

Windows Server 2016 and System Center 2016

Pricing and Licensing FAQs (May 2016)

1. Why should customers be excited about Windows Server 2016 and System Center 2016?

IT professionals and developers have a lot to be excited about in the 2016 releases of Windows Server and System Center. Microsoft is optimizing Windows Server 2016 for innovation in the cloud, and optimizing System Center 2016 for management across private and public cloud environments. Microsoft is unlocking tremendous new value – from efficiencies in cloud app development and software-defined infrastructure, to solution cost savings across storage and networking investments. Windows Server 2016 brings cloud-inspired capabilities to your datacenter, giving customers the platform they need to drive competitive value. Advances in compute, networking, storage, and security give customers added flexibility to meet changing business requirements. Modern application platform features, including Windows Server Containers, increase speed and agility.

System Center 2016 brings cloud learnings to the datacenter, enabling seamless management of complex environments. With comprehensive monitoring, hardware and virtual machine provisioning, robust automation, and configuration management, System Center 2016 offers a simplified datacenter management experience.

More information about the exciting product innovations in Windows Server 2016 and System Center 2016 can be found at these links. Customers can also get started now with the preview releases.

Microsoft.com-Cloud Platform-Windows Server 2016

Microsoft.com-Cloud Platform-System Center 2016

2. What changes are coming with Windows Server 2016 and System Center 2016?

Windows Server 2016 introduces Windows Server Containers and Hyper-V containers, an important technology for “born in the cloud” applications. Nano Server is a new minimal-footprint OS deployment option, which is a more efficient datacenter host and also the perfect lightweight OS for native cloud applications. Some new features unique to Datacenter Edition include an Azure-inspired networking stack, storage enhancements including Storage Spaces Direct and Storage replica, and Shielded VMs. The Standard Edition will continue to provide the core functionality of Windows Server, including up to two instances of Hyper-V (for unlimited VM’s, customers will require Datacenter).

3. How is licensing changing with Windows Server 2016 and System Center 2016?

The licensing of Datacenter and Standard Edition will move from processors to physical cores, which aligns licensing of private and public cloud environments to a consistent currency and simplifies licensing across multi-cloud infrastructures. Customers licensing servers with 8 cores or less per processor for Windows Server 2016 and System Center 2016 will pay the same extended amount (unit price x quantity) as they did when licensed for 2012 R2 based on the two-processor licensing model. The Standard Edition of Windows Server 2016 and System Center 2016 will license up to 2 VMs or 2 Hyper-V containers when all of the physical cores on the server are licensed.

With Windows Server 2016,

- Each physical server will be required to be licensed for all physical cores
- Each physical processor will be required to be licensed with a minimum of 8 physical cores
- Each physical server will be required to be licensed with a minimum of two processors, totaling a minimum of 16 physical cores
- Core licenses will be sold in two-core packs

4. Why is Microsoft making these licensing changes?

The change to core-based licensing is one of several steps Microsoft is taking to evolve our server licensing to support hybrid cloud. For example, in October 2015 we announced the Azure Hybrid Use Benefit that allows customers with Windows Server licenses with Software Assurance to upload their Windows Server images to Azure and pay only the base compute rates for those instances. The move of Windows Server 2016 and System Center 2016 to core licensing also aligns the servers to a common and consistent licensing denomination that is a standard measure for capacity across environments.

5. Can you tell me more about the Azure Hybrid Use Benefit (AHUB)?

The Azure Hybrid Use Benefit lets you bring your on-premises Windows Server license with Software Assurance to Azure. Rather than paying the full price for a new Windows Server virtual machine, you will only pay the base compute rate. The Azure Hybrid Use Benefit was enabled for Azure workloads on February 2nd, 2016.

For each Windows Server Standard and Datacenter Edition license covered with Software Assurance, customers can move or add incremental workloads into Azure across two instances, up to 8 cores each, or one instance up to 16 cores, and pay non-Windows (Linux) pricing. With Datacenter Edition, customers get lower-cost instances in Azure as well as rights to maintain existing on-premises deployments. With Standard Edition, customers still get lower-cost instances in Azure, but must assign the license to Azure and decommission the corresponding on-premises workload.

6. When are the licensing and packaging changes effective?

The move to core-based licensing will come into effect at the commercial General Availability of Windows Server 2016 and System Center 2016, which is expected in Fall 2016. Customers will begin transacting Windows Server and System Center using core-based licensing at the time of their Software Assurance renewal or when net new licenses are purchased after General Availability outside of any Microsoft agreements (e.g. when purchasing net new WS 2016 licenses via MPSA, or when buying net new server licenses directly from an OEM).

