Microsoft Azure Stack Licensing Guide (Hosters and service providers)

August 2017

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 end customers can acquire Azure Stack:

1. Purchase Azure Stack directly from Microsoft via their EA
2. Acquire Azure Stack services via a service provider

This document provides licensing guidance for service providers who operate Azure Stack for their end customers.

Azure Stack is sold as an integrated system, meaning that software comes pre-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.

Software: Service providers purchase software via the Cloud Service Provider (CSP) program.

Support: Support comes in two parts – hardware support and software support.

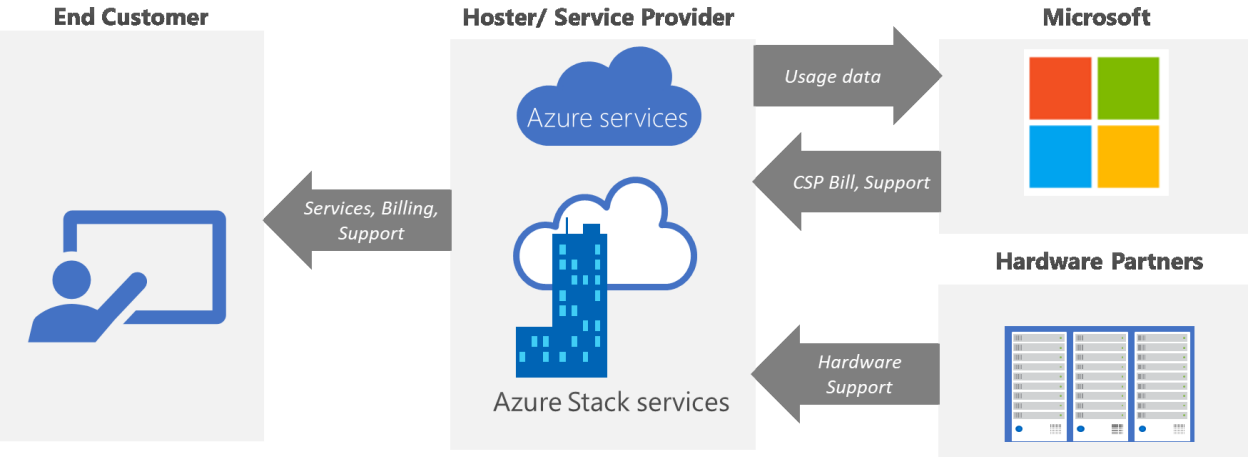
- Hardware support is contracted directly with the hardware partners.
- Software support is contracted directly with Microsoft, if you have direct or indirect provider CSP. If you already have software support from Microsoft (Azure, Premier or Partner Support), those contracts cover Azure Stack software 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. If you are an Indirect CSP (or reseller), your software support will come from your distributor.

The Azure Stack model for hosters and service providers

Azure Stack is available to service providers via CSP. Azure Stack works just like Azure in CSP. As the service provider, you own the relationship with the end customer, including billing and support. Microsoft will have a billing and support relationship only with you, the service provider.

Figure 1. Azure Stack for Hosters and Service Providers



The same CSP agreement and tenant subscription IDs can be used across both Azure and Azure Stack. Azure Stack usage data will flow to Microsoft commerce in the same way that Azure usage data does. Azure Stack usage by tenant will appear in the CSP partner center, just like Azure usage. You will get one bill for both your Azure and Azure Stack usage. Azure Stack usage will qualify for all the same CSP rebates and discounts as Azure.

Note that, in order to transact via CSP, the Azure Stack system must be registered to an Azure subscription owned by the service provider. The CSP program guide has been updated to allow internal-use subscriptions for registering Azure Stack; you will not need to sign any additional agreements to enable this.

The Azure hosting exception covers Azure Stack. This means that hosters/ service providers needing a disconnected scenario will be able to use the Azure Stack capacity model purchased with an EA. The capacity model does not offer the same per-tenant billing and CSP partner center integration benefits as the pay-as-you-use model.

Indirect CSP for Azure Stack

Azure Stack supports indirect CSP arrangements, just like in Azure. You will be able to manage tenant subscriptions and resources just like you do in Azure today. Indirect providers and resellers will have the same responsibilities for billing and end customer support as they do in Azure today. The only additional criteria for Azure Stack is that the Azure subscription used to register the Azure Stack must be owned by the top-tier CSP (aka indirect provider). Furthermore, the local Default Provider subscription created by the Azure Stack will be registered to the indirect provider. Key responsibilities associated with the Default Provider subscription on Azure Stack are administering the infrastructure (e.g., patch and update) and onboarding tenants to

the Azure Stack. As an indirect provider, you may provide your Default Provider subscription login credentials to your reseller if they are taking on responsibilities for owning and administering the Azure Stack.

