# QuickSpecs

#### Overview

#### Windows Server 2022

Do your systems need a cloud-ready operating system to increase security and performance for modern applications? Microsoft Windows Server 2022 can modernize your data center or cloud platform by enabling hybrid capabilities to increase value from technology investments. You can now upgrade to multilayer security with Secured-core OS as a cornerstone, improve efficiency with featured options such as Storage Spaces Direct and Windows Admin Center for easier management of modern applications with virtualization and containerization. With powerful innovations to elevate your system's efficiency and productivity, Windows Server 2022 pairs with Hewlett Packard Enterprise servers, storage, and networking solutions to provide the technology to help achieve your business goals.

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 while keeping your infrastructure flexible and integrating cloud resources. Windows Server 2022 is designed to help.

- Hybrid capabilities with Microsoft Azure™:
  - The cloud-ready operating system that boosts on-premises investments with hybrid capabilities<sup>1</sup>.
- Advanced multilayer security:
  - Help protect data and apps at virtually every level of your business, starting with the operating system.
- Remote working with enhanced security features:
  - Empower workers through simplified deployment and management of remote apps and desktops.
- Modernized server infrastructure:

Transform infrastructure and applications with flexible solutions like software-defined storage and networking and a modern app platform.

Leveraging a 30+ year partnership with Microsoft, HPE helps you maximize advanced features and functionality in Windows Server 2022 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 Windows Server 2022 support for HPE Servers, see the support matrix at <a href="http://www.hpe.com/servers/wincert">http://www.hpe.com/servers/wincert</a>.

Hewlett Packard Enterprise offers Windows Server 2022 OEM license products 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 has been phased out in the Windows Server 2016 generation.

- For more information on Hewlett Packard Enterprise's offering of Windows Server 2022 products, go to: http://www.hpe.com/servers/ws2022
- <sup>1</sup>Azure cloud services may require an Azure subscription

#### **Overview**

#### What's New

## **Hybrid Cloud and Security**

 Microsoft Windows Server 2022 features the Secured-core OS option, which uses Trusted Platform Module 2.0 and System Guard secure boot option to reduce risk from firmware vulnerabilities and to help provide multilayer security across hardware, firmware, and the operating system.

- Windows Server 2022 supports AES-256-GCM and AES-256-CCM cryptographic suites for SMB encryption as well as TLS 1.3 to help provide a communication channel between two endpoints with increased security features.
- To provide east-west storage encryption, Windows Server 2022 failover clusters support granular control of encrypting and signing intranode storage communications for cluster shared volumes (CSV) and the storage bus layer (SBL).
- Improved Discrete Device Assignment (DDA) brings better security, virtual machine isolation, and performance for graphics-intensive workloads.

#### **Modernized Server Infrastructure**

- Microsoft Windows Server 2022 features containers that allow for packaging apps with their dependencies and using operating system-level virtualization to provide fast, fully isolated environments on a single system.
- The Containers extension in Windows Admin Center 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, or monitoring resource consumption.
- Microsoft drastically decreased the size of the Windows Server core container base image by reducing duplicate payloads and removing unused optional components.
- Performance and scalability increased with support for up to 48TB memory and 2048 logical processors

### **Storage Migration**

- Microsoft Windows Server 2022 offers the Storage Migration Service, which 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, without reconfiguring applications or users.
- Capture and migrate legacy access permission settings along with the data for continued seamless functionality of your key business applications. As an option, transfer the identity of the legacy server to the destination server so apps and users can access the data without changing links or paths.

## **Standard Features**

| Microsoft Hardware Specifications for Essentials (10 Core) Edition |                                      |  |
|--|--------------------------------------|--|
| Windows Server 2022  | Essentials (10 Core)                 |  |
| CPU  | Only 1 Processor with up to 10 cores |  |
| Min. CPU Req.  | 1.4 GHz x64                          |  |
| X64 RAM STD/ Max   | Minimum: 2GB RAM / Recommended: 16GB |  |
| ECC  | Yes                                  |  |
| NIC  | multiple NICs supported              |  |
| Internal optical bay drive   | Yes                                  |  |
| allowed  |                                      |  |
| Minimum OS Storage Footprint                                       | 32GB                                 |  |
| SW RAID  | Yes                                  |  |
| Video  | Optional                             |  |
| Keyboard, Mouse  | Optional                             |  |

## Windows Server 2019 Downgrade options Important Message:

Microsoft has 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 2019 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 2022 and intend to downgrade to Windows Server 2019, your server must meet both the processor requirements for Windows Server 2022 and 2019.