7. Can you be more specific in how customers will be impacted by the 2016 licensing changes from processor-to-core?

- The transition from processor-based licensing to core-based licensing will not affect customers with Software Assurance until renewal. Prior to renewal, customers who have licenses with Software Assurance may upgrade to Windows Server 2016 and System Center 2016 at any time. At renewal and post Windows Server 2016 GA, customers who have licenses with Software Assurance will transition to core-based licensing
- Net new licenses will be core-based for Windows Server 2016 and System Center 2016 (e.g. new licenses purchased via MPSA or OEM as examples)
- On-premises customers will be granted a minimum of 16 core licenses for each 2-processor license with Software Assurance at renewal. Service providers will be granted a minimum of 8 core licenses for each 1-processor license with Software Assurance at renewal
- To support the transition of customers with Software Assurance to Windows Server 2016 or System Center 2016, grants will be provided for existing licensed servers with greater than 16 cores (8 cores per proc). The process for customers is described in a different question below.
- Customers' Software Assurance payments as of this renewal will be based on the new core count

Microsoft is working with customers to facilitate smooth transitions. Customers should contact their Microsoft representative for guidance related to their specific situation.

8. Can you share how additional core licenses will be granted?

- After GA of Windows Server 2016, customers are encouraged to inventory their environment using appropriate tools, including Software Inventory Logging (SIL), or third-party inventory tools
- Additional core grants will be provided to customers with Software Assurance for the physical cores currently in use on their licensed servers with active Software Assurance. Licenses without Software Assurance will not be granted additional cores
- To ensure customers are granted all the cores they are entitled to, inventoried environments should include date-stamped documentation of servers, processors, and cores for all production hardware on which Windows Server and/or System center is currently installed. Customers may share this with Microsoft as proof for additional core grants
- Servers with greater than 16 cores per server and greater than 8 cores/proc, will be granted additional core licenses. Customers will pay Software Assurance for servers with greater than 16 cores

Customer example: What will be the changes in licensing for Windows Server 2016 and Systems Center 2016 if the customer has an EA agreement for 500 Datacenter licenses with 2 processor Servers (10 cores/processor) and would like to True-up another 100 licenses after the launch of Windows Server 2016?

True-ups are dependent on when the customer is due for renewal of the agreement

If the renewal of the agreement is before GA, then the customer will be on the processor model for the life of the agreement. In this case, the True-ups will also be processor based and there will be no price impact

If the renewal is after GA, the agreement will be core based and True-ups will be core based as well. The price change for True-ups will be based on the number of cores per Server. There are no license grants for True-ups; grants apply only to existing licenses. In the above scenario, the customer will see no price change on L for the 500 Datacenter licenses but will see a change in price for Software Assurance as well as for the 100 True-ups

9. How are core licenses sold? Will there be a 16-core license?

Core licenses will be sold in two-core packs and each processor will need to be licensed with minimum of eight cores, which is four two-core packs. Each physical server, including single-processor servers, will need to be licensed with minimum of two processors and 16 cores, which is eight two-core packs. Additional cores can then be licensed in increments of two cores (i.e. one two-core pack) for gradual increases in core density growth.

Datacenter Edition provides rights to unlimited virtual OSE when all physical cores on a server are licensed. Standard Edition provides rights for up to two virtual OSEs when all physical cores on a server are licensed.

Number of 2-core pack licenses needed
(Minimum 8 cores per processor; 16 cores per server)

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

Licensing cost same as 2012 R2
 Additional licensing required

* Standard Edition may need additional licensing

10. Are CALs still required for Windows Server 2016?

Windows Server Standard and Datacenter editions will continue to require Windows Server CALs for every user or device accessing a server (See the [Product Terms](#) for exceptions). Some additional or advanced functionality will continue to require the purchase of an additive CAL. These are CALs that are needed in addition to the Windows Server CAL to access functionality such as Remote Desktop Services or Active Directory Rights Management Services.

11. How should I think about hyper-threading in the core based licensing?

Windows Server and System Center 2016 are licensed by physical cores, not virtual cores. Therefore, customers only need to inventory and license the physical cores on their processors.

12. If cores are disabled from Windows Server use, do I still need to license the cores?

Physical cores that are disabled for use by an operating system do not need to be licensed. For example, if 8 cores in a Server with 32 cores are disabled, and not available for an operating system use, only 24 cores would need to be licensed. This exemption does not reduce the minimum number of core licenses required.

