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Microsoft Azure Stack
Licensing Guide
(end customers)

Introduction

This licensing guide is for people who would like to gain a basic understanding of how to license Microsoft Azure Stack and workloads on Azure Stack. This licensing guide is not a legal use rights documents, nor does it supersede or replace terms and conditions in the Microsoft Product Terms and Online Service Terms covering Azure Stack use or the use of Microsoft workloads running on Azure Stack. Program specifications and business rules are subject to change. The details in this licensing guide do not pertain to Azure Stack in China.

Contents

How Azure Stack is purchased

There are two ways to purchase Azure Stack:

1. Purchase Azure Stack services via your own EA
2. Purchase Azure Stack services from a service provider

This document provides licensing guidance for running the Azure Stack within your own enterprise. If you purchase Azure Stack services from a service provider, the provider will set the pricing and terms of use and offer support.

Azure Stack is sold as an integrated system, meaning that software comes installed on prescribed hardware. A complete Azure Stack system is comprised of hardware, software, and support.

Hardware: Hardware is purchased directly from the hardware vendor. A complete list of Azure Stack hardware partners can be found on the Azure Stack product page. If you are purchasing Azure Stack from a service provider, you may not need to purchase your own hardware.

Software: You may purchase Azure Stack services via your Microsoft Enterprise Agreement (EA) or from a service provider. This document describes the model for purchasing Azure Stack via Microsoft EA only. When purchasing Azure Stack from a service provider, the service provider will set the terms and prices for the services.

Support: If you purchase Azure Stack services from a service provider, your provider will provide support. If you purchase Azure Stack services via your Microsoft EA, support comes in two parts—hardware support and software support.

- Hardware support is contracted directly with the hardware partners.
- Software support is contracted directly with Microsoft. If you already have software support from Microsoft (Azure or Premier support plans), those contracts cover Azure Stack software support and no additional contracts or fees are needed. While support is with the hardware partner and Microsoft, our integrated support experience provides coordinated escalation and resolution, so you get a consistent support experience no matter who you call first.

Azure Stack software–packaging and pricing

There are three layers to Azure Stack software: the cloud infrastructure that powers the system, the services running on the system, and portal capabilities. Only services running on the Azure Stack are billed. Services can be licensed in one of two ways as shown in Table 1--a pay-as-you-use (consumption-based) model and a capacity model.

Table 1: Licensing Models

Packaging	Description	Licensing Program	
		EA	CSP
Pay-as-You-Use	Pay for services on a usage basis Best for hybrid use cases Transaction model aligned with Azure Cost effective solution	●	●
Capacity	Fixed fee annual subscription Best for disconnected workloads Not aligned with Azure Suitable for high value workloads	●	

Pay-as-you-use

The pay-as-you-use model has no up-front fees and you pay only when you use a service, as shown in Table 2. This model offers a continuous transaction experience with Azure. Usage for each service is metered and transmitted to Microsoft Azure commerce, where the information is integrated and billed with your Azure usage.

There is no initial deployment fee for pay-as-you use. Additionally, you are not charged for the virtual machines and software required to power the Azure Stack infrastructure. This means that Cloud Infrastructure, Management, Security, and Identity Services, as well as Networking and Service Fabric are not charged. The following describes the units of metering for the services available on Azure Stack at general availability. All services are entirely stand-alone. For example, when you run App Service, you are only spinning App Service meters.

Table 2. Azure Stack Pay-as-You-Use Metering Units

Packaging	Service	Metering Units
Up-Front Licensing	Azure Stack initial deployment	n/a – no upfront fees
Consumption-Based Fees	Cloud infrastructure; Management, Security, and Identity; Networking; Service Fabric	n/a – included
	Virtual Machines: Base VM	$/VCPU/min
	Virtual Machines: with Windows Server	$/VCPU/min
	Blog Storage Service	$/GB (no transaction fee)
	Tables and Queues Service	$/GB (no transaction fee)
	Azure App Service	$/VCPU/min

To run Windows Server virtual machines, you have the option of either using the native meters within Azure Stack or deploying existing Windows Server licenses in conjunction with the Azure Stack Base VM hourly meters. To run SQL Server virtual machines, you may deploy existing licenses in conjunction with Windows virtual machines. Details for how existing licenses work in conjunction with Azure Stack can be found in the "Using existing software" section of this document.

Azure Stack pay-as-you-use services are available in EA and are sold in the same way as Azure services. This means Azure Stack is acquired via a monetary commit SKU on your Azure or SCE enrollment. You can use the same agreement, pool of monetary commit, and subscription IDs for your Azure and Azure Stack services. If you have an existing Azure agreement, you don't need any additional agreements or monetary commitment purchases—you need only enter your subscription ID when you install the system. Your Azure Stack usage will be metered and integrated into one bill with your Azure usage.

Capacity Model

The capacity model offers a more traditional licensing model for disconnected scenarios, as shown in Table 3. An annual subscription fee licenses all the physical cores on your Azure Stack. The capacity model is available in an App Service package or an IaaS package. The App Service

package includes all the services on the IaaS package, plus Azure App Service (including Web, Mobile, Logic Apps, and Functions).

