Microsoft® Windows® Server 2012 from HP

Microsoft Windows Server 2012 and HP ProLiant servers bring together the world's leading server hardware and software

HP and Microsoft solutions

As strategic partners and industry leaders for nearly 30 years, HP and Microsoft are combining the intelligence of HP ProLiant Gen8—the world's most self-sufficient servers—with the virtualization and scalability of the Microsoft Windows Server 2012 family. Together, our integrated hardware-software solutions automate the IT lifecycle, accelerate workloads, optimize energy, and help ensure availability to deliver the applications your business demands today and leverage the cloud-based models of the future.

About Windows Server 2012

Capturing the experience Microsoft has gained from building and operating public clouds, Windows Server 2012 delivers a highly dynamic, available, and cost-effective server platform for your data center and your private cloud.

Windows Server 2012 offers businesses and hosting providers a scalable, dynamic, and multitenant-aware cloud infrastructure that connects securely across premises and allows IT to respond to business needs faster and more efficiently.

Windows Server 2012 is an open, scalable, and elastic Web and application platform. For distributed and mobile workforces, Windows Server 2012 empowers IT to help ensure users' access to their personalized work environments from virtually anywhere. Whether you are an enterprise, a small or midsized company, or a hosting provider, Windows Server 2012 will help you cloud-optimize your IT.

Why HP for Windows Server 2012?

HP and Microsoft are teaming up to make the Microsoft Private Cloud work for you. But a great cloud operating system and systems management are not enough.

- Our customers require infrastructure that delivers proven performance and helps ensure that valuable compute, storage, and networking resources are not wasted.
- Customers need to be able to implement private clouds faster and with less risk by relying on HP and Microsoft to conduct the upfront solution design work; remove the burden of time-consuming racking, stacking, and cabling; and see that the private cloud environment is implemented correctly.
- And, most importantly, customers expect to work with HP to chart a path to the private cloud that allows them to realize the benefits of cloud computing incrementally, without disruption to existing IT services or massive cost overruns.

HP ProLiant Server certification and support for Windows Server 2012

HP certifications for ProLiant MicroServer, ML, DL, SL, and BL servers can be found by searching the Microsoft Windows Server Catalog (visit **windowsservercatalog.com**). You can also view the HP ProLiant OS Support Matrix (visit **hp.com/go/wincert**). And it's really easy to find driver downloads. Type **hp.com/support/** followed by your server name (this link provides a path to download drivers for ProLiant servers by product family and by server series. Once the exact server is located, you will find Windows Server 2012 drivers available for download. Drivers can also be found by clicking on the server name in the HP ProLiant OS Support Matrix).

Table 1. Windows Server 2012 minimum hardware requirements

Windows Server 2012	Foundation	Essentials	Standard	Datacenter
CPU	Limited to 1 processor; per-server licensing	Up to 2 processors; per-server licensing	Up to 2 processors per license; no processor limit	Up to 2 processors per license; no processor limit
Min. CPU requirement	1.4 GHz x64	1.4 GHz x64	1.4 GHz x64	1.4 GHz x64
IA64 sockets	0	0	0	0
X64 RAM standard/max.	2 GB/32 GB	2 GB/64 GB	2 GB/unlimited	2 GB/unlimited
ECC	Yes	Yes	Yes	Yes
NIC	Multiple NICs supported	Multiple NICs supported	Multiple NICs supported	Multiple NICs supported
Internal optical bay drive allowed	Yes	Yes	Yes	Yes
Storage required	32 GB	160 GB	32 GB	32 GB
SW RAID	Yes	Yes	Yes	Yes
Video	Yes	Yes	Yes	Yes
Keyboard, mouse	Yes	Yes	Yes	Yes

Windows Server 2012 OEM offerings from HP

OEM licenses for Windows Server 2012 from HP are available worldwide in several languages and can be purchased directly from HP or your local HP authorized reseller. The HP OEM license program is designed for small to midsized companies requiring the Windows Server operating system with their preferred choice of HP ProLiant server. For specific part numbers see **hp.com/go/ws2012** and click on the quickspecs. When you purchase directly from HP or an HP authorized reseller, you can select the operating system preinstalled or not preinstalled, and the media is included with the server.

When you purchase from your local HP authorized reseller, the OEM license is also available in the form of the Windows Server 2012 Reseller Option Kit (ROK). With ROK, the reseller affixes the certificate of authenticity (COA) label to your server and can provide installation and configuration services with your ProLiant system purchase. To find more information about this purchase option, visit **hp.com/go/ROK**.

When the OS is shipped preinstalled, the COA label is affixed to your server and the operating system is enhanced and integrated with the latest ProLiant system value-added software and drivers, tools, and utilities. The final installation process to customize your settings takes as little as 20 minutes before you are up and running. Preinstalled operating systems install quickly, cost less, are easy to buy, and require only one call for support. Recovery media on DVD is included with the server. For HP documentation relating to these products, visit **hp.com/go/windows/documentation**.

When the OS is not preinstalled when shipped, the COA label is affixed to your server and the operating system media is included with the server. Documentation can be found at **hp.com/go/windows/documentation**.

Windows Server 2012 volume license from HP

Volume licensing offers customized programs designed to meet the needs of your business, tailored to the size and preference of your company. A volume license is available from HP at **hp.com/go/slms** or from Microsoft authorized resellers.