13. I read that Windows Server 2016 will support nested virtualization - a VM running inside a VM. How do you license that scenario?

Windows Server 2016 Datacenter licensing allows for unlimited virtualization and so would easily cover this scenario. Windows Server 2016 Standard Edition licensing is for no to low virtualization scenarios and supports up to two virtual machines. A virtual machine running inside a virtual machine counts as two virtual machines from a licensing perspective.

14. How do I license Nano Server?

Nano Server is a deployment option within Windows Server 2016. It is included as part of the licensing of the edition from which it is deployed. Further specifics on Nano licensing will be shared in the future.

15. Will the Core Infrastructure Suite SKU also be core based licensing?

The Core Infrastructure Suite SKU is a very popular way for customers to license Windows Server and System Center together at a discount, and its licensing will be core-based when Windows Server 2016 and System Center 2016 become generally available.

16. Is the Windows Server External Connector available at the release of Windows Server 2016?

Yes, the Windows Server External Connector license will still be available to license external users' access to Windows Server. An external connector is required for each Windows Server the external user is accessing.

17. I want to continue to use my System Center Software Assurance rights to manage instances in Azure or another service provider's cloud. How many core licenses do I need for that benefit if I am not using System Center to manage any OSEs on premises?

Customers would need to maintain Software Assurance on 16 cores (equivalent price of the 2012 R2 2-processor license) to continue to use the Software Assurance benefit of managing instances in Azure or other service provider's cloud.

18. Are there any changes to how the number of System Center Server Management Licenses are determined?

There are no changes in the manner in which the number of System Center Server Management licenses are determined. Consistent with the 2012 R2 licensing of System Center Server Management Licenses, 2016 server MLs will be required for managed devices that run server OSEs. Licenses for System Center 2016 will be core based instead of processor based. The number of server MLs needed for each managed server is determined by the number of physical cores in the server being managed. For Standard Edition, licensing all of the physical cores on the managed server provides rights to manage two OSEs on that server while

Datacenter entitles management of unlimited number of OSEs. The rights to run the management server software continues to be included with the server and client MLs. Multiple core licenses can be assigned to the same physical core to increase the number of OSEs able to be managed.

19. Can a customer sign an early commitment for a renewal that is scheduled after Windows Server 2016 GA? Will the customer be on the processor model in this case?

Yes, customers with renewals after Windows Server 2016 GA can sign an early commitment and the license agreement will be processor based in this case. Volume licensing customers with active Software Assurance can sign early commitment before GA to:

- Be eligible to continue to purchase Windows Server on the processor-based model for the life of the agreement
- Price on the True Ups will be processor-based for the life of the agreement

20. Can you share details on the available editions of Windows Server 2016?

The Windows Server 2016 Editions are:

- **Windows Server 2016 Datacenter:** For highly virtualized datacenter and cloud environments. Includes new datacenter functionality including shielded virtual machines, software-defined networking, storage spaces direct and storage replica
 - **Windows Server 2016 Standard:** For physical or minimally virtualized environments
 - **Windows Server 2016 Essentials:** For small businesses with up to 25 users and 50 devices
 - **Windows Server 2016 MultiPoint Premium Server:** For Volume Licensing customers in Academic segments only
 - **Windows Storage Server 2016:** Standard and Workgroup Editions available in the OEM channel only
- With Windows Server 2016, Windows Server Foundation and Windows Server Essential SKUS will be merged into a single SKU, Microsoft Windows Server 2016 Essentials. The 2016 Essentials Server licensing will continue to be processor based.
 - MultiPoint Server will have a single offering, Windows Server 2016 MultiPoint Premium Server that will have the same features as the current Windows Server 2012 R2 MultiPoint Premium Server.
 - There are no changes to Windows Storage Server from 2012 R2. It will continue to be processor based and available in the OEM channel

21. Will MultiPoint Premium Service be available in all channels in Windows Server 2016?

- MultiPoint Premium Server 2016 will be available in the Volume Licensing channel for the Academic segments only, and will not be available in the Open, OEM and Retail Channels.
- Corporate customers can use the Windows MultiPoint Premium Server role that will be available in Standard and Datacenter editions. Server and RDS CAL (Non-Academic CAL) are required.

22. Will I need CALs for Windows 2016 MultiPoint Premium Server?

Yes, to license MultiPoint Premium Server customers would need a Server CAL and a CAL for Remote Desktop Services (RDS). For customers qualifying for Academic programs, Academic RDS CALs can be used.