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. Only the pay-as-you-use model is available to service providers under CSP. Service providers may purchase the capacity model under EA, with third party access rights granted by the Azure hosting exception.

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. It 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, as shown in Table 2. Additionally, you are not charged for the virtual machines and software required to power the Azure Stack infrastructure. This means that there are no charges for: Cloud Infrastructure, Management,

Security, and Identity Services, as well as Networking and Service Fabric. 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

	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 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 works 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 CSP and are sold in the same way as Azure services.

For CSP customers, this means the same agreement can cover both Azure and Azure Stack, your customers can keep the same tenant subscription ID, and your partner center and bill will display an integrated view of Azure and Azure Stack services. No additional agreements are needed to enable your pay-as-you use Azure Stack via CSP. You just need to register the Azure Stack system to an Azure subscription tied to your CSP agreement.

Capacity Model

The capacity model, shown in Table 3, offers a more traditional licensing model for disconnected scenarios. 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 VM	●	●
Windows Virtual Machine	BYO License	BYO License
SQL Server Virtual Machine	BYO License	BYO License

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

The capacity model is available in EA only. Third party access for solutions built on the capacity model procured via EA will be granted via the Azure hosting exception.

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 only need to 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 licenses (e.g., Windows Server, SQL Server, Marketplace) in conjunction with Azure Stack. Azure Stack is treated like on-premises hardware for the purposes of using existing licenses. Customers must comply with all product licensing terms under which the software is acquired.

When existing licenses are 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 Service Provider Use Rights (SPUR) for Services Provider License Agreement (SPLA) or the Microsoft Product Terms in the case of volume licensing.

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**

   You must have enough core licenses to cover all the cores in an Azure Stack region[1], just like when licensing Hyper-V. Furthermore, all cores must be covered with the same edition 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 may use SPLA or EA licenses in accordance with the conditions set forth in the SPUR or Microsoft Product

Terms, respectively. The next two paragraphs describe in more detail how SPLA and EA licensing guidelines can be applied in hosted dedicated and multi-tenant Azure Stack environments.

2. **Use rights for hosted dedicated and multi-tenant environments**

   Table 4 offers a summary of how existing Windows Server licenses can be deployed in hosted dedicated or multi-tenant environments. Windows Server may be licensed under EA by service providers via self-hosting rights or by end customers in dedicated hosted environments.

Table 4. Windows Server Virtual Machine Licensing on Azure Stack

Windows Server Virtual Machines on Azure Stack					
	Native Azure Stack Windows Server Virtual Machine Meter	**OR**	On-Premises Service Provider License	**OR**	On-Premises End-Customer License
Dedicated Hosting Single customer per Azure Stack region	CSP		SPLA + Base VM		EA + Base VM
Multi-Tenant Hosting Multiple different customers per Azure Stack region	CSP		SPLA + Base VM		n/a – AHUB not enabled

3. **Third party access for software purchased via hoster's Enterprise Agreement**

   Product terms for both Windows Server and Azure Stack offer provisions for hosting workloads when licensing via EA. However, Windows Server and Azure Stack have different third party access rights. The Azure hosting exception applies to Azure Stack, while self-hosting rights apply to Windows Server. When using Windows Server in conjunction with Azure Stack to support third party access, you must comply with the more restrictive of the two sets of licensing terms.

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 the SPUR or the 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 region. 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.

2. **Use rights on hosted dedicated or multi-tenant environments**

   Table 5 offers a summary of how SQL Server on-premises licenses can be deployed in hosted dedicated or multi-tenant environments. Since Azure Stack is on-premises hardware, you do not need License Mobility to use SQL Server licensed under your own EA, but you will need to comply with the terms and conditions of Self-Hosting rights. Likewise, in dedicated environments, your end customer will not need License Mobility to use SQL Server licensed under their EA. However, end customers will need license mobility to bring their EA licenses to your hosted, multi-tenant environment. You will need to be an Authorized Licensed Mobility partner per the SPLA terms in order to accept License Mobility licenses.