Table 3. Azure Stack Capacity Model—Licensing Packages

	App Service Package	IaaS Package
	$/physical core/year	$/physical core/year
Azure App Service	●	
Azure Storage	●	●
Base Virtual Machine	●	●
Windows Virtual Machine	BYO License	BYO License
SQL Server Virtual Machine	BYO License	BYO License

You need existing Windows Server or SQL Server licenses to run Windows Server and SQL Server virtual machines on the capacity model. Details on how existing licensing works in conjunction with Azure Stack are discussed in "Using existing software" section of this document.

The capacity model is available in EA only and can be ordered via standard Volume Licensing channels. The capacity model will not have integrated billing with Azure and Azure monetary commitment cannot be applied to the capacity model.

Azure Stack support

Azure Stack support is a consistent, integrated, hybrid support experience that covers the full system lifecycle. To fully support your Azure Stack system, you need two support instruments— one with Microsoft for cloud services support and one with your hardware provider for system support. Our integrated support experience provides coordinated escalation and resolution, so you get a consistent support experience no matter who you call first. If you already have Premier, Azure, or Partner support with Microsoft, your Azure Stack software support is included.

Although support is purchased in separate components, Microsoft and the hardware providers have partnered to create a unified support experience. You need only make one call to the vendor of your choice (Microsoft or hardware partner) for any Azure Stack issue. That vendor will help you diagnose the source of the issue and route your question accordingly.

Using existing software with Azure Stack

Customers may use existing software licenses (e.g., Windows Server, SQL Server, Marketplace services) in conjunction with Azure Stack. Azure Stack is treated like on-premises hardware for purposes of licensing existing software. Customers must comply with all product licensing terms under which the software is acquired. When other software is used in conjunction with Azure Stack, the fee structure is:

Licensing fees for the software (paid to the software vendor) + virtual machines consumed to run the service

Guidelines for how Microsoft Windows Server and SQL Server licensing are applied to Azure Stack systems are discussed in the following sections.

Windows Server licensing

When deploying Windows Server virtual machines on Azure Stack, you may use existing Windows Server licenses as an alternative to the native hourly Windows Server meters in the pay-as-you-use model. Windows Server licenses acquired apart from Azure Stack are subject to terms and conditions stated in the Microsoft Product Terms.

What follows are some guidelines for how the licensing terms and conditions can be applied when existing Window Server licenses are used with Azure Stack:

1. **Number of licenses required for Windows Server used with Azure Stack**

   To comply with Windows Server licensing, all cores in an Azure Stack region must be covered, just like when licensing Hyper-V. Furthermore, all cores must be covered with the same edition of license (all Datacenter or all Standard), since the virtual machine may be sitting anywhere on the Azure Stack. We recommend Windows Server Datacenter for Azure Stack, since we anticipate your workloads will be heavily virtualized. You can use EA, Open, or Select Plus Windows Server licenses. Customers using volume licensing licenses must also have sufficient CALs to cover the use case. Since Azure Stack is on your own hardware, you do not need Azure Hybrid Use Benefit (AHUB) rights to use Windows Server in conjunction with Azure Stack.

2. **AHUB with Azure Stack**

   Azure Stack is considered on-premises hardware for licensing purposes. As such, you do not need AHUB to use existing Windows Server licenses in conjunction with dedicated Azure Stack environments. Furthermore, the AHUB benefit does not extend to bringing

Windows Server EA licenses to hosted, multi-tenant environments; you may not bring Windows Server EA licenses to such environments.

SQL Server licensing

SQL Server virtual machines can be deployed on Azure Stack by using separately acquired SQL Server licenses in conjunction with Windows virtual machines. SQL Server licenses acquired outside Azure Stack are subject to Microsoft Product Terms.

What follows are some guidelines that illustrate how licensing terms and conditions are applied when existing SQL Server licenses are used with Azure Stack:

1. **Number of core licenses required for SQL Server used with Azure Stack**

    SQL Server may be licensed either by physical cores or by virtual machines. If licensing by physical cores, you must license the entire Azure Stack region1. If licensing by virtual machines, you only need enough licenses to cover the virtual machines using SQL Server (subject to a minimum of 4 per virtual machine). If licensing by virtual machines, you may separately allocate SQL Server Enterprise and Standard edition licenses by virtual machine. Since Azure Stack is the customer's own hardware, you do not need License Mobility when using SQL Server under EA on your own Azure Stack hardware.

