Microsoft

Licensing

Windows Server 2016

Product overview

Windows Server 2016 is the cloud-ready operating system that supports customer workloads while introducing new technologies that make it easy for customers to transition to cloud computing when they are ready. Windows Server 2016 delivers powerful new layers of security along with Azure-inspired innovation for the applications and infrastructure that power business.

Editions overview

Customers can choose from three primary editions of Windows Server, based on the size of the organization as well as virtualization and datacenter requirements:

- Datacenter Edition is ideal for highly virtualized and software-defined datacenter environments.
- Standard Edition is ideal for customers with low density or non-virtualized environments.
- Essentials Edition is a cloud-connected first server, ideal for small businesses with up to 25 users and 50 devices. Essentials is a good option for customers currently using the Foundation Edition, which is not available with Windows Server 2016.

Windows Server 2016 features

Windows Server 2016 customers benefit from a variety of new features. New features in Standard Edition include Nano Server and unlimited Windows Server containers; customers also receive rights to two Operating System Environments (OSEs) or Windows Server containers with Hyper-V isolation. New features exclusive to Datacenter Edition include Shielded Virtual Machines, software-defined networking, Storage Spaces Direct, and Storage Replica; customers receive rights to unlimited OSEs or Windows Server containers with Hyper-V isolation.

Feature	Datacenter Edition	Standard Edition
Core functionality of Windows Server	✓	✓
Operating System Environments (OSEs/Windows Servers containers with Hyper-V isolation)	Unlimited	2
Windows Server containers	Unlimited	Unlimited
Host Guardian Service	✓	✓
Nano Server*	✓	✓
Storage features including Storage Spaces Direct and Storage Replica	✓	
Shielded Virtual Machines	✓	
Networking stack	✓	
Price**	$6,155	$883

* Software Assurance is required to install and use Nano Server.

** Pricing for Open (NL) ERP license for 16 core licenses. Actual customer prices may vary.

Windows Server 2016 licensing model

The business model for Standard and Datacenter editions transitioned from processor-based to core-based licensing in October 2016 with the general availability of Windows Server 2016 (all other editions of Windows Server 2016 continue to be on the processor-based licensing model). Core-based licensing provides a more consistent licensing metric across environments, enabling multi-cloud environments, improving workload portability for Windows Server through benefits like Azure Hybrid Benefit, and helping remove friction across different licensing models.

Customers with Software Assurance will transition to core-based licensing at their first renewal after the general availability of Windows Server 2016, although they can deploy Windows Server 2016 at any time.

The Windows Server 2016 licensing model includes both Cores + Client Access Licenses (CALs). Each user and/or device accessing a licensed Windows Server Standard, Datacenter, or Multipoint edition requires a Windows Server CAL or Windows Server and Remote Desktop Services CAL. A Windows Server CAL gives a user or device the right to access any edition of Windows Server of the same or earlier version. Each Window Server CAL allows access to multiple licenses of Windows Server.

Edition	Licensing model	CAL requirements
Datacenter	Core-based*	Windows Server CAL**
Standard	Core-based*	Windows Server CAL**
Essentials	Specialty server	No CAL required

* All physical cores on the server must be licensed, subject to a minimum of 8 core licenses per physical processor and a minimum of 16 core licenses per server.

** CALs are required for every user or device accessing a server. See the Product Terms for details.

Windows Server 2016 Standard and Datacenter: Core-based licensing

Core-based licensing requires all physical cores in the server to be licensed. Servers are licensed based on the number of processor cores in the physical server.

- A minimum of 8 core licenses is required for each physical processor and a minimum of 16 core licenses is required for each server.
- Core licenses are sold in packs of two.*
- Standard Edition provides rights for up to 2 Operating System Environments or Windows Servers containers with Hyper-V isolation when all physical cores in the server are licensed. For each additional 1 or 2 VMs, all the physical cores in the server must be licensed again.
- The price of a set of 16 core licenses (for a 2-processor server) for Windows Server 2016 Datacenter and Standard editions is the same price** as the 2-processor license of the corresponding edition of Windows Server 2012 R2.