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://docs.microsoft.com/en-us/windows-hardware/design/minimum/minimum-hardware-requirements-overview

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

#### 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 <a href="https://technet.microsoft.com/sysinternals/cc835722.aspx">https://technet.microsoft.com/sysinternals/cc835722.aspx</a>, is a tool you can use to confirm which of these capabilities your CPU has.

## **Standard Features**

#### **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, for physical host deployments

## Storage controller and disk space requirements

Computers that run Windows Server 2022 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, assuming Server Core installation. Minimum: 32GB

## **Network adapter requirements**

#### Minimum:

- An Ethernet adapter capable of at least gigabit throughput
- Compliant with the PCI Express architecture specification.

A network adapter that supports Pre-boot Execution Environment (PXE) is useful, but not a minimum requirement.

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 2022 System Requirements visit:

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

### **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 <a href="https://www.hpe.com/us/en/servers/integrated-lights-out-ilo.html">https://www.hpe.com/us/en/servers/integrated-lights-out-ilo.html</a>.

## Service and Support

## Software Technical Support

Remote Tech Support via HPE Pointnext Tech Care provides reliable and consistent support to keep your business up and running. Tech Care goes beyond traditional support by providing access to product specific experts, an Al driven digital experience, and general technical guidance to not only reduce risk but constantly search for ways to do things better. Within HPE Pointnext Tech 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 installing your Microsoft software. You can also purchase more extensive support to cover your requirements. Remote Tech Support provides software support for Microsoft Windows Server 2022 and includes support for other Microsoft supported applications. Visit

https://psnow.ext.hpe.com/doc/4AA4-9999ENW to view the HPE supported Microsoft SW list. With Remote Tech Support, your IT staff receives fast and reliable access to HPE support. HPE Pointnext 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. Remote Tech Support for Microsoft Windows Server 2022 is available from HPE Pointnext via multiple contact methods including electronic media and telephone.

## **Remote Tech Support includes:**

- 24x7 access to technical resources Connect with Remote Tech Support via telephone, web portal, chat, or forums as locally available 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 Pointnext support 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 HPE Pointnext 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 HPE Pointnext to Microsoft support.
- Electronic software information Access HPE Pointnext electronic support facility including symptom solution database, product descriptions, specifications, technical literature, and more. Software technical support does not include assistance with:
  - o Generating or diagnosing user generated programs or source codes
  - o Installation of non-Hewlett Packard Enterprise products

Notes: For more information, visit: <a href="https://www.hpe.com/services/techcare">https://www.hpe.com/services/techcare</a>

Also available is HPE Pointnext Complete Care. HPE Pointnext Complete Care provides Customers with a single point of contact for all their support needs. The service is delivered under the governance of an assigned HPE account team that is familiar with the Customer's IT environment. The goal of the assigned account team is to work with the Customer as a trusted partner and help the Customer achieve their overall business objectives. A mutually agreed upon and executed statement of work (SOW) details the precise combination of reactive and proactive support features to be provided under HPE Pointnext Complete Care based upon Customers' requirements.

Customers may choose compute services operating system patch analysis and management. For Microsoft OSs, HPE delivers written communication regarding cumulative updates and patches as per the release cycle defined by Microsoft. HPE also provides monthly (or the timeframe agreed in the SOW) notification on Microsoft security releases and quarterly (or the timeframe agreed in the SOW) notification on Microsoft products supported by HPE, applicable to servers outlined in the account support plan.

Notes: For more information, visit: https://www.hpe.com/services/completecare

# Service and Support

#### 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, you have access to and are licensed for the new version. Customers that acquire perpetual licenses through Software Assurance can deploy the upgrades after their coverage has expired.

Notes: 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 Windows Server 2022.