2. **License Mobility**

    Azure Stack is considered on-premises hardware for licensing purposes. As such, you do not need License Mobility to use SQL Server licenses in dedicated Azure Stack environments. You will, however, need License Mobility if you bring your own SQL Server EA licenses to a service provider's multi-tenant hosted environment. In that situation, you must also ensure your service provider is an authorized License Mobility provider.
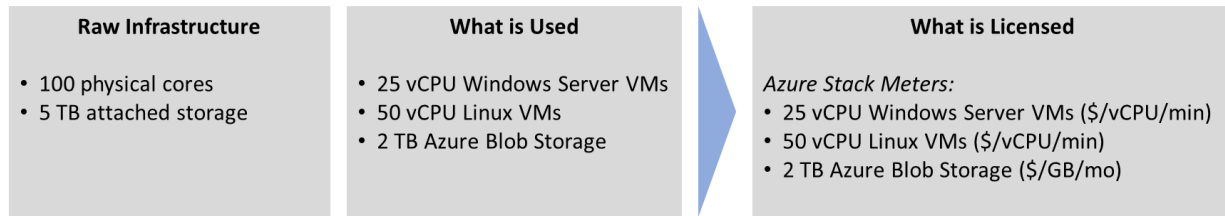
Example scenarios

The following figures and text illustrate a few examples for how services are licensed on Azure Stack, particularly focused on contrasting the licensing for pure Azure Stack meters with scenarios where on-premises licenses are used in conjunction with Azure Stack.

If using all native meters, as in Figure 1, you pay only for what you use. Usage is metered on a per minute basis. Storage is decoupled from virtual-machine instances and paid for separately.
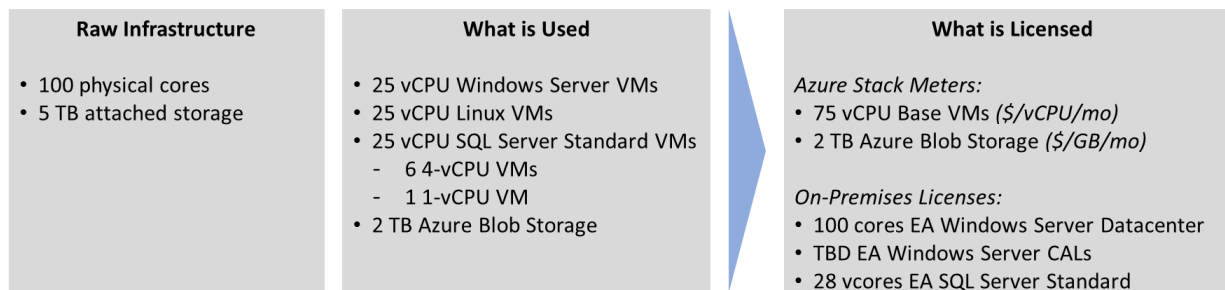
Figure 1. All Native Azure Stack Meters

Raw Infrastructure	What is Used		What is Licensed
• 100 physical cores • 5 TB attached storage	• 25 vCPU Windows Server VMs • 50 vCPU Linux VMs • 2 TB Azure Blob Storage		*Azure Stack Meters:* • 25 vCPU Windows Server VMs ($/vCPU/min) • 50 vCPU Linux VMs ($/vCPU/min) • 2 TB Azure Blob Storage ($/GB/mo)

When you use existing licenses to deploy Windows Server virtual machines on Azure Stack, you bring your own license and pay only a consumption rate on Base VM meters. You must have enough Windows Server core licenses to cover the entire Azure Stack region, regardless of how many Windows Server virtual machines are deployed on the Azure Stack. In the scenario shown in Figure 2, 25 of the 75 virtual machine cores (vcores) are using Windows Server. However, since there are 100 physical cores in the system, 100 Windows Server core licenses are needed. When used with existing Windows Server licenses, Azure Stack only runs consumption meters at the Base VM rate for the Windows Server virtual machines.

Figure 2. On-Premises License with Azure Stack

Raw Infrastructure	What is Used		What is Licensed

• 100 physical cores
• 5 TB attached storage
	• 25 vCPU Windows Server VMs
	• 25 vCPU Linux VMs
	• 25 vCPU SQL Server Standard VMs
	  - 6 4-vCPU VMs
	  - 1 1-vCPU VM
	• 2 TB Azure Blob Storage
			Azure Stack Meters:
			• 75 vCPU Base VMs *($/vCPU/mo)*
			• 2 TB Azure Blob Storage *($/GB/mo)*
			
			On-Premises Licenses:
			• 100 cores EA Windows Server Datacenter
			• TBD EA Windows Server CALs
			• 28 vcores EA SQL Server Standard

When using existing licenses to deploy SQL Server virtual machines on Azure Stack, you pay for those SQL Server licenses, plus Windows virtual machines. In Figure 2, since we've already deployed enough separately acquired Windows Server licenses to cover the entire Azure Stack region, only a Base VM fee is metered for the 25 vcores being used for SQL Server virtual machines. If you are only using SQL Server for part of your deployment, you may license it on a per-virtual machine basis. In accordance with SQL Server licensing rules, there is a 4-core licensing minimum per virtual machine. Even if you deploy a 1-node SQL Server virtual machine, you must still pay for and allocate 4 core licenses.

Definitions

Azure Stack region: A region is a logical concept describing a set of physical resources to which workloads can be assigned. The Azure Stack ARM may assign a workload deployed to an Azure Stack region to any of the physical resources within the region. Administrators will configure the

boundaries of the region, but regions will have a minimum of 4 physical nodes to ensure redundancy. (At general availability, Azure Stack will support only one region per deployment.)