Procuring Windows Server 2012 OEM licenses from HP

Windows Server 2012 editions are as follows:

• Windows Server 2012 Datacenter is designed for highly virtualized private cloud environments.

• Windows Server 2012 Standard is designed for physical or minimally virtualized environments.

• Windows Server 2012 Foundation provides a Windows Server experience for as many as 15 users.

• Windows Server 2012 Essentials provides a unique cloud-enabled offering for up to 25 users and will be available Fall 2012.

HP authorized resellers can purchase customer offerings as well as the Reseller Option Kit (ROK). Please see **hp.com/go/rok**.

Windows Server 2012 has some licensing changes over Windows Server 2008 R2. Here is a quick reference list:

1. Windows Server 2012 Standard and Datacenter editions are now sold as per-processor and CAL model license versus a per-server licensing model. This means that the licenses are sold by 2-CPU increments and for Standard edition two VMs for the base. Essentials and Foundation editions are sold as per-server type licensing, staying consistent with the Windows Server 2008 R2 licensing model.

2. Both Windows Server 2012 Standard and Datacenter editions have identical features. The difference between these two new editions is based on virtualization; for example:

   – Standard Edition 2-CPU offering includes two VMs per license

   – Datacenter Edition 2-CPU offering includes unlimited VMs

3. Both Windows 2012 Standard and Datacenter CALs are sold separately. Device, User, and RDS CALs must be purchased in addition to the base license. In the Windows Server 2008 R2 editions, CALs were included with the license.

4. Additive licenses are NEW. They allow you to purchase additional VM or CPU licenses as you require additional support. For example, if you only require four VMs, you could purchase Windows Server 2012 Standard edition and one additive license; this would get you up to four VMs with 4-CPU support.

Downgrading Windows Server 2012 OEM licenses from HP

Windows Server 2012 editions may be downgraded per Microsoft policy. For details on what editions can be downgraded, visit **microsoft.com/en-us/server-cloud/new.aspx**.

According to Microsoft, the ability to run downgrade bits does not change the licensing or support terms by which you can use the product; the purchased product (Windows Server 2012) rights apply. This means that the license will continue to cover two physical processors and the virtualization rights do not change.

HP Services

HP Technology Services offers one-stop support, saving customers time with one place to call for software and hardware technical support. HP offers technical expertise, giving customers fast answers and problem resolution. And HP, with its global reach, offers customers technical expertise locally in more than 170 countries. HP offers an extensive portfolio of solutions that enables customers to choose the right level of support, deployment, and technical services to meet their IT and business requirements and expectations. With these support services, HP customers can choose from reactive support when they have a problem and proactive support to help prevent problems and minimize downtime.

The HP Support Services portfolio includes:

- **HP Foundation Care**
  Customers receive cost-effective reactive services, with separate or integrated hardware and software support options. This support includes HP Collaborative Support, with ISV software problem resolution and enhanced call management.

- **HP Proactive Care**
  This advanced support is integrated reactive and proactive hardware and software support. It offers a single point of contact for remote and onsite support by HP technology experts.

- **HP Data Center Care**
  This service supports the customer's entire data center environment and is developed and customized for the customer's specific needs and SLAs.

- **HP Lifecycle Event Services**
  These services give customers comprehensive end-to-end services—strategy, planning and design, deployment, and technical and education services, which can be used at any stage or throughout the IT solution lifecycle.

Table 2. Windows Server 2012 downgrade terms

Purchased license	Downgraded version or edition	Bit rights that apply	Licensing rights that apply
Datacenter 2012	Datacenter 2008	Datacenter 2008	Datacenter 2012[1]
Standard 2012	Enterprise 2008 R2	Enterprise 2008 R2	Standard 2012[1,2]
Standard 2012	Standard 2008	Standard 2008	Standard 2012[1,2]

[1] The license will cover up to two processors.
[2] The license entitles up to two virtual machines.
Source: **Windows Server 2012 Licensing & Pricing FAQ**

Microsoft Software Assurance

Software Assurance is a comprehensive maintenance offering that helps you get the most out of your software investment. It combines the latest software with phone support available 24 hours a day, partner services, training, and IT tools that help customers deploy, manage, and migrate software.

When Software Assurance is purchased within 90 days of your OEM license purchase, your license is transitioned to a volume license with additional benefits. For more information on Software Assurance, visit **https://www.microsoft.com/licensing/software-assurance/ check-your-benefits.aspx**.

Software Assurance is available directly from HP or from your local HP authorized reseller.

For more information

To get answers to any questions you have about running Windows Server 2012 on HP Converged Infrastructure solutions, contact your HP representative or visit the following sites for more information.

- HP Windows Server 2012: **hp.com/learn/ws2012**
- Microsoft Windows Server 2012: **microsoft.com/windowsserver2012**
- HP ProLiant server support for Windows Server: **hp.com/go/wincert**
- HP ProLiant servers: **hp.com/go/proliant**
- HP Care Pack services: **hp.com/services**

For additional technical specifications, please visit **hp.com/go/ws2012**.

Windows Server 2012

Get connected
hp.com/go/getconnected

Current HP driver, support, and security alerts delivered directly to your desktop

Share with colleagues