server when all physical cores in the server are licensed. Additional Licenses for Windows Server 2019 Datacenter are available in packs of two, four, and sixteen cores. **NOTE:** The server OS license can be reassigned to another server for any reason (hardware failure, maintenance, upgrade, etc.). The COA is affixed to a license card which is the end user's proof of license for purposes of exercising the reassignment license rights. The server OS license may be reassigned by an end user to a different physical server no more than once every 90 days. Other rights and limitations are described on the license card.

Microsoft Windows Server 2019 Datacenter Edition with Reassignment Rights ROK 16 Core P11062-xxx				
Language Code Key for	xxx = B21	English	WW	
P11062-xxx	xxx = 051	French	AMS & EMEA	
	xxx = 061	Italian	EMEA	
	xxx = 041	German	EMEA	
	xxx = 291	Japanese	APJ	

Microsoft Windows Server 2019 Datacenter Edition Additional License

NOTE: Datacenter Additional Licenses include COA, will not include an activation key because will be activated with license key from the base OS license. Additional Licenses do not include media. Sold only as a configurable option with an HPE Server purchase.

Microsoft Windows Server 2019 Datacenter Edition Additional License 16 Core

Microsoft Windows Server 2019 Datacenter Edition Additional License 4 Core

P11067-xxx

P11068-xxx

Language Code Key for $xxx = DN1$		English, French, Spanish, Brazilian Portuguese	
P11067-xxx	xxx = A21	English, Czech, German, Spanish, French, Italian, Dutch,	EMEA

Polish, Portuguese, Russian, Swedish

xxx = 371 English, Korean, Japanese APJ

Language Code Key for xxx = DN1 English, French, Spanish, Brazilian Portuguese AMS **P11068-xxx** xxx = A21 English, Czech, German, Spanish, French, Italian, Dutch, EMEA

Polish, Portuguese, Russian

xxx = 371 English, Korean, Japanese APJ

Microsoft Windows Server 2019 Datacenter Edition Additional License 2 Core P11069-xxx

Language Code Key forxxx = DN1English, French, Spanish, Brazilian PortugueseAMSP11069-xxxxxx = A21English, Czech, German, Spanish, French, Italian, Dutch, EMEA

Polish, Portuguese, Russian

xxx = 371 English, Korean, Japanese APJ

Microsoft Windows Server 2019 - Remote Desktop Services 5 Device CAL

NOTE: Sold from Hewlett Packard Enterprise and authorized resellers with or without an HPE Server.

NOTE: Use of Remote Desktop Services requires a Windows Server CAL and an RDS CAL for each user or device.

Microsoft Windows Server 2019 Remote Desktop Services 5 Device CAL

P11074-xxx

Language Code Key forxxx = DN1English, French, Spanish, Brazilian PortugueseAMSP11074-xxxxxx = A21English, Czech, German, Spanish, French, Italian, Dutch, Polish, Portuguese, Russian, Swedish, TurkishEMEA

xxx = 371 English, Korean, Japanese APJ

Microsoft Windows Server 2019 - Remote Desktop Services 5 User CAL

NOTE: Sold from Hewlett Packard Enterprise and authorized resellers with or without an HPE Server.

NOTE: Use of Remote Desktop Services requires a Windows Server CAL and an RDS CAL for each user or device.

Microsoft Windows Server 2019 Remote Desktop Services 5 User CAL

P11073-xxx

Language Code Key forxxx = DN1English, French, Spanish, Brazilian PortugueseAMSP11073-xxxxxx = A21English, Czech, German, Spanish, French, Italian, Dutch, Polish, Portuguese, Russian, Swedish, TurkishEMEA

xxx = 371 English, Korean, Japanese APJ

Microsoft Windows Server 2019 50 User CAL

NOTE: Sold from Hewlett Packard Enterprise and authorized resellers with or without an HPE Server.

Microsoft Windows Server 2019 50 User CAL P11081-xxx

Language Code Key for xxx = B21 English, French, Italian, German, Spanish, Japanese WW

P11081-xxx

WW

Software Information

NOTE: Sold from Hewlett Packard Enterprise and authorized resellers with or without an HPE Server.

Microsoft Windows Server 2019 50 Device CAL

P11082-xxx

Language Code Key for xxx = B21

P11082-xxx

English, French, Italian, German, Spanish, Japanese

Microsoft Windows Server 2019 10 User CAL

NOTE: Sold from Hewlett Packard Enterprise and authorized resellers with or without an HPE Server.

Microsoft Windows Server 2019 10 User CAL

P11079-xxx

Language Code Key for xxx = B21

English, French, Italian, German, Spanish, Japanese

WW

Microsoft Windows Server 2019 10 Device CAL

NOTE: Sold from Hewlett Packard Enterprise and authorized resellers with or without an HPE Server.

