

Windows Server 2016 and System Center 2016 Standard and Datacenter Editions

Pricing and licensing FAQ

December 2015

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

IT professionals and developers have a lot to get excited about in the 2016 releases of Windows Server and System Center. There is a tremendous amount of new value in software defined infrastructure and cloud app development and potential solution cost savings for customers with regards to storage and networking investments. Microsoft is turning Windows Server 2016 into a cloud optimized server and System Center 2016 into management of traditional datacenter management and cloud environments. Some highlights that will help customers with their cloud application development and infrastructure are new container technologies, Nano Server and software defined infrastructure capabilities across networking, storage, and compute. 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 planned for the packaging, pricing and licensing of Windows Server 2016 and System Center 2016?

In addition to the virtualization rights differentiation between Standard and Datacenter Editions, Windows Server 2016 Datacenter Edition will include new advanced software-defined datacenter capabilities designed for highly virtualized private and hybrid cloud environments. Some new features unique to Datacenter Edition include an Azure-inspired networking stack and Azure-inspired storage enhancements including Storage Spaces Direct. Standard Edition will continue to provide the core functionality of Windows Server inclusive of Hyper-V.

The licensing of Datacenter and Standard Edition will move from processors to physical cores which aligns licensing of private and public cloud to a consistent currency of cores and simplifies licensing across multi-cloud environments. Licenses for servers with 8 cores or less per proc will be same price as the 2012 R2 two-proc license price. Core licenses will be sold in packs of 2 for incremental licenses needed above the required 8 cores per proc. The Standard Edition of Windows Server and System Center will license up to 2 VMs when all of the physical cores on the server are licensed.

3. Why is Microsoft making the packaging and 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 an Azure benefit whereby customers with Windows Server licenses with SA are eligible to upload their Windows images to Azure and pay only the compute rates. The move of Windows Server and System Center 2016 to core licensing aligns the servers to a common and consistent licensing denomination that is already a standard measure for capacity across environments.

4. Can you tell me more about the Azure hybrid use benefit?

The Azure hybrid use benefit was initially communicated out publicly on the Azure blog in October 2015. The web site will provide more information soon. Windows Server licenses with SA are eligible for the benefit which permits customers to load and run their own Windows Server images in Azure in a non-Windows VM. The benefit entitles customers to run up to 2 instances on up to 8 cores each or 1 instance on up to 16 cores in Azure for each Windows Server Standard or Datacenter 2 proc license with SA. When the benefit is used on Windows Server Standard Edition licenses with SA, the Standard Edition license can no longer be assigned to another server. When the benefit is used on Windows Server Datacenter Edition licenses with SA, the customer can continue to assign and use their Datacenter Edition licenses for unlimited virtualization on premises. The benefit enables customers to leverage their existing investments as they transition workloads to the cloud. More information will be coming soon about how customers and partners can participate in this benefit.

5. When are the licensing and packaging changes effective?

The Azure hybrid use benefit for Windows Server SA customers is expected to be available in Q1CY16. The alignment to core based licensing will come into effect at the commercial general availability of Windows Server 2016 and System Center 2016 expected in Q3 of calendar year 2016. Customers will then begin transacting Windows Server and System by core based licenses at the time of their SA renewal or at time of net new license purchase outside of any Microsoft agreements (e.g. purchasing new 2016 licenses via MPSA or buying new server licenses directly from an OEM).

6. Can you be more specific in how customers will be impacted by the combination of the Azure hybrid use benefit for SA customers and the 2016 licensing changes?

- The Azure hybrid use rights benefit that Windows Server SA customers can use in Q1CY16 amounts to potentially significant Azure VM cost savings depending on the Azure instance type being used.
- The core transition will not affect customers with software assurance until renewal time. For licenses with software assurance on servers with greater than 8 CPU core densities, there may be an increase in the cost of software assurance relative to the increase in processing power.
- There will be options to support customers in the transition by granting licenses in situations where Windows Server 2016 or System Center 2016 is running on or managing servers with more than 8 cores per proc. Additional consideration will be given to situations where SA exists on Standard Edition licenses being used to run or manage more than 2 OSEs on a server with more than two processors.
- 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).
- Microsoft is working with customers to facilitate smooth transitions. Customers should contact their Microsoft representative for guidance related to their specific situation.

7. What is the packaging of the core licenses? Will there be a 16 core license?

Core licenses will be sold in packs of two licenses. Each processor will need to be licensed with minimum of 8 cores which is 4 two-core packs. Each physical server, including 1 processor servers, will need to be licensed with minimum of 16 cores which is 8 two-core packs. Additional cores can then be licensed in increments of two cores (one two core pack) for gradual increases in core density growth.

Standard Edition provides rights for up to two virtual OSEs when all physical cores on a server are licensed (minimum of 8 cores per proc and 16 cores per server).

Number of 2-core pack licenses needed
(Minimum 8 cores/proc; 16 cores/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

* Standard Edition may need additional licensing

Licensing costs are same as 2012 R2

Additional licensing required

8. 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 Use Rights](#) for exceptions). Some additional or advanced functionality will continue to require the purchase of an additive CAL. These are CALs that you need in addition to the Windows Server CAL to access functionality, such as Remote Desktop Services or Active Directory Rights Management Services.

9. 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.

10. If processors (and therefore cores) are disabled from Windows use, do I still need to license the cores?

If the processor is disabled for use by Windows, the cores on that processor do not need to be licensed. For example, if 2 processors in a 4 processor server (with 8 cores per processor) were disabled and not available for Windows Server use, only 16 cores would need to be licensed. However, disabling hyper threading or disabling cores for specific programs does not relieve the need for a Windows Server license on the physical cores.

11. 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 low to no virtualization scenarios and supports up to two virtual machines. A virtual machine running inside a virtual machine counts as two virtual machines from licensing perspective.

12. 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. There is no unique or separate licensing for Nano Server.

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

Core Infrastructure Suite SKU, a very popular way for customers to license both Windows Server and System Center at a discount, will be core based when Windows Server 2016 and System Center 2016 GA.

14. 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.

15. I want to continue to use my System Center SA 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 SA on 16 cores (equivalent price of the 2012 R2 2 proc license) to continue to use the SA benefit of managing instances in Azure or other service provider's cloud.

16. 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 proc 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.

17. Where is the information about other editions of Windows Server, Windows Storage Server, Azure Stack and other products coming next year?

More information is coming in Q1CY16 about Azure Stack, Windows Server Essentials and the rest of the Windows Server editions and other related products.