- For information on HPE Servers certified for Windows Server, visit: <a href="http://www.hpe.com/servers/wincert">http://www.hpe.com/servers/wincert</a>.
- For details on Microsoft's server catalog and also a list of HPE certified servers, visit:

https://www.windowsservercatalog.com/

## **Configuration Information**

# Windows Server 2022 Essentials Edition 1P (10 Core) Pre-Installed UEFI on HPE Servers Notes:

 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.

| Language Code Key for P46173-xxx                                     |          |     |
|--|----------|-----|
| Windows Server 2022 Essentials edition (10 Core) FIO UEFI P46173-xxx |          |     |
| xxx = 291  | Japanese | APJ |

## Windows Server 2022 Essentials Edition 1P (10 Core) OS Not Pre-Installed

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

| Language Code Key for P46174-xxx    |  |            |
|-------------------------------------|--|------------|
| Windows Server 2022 Essenti         | als edition (10 Core) FIO Not Pre-Installed                  | P46174-xxx |
| xxx = B21                           | English, French, Italian, German, Spanish, Dutch, Portuguese | WW         |
| xxx = 371 English, Korean, Japanese |  | APJ        |

## Windows Server 2022 Essentials Edition 1P (10 Core) Reseller Option Kit

**Notes:** 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.

| Language Code Key for P46172-xxx |   |      |  |
|----------------------------------|---|------|--|
| Windows Server 2022              | Windows Server 2022 Essentials edition (10 Core) ROK P46172-xxx |      |  |
| xxx = A21                        | English, French, Italian, German, Spanish, Dutch, Portuguese    | EMEA |  |
| xxx = 021                        | English, Czech, Polish, Russian, Swedish                        | EMEA |  |
| xxx = 371                        | English, Korean, Japanese                                       | APJ  |  |
| xxx = AA1                        | Chinese Simplified  | APJ  |  |
| xxx = AB1                        | Chinese Traditional   | APJ  |  |
| xxx = DN1                        | English, French, Spanish, Brazilian Portuguese                  | AMS  |  |

## Windows Server 2022 Standard Edition 16 Core Pre-Installed on HPE Servers

#### **Notes:**

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

Standard edition provides rights for up to two virtualized Operating System instances (VMs) or Hyper-V containers when all physical processor 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 2022 Standard are available in packs of two, four, and sixteen cores

| Language Code Key for P46155-xxx |  |            |
|----------------------------------|--|------------|
| Windows Server 2022 Standar      | d Edition Pre-Installed (FIO) UEFI 16 Core                   | P46155-xxx |
| xxx = B21                        | English, French, Italian, German, Spanish, Dutch, Portuguese | WW         |
| xxx = 291                        | Japanese   | APJ        |

## **Configuration Information**

# Windows Server 2022 Standard Edition 16 Core OS Not Pre-Installed

#### **Notes:**

- Include x64 DVD media and COA. Sold only as a configurable option with an HPE Server purchase.
- Standard edition provides rights for up to two virtualized Operating System instances (VMs) or Hyper-V containers when all physical processor 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 2022 Standard are available in packs of two, four, and sixteen cores.

| Language Code Key for P46005-xxx |  |            |
|----------------------------------|--|------------|
| Windows Server 2022              | Standard edition Not Pre-installed (FIO Npi) 16 Core         | P46005-xxx |
| xxx = B21                        | English, French, Italian, German, Spanish, Dutch, Portuguese | WW         |
| xxx = 291                        | Japanese   | APJ        |

# Windows Server 2022 Standard Edition 16 Core Reseller Option Kit (ROK)

#### **Notes:**

- 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.
- Standard edition provides rights for up to two virtualized Operating System instances (VMs) or Hyper-V containers when all physical processor 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 2022 Standard are available in packs of two, four, and sixteen cores.

| Language Code Key for P46171xxx                  |  |            |
|--|--|------------|
| Windows Server 2022 Standard Edition ROK 16 Core |  | P46171-xxx |
| xxx = A21  | English, French, Italian, German, Spanish, Dutch, Portuguese | EMEA       |
| xxx = 021  | English, Czech, Polish, Russian, Swedish                     | EMEA       |
| xxx = 371  | English, Korean, Japanese                                    | APJ        |
| xxx = AA1  | Chinese Simplified   | APJ        |
| xxx = AB1  | Chinese Traditional  | APJ        |
| xxx = DN1  | English, French, Spanish, Brazilian Portuguese               | AMS        |