Microsoft Windows Server 2019 10 Device CAL

P11080-xxx

Language Code Key for xxx = B21

English, French, Italian, German, Spanish, Japanese

WW

AMS

EMEA

APJ

P11080-xxx

P11079-xxx

Microsoft Windows Server 2019 5 User CAL

NOTE: Sold from Hewlett Packard Enterprise and authorized resellers with or without an HPE Server.

Microsoft Windows Server 2019 5 User CAL P11077-xxx

Chinese Traditional

Language Code Key for P11077-xxx

xxx = DN1xxx = A21

English, French, Spanish, Brazilian Portuguese English, Czech, German, Spanish, French, Italian, Dutch,

Polish, Portuguese, Russian, Swedish, Turkish

xxx = 371xxx = AA1

xxx = AB1

English, Korean, Japanese AP.J APJ Chinese Simplified

Microsoft Windows Server 2019 5 Device CAL

NOTE: Sold from Hewlett Packard Enterprise and authorized resellers with or without an HPE Server.

Microsoft Windows Server 2019 5 Device CAL

P11078-xxx

Language Code Key for P11078-xxx

xxx = A21

xxx = DN1

English, French, Spanish, Brazilian Portuguese English, Czech, German, Spanish, French, Italian, Dutch, Polish, Portuguese, Russian, Swedish, Turkish

EMEA

xxx = 371

English, Korean, Japanese

APJ

AMS

Software Information

Microsoft Windows Server 2019 1 User CAL

NOTE: Sold from Hewlett Packard Enterprise and authorized resellers with or without an HPE Server.

Microsoft Windows Server	2019 1 User CAL		P11075-xxx
Language Code Key for	xxx = DN1	English, French, Spanish, Brazilian Portuguese	AMS
P11075-xxx	xxx = A21	English, Czech, German, Spanish, French, Italian, Dutch, Polish, Portuguese, Russian, Swedish, Turkish	EMEA
	xxx = 371	English, Korean, Japanese	APJ
	xxx = AA1	Chinese Simplified	APJ

Microsoft Windows Server 2019 1 Device CAL

NOTE: Sold from Hewlett Packard Enterprise and authorized resellers with or without an HPE Server.

Microsoft Windows Server	2019 1 Device CAL		P11076-xxx
Language Code Key for	xxx = DN1	English, French, Spanish, Brazilian Portuguese	AMS
P11076-xxx	xxx = A21	English, Czech, German, Spanish, French, Italian, Dutch, Polish, Portuguese, Russian, Swedish, Turkish	EMEA
	xxx = 371	English, Korean, Japanese	APJ

Windows Server 2016 Downgrade options

IMPORTANT MESSAGE: Microsoft has recently announced new policies regarding Silicon support for Windows Server operating system products, including those that are offered through 'downgrade' rights.

By placing a request for a Windows Server 2016 Downgrade kit, you confirm that your HPE Server meets the Microsoft processor requirements, the details of which can be found at the following link:

https://docs.microsoft.com/en-us/windows-server/get-started/system-requirements

Please note, for the deployed OS to be supported by Microsoft, your HPE Server must meet all processor requirements that are specified and listed for both the licensed product and the downgrade/down-edition (DG/DE) software. For clarity, if you purchased a Windows Server 2019 and intend to downgrade to Windows Server 2016, your server must meet both the processor requirements for Windows Server 2019 and 2016.

This requirement applies both to customers who have purchased the Windows Server OEM license directly from HPE or from an HPE Reseller or Partner. The Microsoft processor requirements are in addition to other hardware requirements for the Windows Server operating system products that are specified in the document located at

https://msdn.microsoft.com/library/windows/hardware/dn915086(v=vs.85).

Microsoft may update the processor requirements and the minimum hardware requirements for Windows Server operating system products as requirements change.

Downgrade Windows Server 2016 Standard Edition Not Pre-Installed

NOTE: Only available when purchasing Windows Server 2019 with a Hewlett Packard Enterprise server.

Microsoft Windows Server 2016 Standard Downgrade Kit FIO Not Pre-installed

P11083-xxx

Language Code Key for P11083-xxx

xxx = B21xxx = 291xxx = 051

Japanese French Italian

English

German

AMS & EMEA **EMEA**

WW

APJ

EMEA

xxx = 041xxx = 071

xxx = 061

AMS & EMEA Spanish

Downgrade Windows Server 2016 Standard Edition Reseller Option Kit

NOTE: Available for purchase from your local Hewlett Packard Enterprise authorized reseller only when purchasing Windows Server 2019 with a Hewlett Packard Enterprise server.

Microsoft Windows Server 2016 Standard Downgrade Kit ROK

P11084-xxx

Language Code Key for xxx = 291

Japanese

APJ

P11084-xxx

Downgrade Windows Server 2016 Datacenter Edition Not Pre-Installed

NOTE: Only available when purchasing Windows Server 2019with a Hewlett Packard Enterprise server.