Table 5. SQL Server Virtual Machine Licensing on Azure Stack

SQL Server Virtual Machines on Azure Stack			
	On-Premises Service Provider License	**OR**	On-Premises End-Customer License
Dedicated Hosting Single customer per Azure Stack region	SPLA + Windows virtual machine		EA + Windows virtual machine
Multi-Tenant Hosting Multiple different customers per Azure Stack region	SPLA + Windows virtual machine		EA with license mobility + Windows virtual machine

3. **Datacenter Provider (DCP) provisions**

   SQL Server SPLA licenses used in conjunction with Azure Stack to provide software services to third parties must comply with SPLA licensing terms. Therefore, DCP

provisions apply if the Azure Stand tenant is a second tier hoster. This means that if a hoster is running SPLA SQL Server on Azure Stack hardware they do not own, they must either license the virtual machines with SALs or use the hardware owner's SPLA core licenses.

4. **Third Party Access for software purchased via EA**

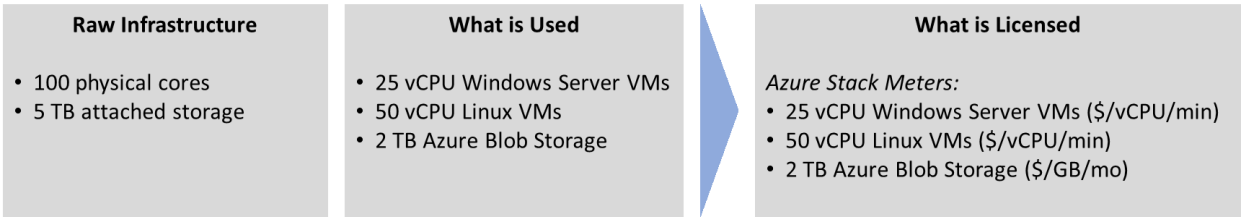
   Both Azure Stack and SQL Server product terms contain provisions for hosting workloads when licensing through EA. However, Azure Stack and SQL Server have different thirdparty access terms. The Azure hosting exception applies to Azure Stack, while Self Hosting rights apply to SQL Server. When using SQL Server in conjunction with Azure Stack to support third party access, you must comply with the more restrictive of the two sets of licensing terms.

Example scenarios

Figures 2 and 3 show 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.

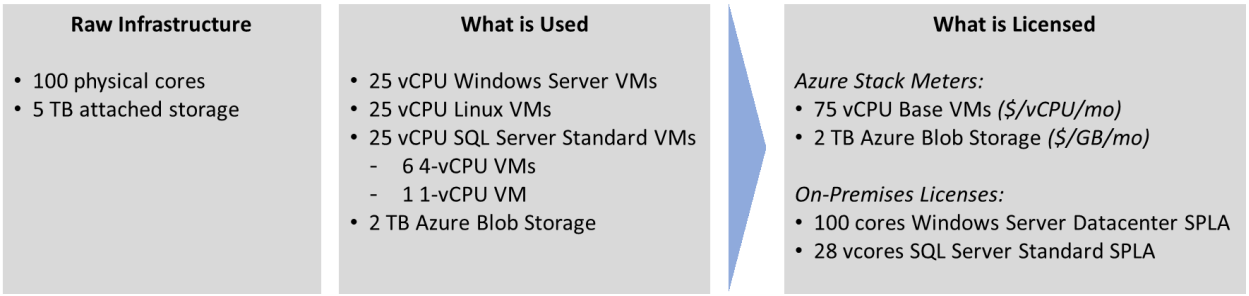
If using all native meters, you only pay for what you use, as shown in Figure 2. Usage is metered on a per minute basis. Storage is decoupled from virtual machine instances and paid for separately.

Figure 2. All Native Azure Stack Meters



When using existing licenses to deploy Windows Server virtual machines on Azure Stack, bring your own license and only pay 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 above scenario, 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 using separately acquired Windows Server licenses, Azure Stack only runs consumption meters at the Base VM rate for the Windows Server virtual machines. In order to offer software services on these virtual machines, you will also need Software Assurance and you will need to comply with the terms and conditions of Self Hosting rights.

Figure 3. On-Premises License with Azure Stack – Service Provider and Hoster



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 the above example, 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 4 vcores. Therefore, for the six 4-node and one 1-node SQL Server Standard virtual machines, a total of 28 core-licenses are needed. As with Windows Server, in order to offer software services on these virtual machines, you will also need Software Assurance and you will need to comply with the terms and conditions of Self Hosting rights.

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 1 region per deployment.)