## **Windows Server 2022 Standard Edition Additional License**

- 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.
- Can be sold with or without an HPE Server After Point of Sale (APOS).
- End Users can reassign Windows Server Standard Additional licenses to another server that has a Windows Server 2022
   Standard base license.

| Language Code Key for P46199-xxx Windows Server 2022 Standard Edition Additional License 2 Core P46199-xxx |                     |     |
|--|---------------------|-----|
|  |                     |     |
| xxx = AA1  | Chinese Simplified  | APJ |
| xxx = AB1  | Chinese Traditional | APJ |

| Language Code Key for P46196-xxx                                   |  |            |
|--|--|------------|
| Windows Server 2022 Standard Edition Additional License 4 Core P46 |  | P46196-xxx |
| xxx = B21  | English, Czech, German, Spanish, French, Italian, Dutch, Polish, | WW         |
|  | Portuguese, Russian, Swedish, Korean, Japanese, Brazilian        |            |
|  | Portuguese   |            |

## **Configuration Information**

| Language Code Key for P46195-xxx |  |            |
|----------------------------------|--|------------|
| Windows Server 2022 Standard     | Edition Additional License 16 Core                               | P46195-xxx |
| xxx = B21                        | English, Czech, German, Spanish, French, Italian, Dutch, Polish, | WW         |
|                                  | Portuguese, Russian, Swedish, Korean, Japanese, Brazilian        |            |
|                                  | Portuguese   |            |

# Windows Server 2022 Datacenter Edition 16 Core - No Reassignment Rights OS Not Pre-Installed Notes:

- Include x64 DVD media and COA. Sold only as a configurable option with an HPE Server purchase.
- Datacenter edition permits unlimited virtualized Operating System instances (VMs) and Hyper-V containers on a server when all physical cores in the server are licensed. Additional Licenses for Windows Server 2022 Datacenter are available in packs of two, four, and sixteen cores.

| Language Code Key for P45916-xxx   |  |     |
|--|--|-----|
| Windows Server 2022 Datacenter Edition Not Pre-installed (FIO Npi) 16 Core - No P45916-xxx |  |     |
| Reassignment Rights  |  |     |
| xxx = B21  | English, French, Italian, German, Spanish, Dutch, Portuguese | WW  |
| xxx = 291  | Japanese   | APJ |

# Windows Server 2022 Datacenter Edition 16 Core - No Reassignment Rights Reseller Option Kit (ROK) Notes:

- 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.
- Datacenter edition permits unlimited virtualized Operating System instances (VMs) and Hyper-V containers on a server when all physical cores in the server are licensed. Additional Licenses for Windows Server 2022 Datacenter are available in packs of two, four, and sixteen cores.

| Language Code Key for P46123-xxx  |  |            |
|---|--|------------|
| Windows Server 2022 Datacenter Edition ROK 16 Core - No Reassignment Rights |  | P46123-xxx |
| xxx = A21   | English, French, Italian, German, Spanish, Dutch, Portuguese | EMEA       |
| xxx = 021   | English, Czech, Polish, Russian, Swedish                     | EMEA       |
| xxx = 371   | English, Korean, Japanese                                    | APJ        |
| xxx = AA1   | Chinese Simplified   | APJ        |
| xxx = AB1   | Chinese Traditional  | APJ        |
| xxx = DN1   | English, French, Spanish, Brazilian Portuguese               | AMS        |

# Windows Server 2022 Datacenter Edition 16 Core - with Reassignment Rights Reseller Option Kit (ROK)

- 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.
- Datacenter edition permits unlimited virtualized Operating System instances (VMs) and Hyper-V containers on a server when all physical cores in the server are licensed. Additional Licenses for Windows Server 2022 Datacenter are available in packs of two, four, and sixteen cores.
- 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.