Microsoft Windows Server 2016 Datacenter Downgrade Kit FIO Not Pre-installed

P11086-xxx

Language Code Key for P11086-xxx

xxx = B21xxx = 041xxx = 051xxx = 061

xxx = 071

English German French Italian Spanish WW **EMEA**

AMS & EMEA

EMEA AMS & EMEA

xxx = 291Japanese APJ

Downgrade Windows Server 2016 Datacenter Edition Reseller Option Kit

NOTE: Available for purchase from your local Hewlett Packard Enterprise authorized reseller only when purchasing Windows Server 2019 with a Hewlett Packard Enterprise server.

Microsoft Windows Server 2016 Datacenter Downgrade Kit ROK

P11085-xxx

Language Code Key for xxx = 291P11085-xxx

Japanese

APJ

HPE Integrated Lights Out (iLO)

HPE iLO Essentials is the preferred license for small and medium businesses that offer full remote server management capabilities for small and medium business via the Integrated Remote Console (IRC), virtual media, and e-mail based alerts. HPE iLO Advanced licenses offer smart remote functionality without compromise, for all HPE Servers. The license includes the full integrated remote console, virtual keyboard, video, and mouse (KVM), multi-user collaboration, console record and replay, and GUI-based and scripted virtual media and virtual folders. You can also activate the enhanced security and power management functionality. Learn more about HPE iLO Advanced at http://www.hpe.com/servers/iloadvanced.

Software Technical Support

HPE Foundation Care Services provide reliable and consistent support to keep your business up and running. Within Foundation Care HPE offers several ways for you to obtain support for your Microsoft solution. If your purchase includes the software licenses for Microsoft products, you receive 90 days of telephone support for setting up your Microsoft software. You can also purchase more extensive support to cover your requirements.

HPE Software Technical Support provides remote software support services for Microsoft Windows Server 2019. With HPE Software Technical Support, your IT staff receives fast and reliable access to HPE Global Support Centers. Hewlett Packard Enterprise technical resources work with your IT team to provide advice on software features and use, problem diagnosis and resolution, software defect identification, and access to patches.

This service also provides electronic access to comprehensive support information allowing any member of your IT staff to locate essential product and support information.

Software Technical Support for Microsoft Windows Server 2019 is available from Hewlett Packard Enterprise via multiple contact methods including electronic media and telephone. Software Technical Support includes:

- **24x7 access to technical resources** Connect with HPE Global Solution Center engineers via telephone, electronic communication, or FAX for assistance in resolving software implementation or operations problems. Service is available around the clock every day, including all holidays.
- **Problem analysis and resolution** HPE Services provides corrective support to resolve identifiable and reproducible software product problems, and to help you identify problems that are difficult to reproduce. You can also receive assistance in trouble-shooting problems and setting configuration parameters.
- **Software features and operational support** Hewlett Packard Enterprise provides information on the latest product features and known problems and solutions, plus operational advice and assistance.
- **Escalation management** Established escalation procedures enlist specialized expertise from Hewlett Packard Enterprise to Microsoft Windows
- **Electronic software information** Access Hewlett Packard Enterprise's electronic support facility including symptom-solution database, product descriptions, specifications, technical literature, and more.

Software technical support does NOT include assistance with:

- Generating or diagnosing user generated programs or source codes
- Installation of non-Hewlett Packard Enterprise products

NOTE: For more information, visit: http://www.hpe.com/services/foundationcare.

Microsoft Software Assurance

Boost productivity across your organization with new software versions, deployment planning services, 24x7 phone and web support, end-user training, unique desktop technologies and more, all in one cost-effective program.

With New Product Versions, every Microsoft product license that is covered by Software Assurance can be upgraded to the most recent version.

For example, if a new version of Microsoft Windows Server is made available during the term of your coverage, your licenses will automatically be upgraded to the new version. Customers that acquire perpetual licenses through Software Assurance can deploy the upgrades after their coverage has expired.

NOTE: For more information, please visit:

https://www.microsoft.com/en-us/licensing/licensing-programs/software-assurance-default

Windows Server Catalog Definition

Microsoft's certification program gives HPE Servers a compatibility certification with Windows Server operating systems. HPE Servers listed in the Windows Server Catalog have been rigorously tested and certified with Microsoft Windows Server 2019. **NOTE:** For information on HPE Servers certified for Windows Server, visit: http://www.hpe.com/servers/wincert.

NOTE: For details on Microsoft's server catalog and also a list of HPE certified servers, visit:

https://www.windowsservercatalog.com/

Summary of Changes

Date	Version History	Action	Description of Change
05-Aug-2019	Version 2	Changed	Software Information section was updated.
02-Apr-2019	Version 1	New	New QuickSpecs.



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