* 8 two-core packs will be the minimum required to license each physical server. The two-core pack for each edition is 1/8th the price of a license for a 2-processor server for corresponding Windows Server 2012 R2 editions.

** Rounding may result in slight variations in the final price of eight 2-pack core SKUs relative to the price of one Windows Server 2012 R2 processor SKU.

Azure Hybrid Benefit

With the Azure Hybrid Benefit, customers with Software Assurance can benefit from special pricing for new Windows Server virtual machines in Azure. Customers pay only for the base compute rate, which is currently the same as the Linux rate for virtual machines. For complete details, visit www.azure.com/ahub.

Processors per server	Physical cores per processor				
	2	4	6	8	10
1	8	8	8	8	8
2	8	8	8	8	10
4*	16	16	16	16	20

Licensing costs are same as Windows Server 2012 R2

Additional licensing required

* Standard Edition may need additional licensing.

Moving to core-based licensing

Customers purchasing net new licenses, for example, through MPSA or from an OEM, will purchase licenses under the core-based model.

Existing customers with Software Assurance will transition from processor-based to core-based licensing at the first renewal after the general availability of Windows Server 2016.

- Renewal before the general availability of Windows Server 2016: Customers with Software Assurance will be on processor-based licensing and true-ups will also be processor-based.
- Renewal after the general availability of Windows Server 2016: Customers with Software Assurance will transition to core-based licensing and true-ups will also be core-based.

Core license grants overview

Customers with servers under Software Assurance will receive core license grants at the expiration of Software Assurance coverage. Depending on the core density of existing servers, there are two categories of core license grants: Full core licenses and additional core licenses.

1. Full core license grants: Customers with a server density of 8 or fewer cores per processor and 16 or fewer cores per server are eligible to receive full core license grants. Customers will receive a minimum of 8 cores per processor and 16 cores per server at the expiration of Software Assurance coverage after the general availability of Windows Server 2016. To receive full core license grants, customers do not need to document their environments.
2. Additional core license grants: Customers with a server density of more than 8 cores per processor and 16 cores per server are eligible to receive additional core license grants and pay only Software Assurance on the incremental cores. To receive additional core license grants, customers must maintain a record of the physical hardware and the configuration of the licensed server by using the Microsoft Software Inventory Logging tool (SIL) or any equivalent software. Inventory must be maintained at the first expiration of the Software Assurance coverage after the general availability of Windows Server 2016 or before September 30, 2019.

Note: Customers are not required to share inventory with Microsoft, but may be asked to share inventory if required.

Core grants	Eligibility	What customers receive	Documentation	Price impact
Full core license grants	Servers with ≤8 cores per processor and ≤16 cores per server.	A minimum of 8 cores per processor and 16 cores per server for the corresponding edition of Windows Server 2016.	Customer is not required to establish or maintain documentation of their server environment.	No price impact: Customer licensing Windows Server 2016 on servers with ≤ 8 cores per processor and ≤ 16 cores per server pay approximately the same amount* as they did for a 2-processor Windows Server 2012 R2 license.
Additional core license grants	Servers with >8 cores per processor and >16 cores per server.	Grants for core licenses for servers greater than 8 per processor and 16 cores per server and customer pays Software Assurance on incremental cores.	Customer is required to establish and maintain documentation of their server environment.	Price impact: Customer pays Software Assurance on incremental cores.

* Rounding may result in slight variations in the final price of eight 2-pack core SKUs relative to the price of one Windows Server 2012 R2 processor SKU.

Announcing servicing guidelines for Windows Server 2016

With prior releases, Windows Server has been serviced and supported through a 5+5 model, with 5 years of mainstream support and 5 years of extended support. This model—renamed Long Term Servicing Branch (LTSB)—will continue with Windows Server 2016 for customers who choose to install full Windows Server 2016 with Desktop Experience or Server Core.

Customers can also opt into a more active servicing model—known as the Semi-Annual Channel—similar to the experience with Windows 10. This approach supports customers who are moving at a cloud cadence of rapid development lifecycles and wish to innovate more quickly. Since this servicing model continues to provide new features and functionality, Software Assurance is also required to install and use Nano Server as a container image.

For more information about Windows Server 2016,
visit www.microsoft.com/windowsserver2016

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