## **Configuration Information**

| Language Code Key for P46128-xxx   |                                  |      |  |
|--|----------------------------------|------|--|
| Windows Server 2022 Datacenter Edition with Reassignment Rights ROK 16 Core P46128-xxx |                                  |      |  |
| xxx = A21  | English, French, German, Spanish | EMEA |  |
| xxx = 291  | Japanese                         | APJ  |  |

## **Windows Server 2022 Datacenter Edition Additional License**

**Notes:** 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.

| Language Code Key for P46214-xxx |   |            |  |
|----------------------------------|---|------------|--|
| Windows Server 2022 Datace       | nter Edition Additional License 2 Core  | P46214-xxx |  |
| xxx = B21                        | English, Czech, German, Spanish, French, Italian, Dutch, Polish, Portuguese, Russian, Swedish, Korean, Japanese, Brazilian Portuguese | WW         |  |

| Language Code Key for P46213-xxx  |  |    |  |
|---|--|----|--|
| Windows Server 2022 Datacenter Edition Additional License 4 Core P46213-xxx |  |    |  |
| xxx = B21   | English, Czech, German, Spanish, French, Italian, Dutch, | WW |  |
|   | Polish, Portuguese, Russian, Swedish, Korean, Japanese,  |    |  |
|   | Brazilian Portuguese                                     |    |  |

| Language Code Key for P46212-xxx   |  |    |
|--|--|----|
| Windows Server 2022 Datacenter Edition Additional License 16 Core P46212-xxx |  |    |
| xxx = B21  | English, Czech, German, Spanish, French, Italian, Dutch, | WW |
|  | Polish, Portuguese, Russian, Swedish, Korean, Japanese,  |    |
|  | Brazilian Portuguese                                     |    |

## Windows Server 2022 - Remote Desktop Services 5 Device CAL

#### Notes:

- Sold from Hewlett Packard Enterprise and authorized resellers with or without an HPE Server.
- Use of Remote Desktop Services requires a Windows Server CAL and an RDS CAL for each user or device.

| Language Code Key for P46222-xxx                                    |  |    |
|---|--|----|
| Windows Server 2022 Remote Desktop Services 5 Device CAL P46222-xxx |  |    |
| xxx = B21   | English, Czech, German, Spanish, French, Italian, Dutch, Polish, | WW |
|   | Portuguese, Russian, Swedish, Korean, Japanese, Brazilian        |    |
|   | Portuguese   |    |

## Windows Server 2022 - Remote Desktop Services 5 User CAL

- Sold from Hewlett Packard Enterprise and authorized resellers with or without an HPE Server.
- Use of Remote Desktop Services requires a Windows Server CAL and an RDS CAL for each user or device.

| Language Code Key for P46221-xxx                                  |  |    |  |
|---|--|----|--|
| Windows Server 2022 Remote Desktop Services 5 User CAL P46221-xxx |  |    |  |
| xxx = B21   | English, Czech, German, Spanish, French, Italian, Dutch, Polish, | WW |  |
|   | Portuguese, Russian, Swedish, Korean, Japanese, Brazilian        |    |  |
|   | Portuguese   |    |  |

# **Configuration Information**

#### Windows Server 2022 50 User CAL

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

| Language Code Key for P46219-xxx           |   |    |  |
|--|---|----|--|
| Windows Server 2022 50 User CAL P46219-xxx |   |    |  |
| xxx = B21                                  | English, French, Italian, German, Spanish, Japanese | WW |  |

## Windows Server 2022 50 Device CAL

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

| Language Code Key for P46220-xxx             |   |    |
|--|---|----|
| Windows Server 2022 50 Device CAL P46220-xxx |   |    |
| xxx = B21                                    | English, French, Italian, German, Spanish, Japanese | WW |

#### Windows Server 2022 10 User CAL

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

| Language Code Key for P46217-xxx           |   |    |  |
|--|---|----|--|
| Windows Server 2022 10 User CAL P46217-xxx |   |    |  |
| xxx = B21                                  | English, French, Italian, German, Spanish, Japanese | WW |  |

## Windows Server 2022 10 Device CAL

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

| Language Code Key for P46218-xxx             |   |    |
|--|---|----|
| Windows Server 2022 10 Device CAL P46218-xxx |   |    |
| xxx = B21                                    | English, French, Italian, German, Spanish, Japanese | WW |

## Windows Server 2022 5 User CAL

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

| Language Code Key for P46215-xxx          |   |     |  |
|---|---|-----|--|
| Windows Server 2022 5 User CAL P46215-xxx |   |     |  |
| xxx = B21                                 | English, Czech, German, Spanish, French, Italian, Dutch, Polish, Portuguese, Russian, Swedish, Korean, Japanese, Brazilian Portuguese | WW  |  |
| xxx = AA1                                 | Chinese Simplified  | APJ |  |
| xxx = AB1                                 | Chinese Traditional   | APJ |  |

## Windows Server 2022 5 Device CAL

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

| Language Code Key for P46216-xxx            |  |    |  |
|---|--|----|--|
| Windows Server 2022 5 Device CAL P46216-xxx |  |    |  |
| xxx = B21                                   | English, Czech, German, Spanish, French, Italian, Dutch, Polish, | WW |  |
|   | Portuguese, Russian, Swedish, Korean, Japanese, Brazilian        |    |  |
|   | Portuguese   |    |  |

# **Configuration Information**

#### Windows Server 2022 1 User CAL

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

| Language Code Key for P46191-xxx          |   |     |
|---|---|-----|
| Windows Server 2022 1 User CAL P46191-xxx |   |     |
| xxx = B21                                 | xxx = B21 English, Czech, German, Spanish, French, Italian, Dutch, Polish, Portuguese, Russian, Swedish, Korean, Japanese, Brazilian Portuguese |     |
| xxx = AA1                                 | Chinese Simplified  | APJ |

## Windows Server 2022 1 Device CAL

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

| Language Code Key for P46194-xxx            |  |    |  |
|---|--|----|--|
| Windows Server 2022 1 Device CAL P46194-xxx |  |    |  |
| xxx = B21                                   | English, Czech, German, Spanish, French, Italian, Dutch, Polish, | WW |  |
|   | Portuguese, Russian, Swedish, Korean, Japanese, Brazilian        |    |  |
|   | Portuguese   |    |  |

## Downgrade Windows Server 2019 Standard Edition Not Pre-Installed

Notes: Only available when purchasing Windows Server 2022 with a Hewlett Packard Enterprise server.

| Language Code Key for P45862-xxx   |          |            |
|--|----------|------------|
| Microsoft Windows Server 2019 Standard Downgrade Kit FIO Not Pre-installed |          | P45862-xxx |
| 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 |

## **Downgrade Windows Server 2019 Standard Edition Reseller Option Kit**

**Notes:** Available for purchase from your local Hewlett Packard Enterprise authorized reseller only when purchasing Windows Server 2022 with a Hewlett Packard Enterprise server.

| Language Code Key for P45863-xxx                                    |          |            |
|---|----------|------------|
| Microsoft Windows Server 2019 Standard Downgrade Kit ROK P45863-xxx |          | P45863-xxx |
| xxx = 291   | Japanese | APJ        |

## Downgrade Windows Server 2019 Datacenter Edition Not Pre-Installed

**Notes:** Only available when purchasing Windows Server 2022 with a Hewlett Packard Enterprise server.

| Language Code Key for P45879-xxx   |          |            |
|--|----------|------------|
| Microsoft Windows Server 2019 Datacenter Downgrade Kit FIO Not Pre-installed |          | P45879-xxx |
| xxx = B21  | English  | WW         |
| xxx = 041  | German   | EMEA       |
| xxx = 051  | French   | AMS & EMEA |
| xxx = 061  | Italian  | EMEA       |
| xxx = 071  | Spanish  | AMS & EMEA |
| xxx = 291  | Japanese | APJ        |

# **Configuration Information**

## Downgrade Windows Server 2019 Datacenter Edition Reseller Option Kit

**Notes:** Available for purchase from your local Hewlett Packard Enterprise authorized reseller only when purchasing Windows Server 2022 with a Hewlett Packard Enterprise server.

| Language Code Key for P45880-xxx                                      |          |            |
|---|----------|------------|
| Microsoft Windows Server 2019 Datacenter Downgrade Kit ROK P45880-xxx |          | P45880-xxx |
| xxx = 291   | Japanese | APJ        |

# **Summary of Changes**

| Date        | Version History | Action  | Description of Change  |
|-------------|-----------------|---------|--|
| 06-Dec-2021 | Version 3       | Changed | Configuration Information section was updated.                                       |
| 01-Nov-2021 | Version 2       | Changed | Configuration Information and Service and Support sections were updated. SKUs added. |
| 04-Oct-2021 | Version 1       | New     | New QuickSpecs   |

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