Microsoft Azure

Microsoft Azure Stack Hub
Licensing, Packaging, & Pricing Guide

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Microsoft Azure Stack Hub is an extension of Microsoft Azure, bringing the agility and fast-paced innovation of cloud computing to on-premises environments. Working together, Azure and Azure Stack Hub deliver a truly consistent hybrid cloud platform for building modern applications.

Introduction (Licensing)

This licensing guide is for people who would like to gain a basic understanding of how to license Microsoft Azure Stack Hub and workloads on Azure Stack Hub. 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 Hub use or the use of Microsoft workloads running on Azure Stack Hub. Program specifications and business rules are subject to change. The details in this licensing guide do not pertain to Azure Stack Hub in China.

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Licensing

How Azure Stack Hub is purchased

There are two ways to purchase Azure Stack Hub:

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

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

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

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

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

Support: If you purchase Azure Stack Hub services from a service provider, your provider will provide support. If you purchase Azure Stack Hub 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 Hub 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 Hub software–packaging and pricing

There are two main layers to Azure Stack Hub software: the cloud infrastructure that powers the system, including the portal, and the services (customer workloads) running on the system. Only the services running on Azure Stack Hub are billed. Examples of billed services are VMs deployed from the Azure Stack Hub marketplace and Azure services such as Azure App Service. 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 Model

Packaging	Description	Licensing - EA	Program - CSP
Pay-as-You-Use	Pay for services on a usage basis Best for hybrid use cases Transaction model aligned with Azure billing Cost-effective solution	X	X
Capacity	Fixed fee annual subscription Best for disconnected deployments Billing not aligned with Azure	X	

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 Hub 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 Hub at general availability. All services are entirely stand-alone. For example, when you run App Service, you are only spinning App Service meters. You may also try Azure Stack Hub for free by downloading the Azure Stack Hub Development Kit (ASDK).

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

Packaging	Service	Metering Units
Up-Front Licensing	Azure Stack Hub 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
	Blob Storage Service	$/GB (no transaction fee)
	Tables and Queues Service	$/GB (no transaction fee)
	Managed Disks	Disk/month
	Azure App Service	$/VCPU/min

To run Windows Server virtual machines, you have the option of either using the native meters within Azure Stack Hub or deploying existing Windows Server licenses in conjunction with the Azure Stack Hub 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 Hub can be found in the "Using existing software" section of this document.

Azure Stack Hub pay-as-you-use services are available in Enterprise Agreement (EA) or Cloud Service Provider (CSP) and are sold in the same way as Azure services. This means Azure Stack Hub 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 Hub 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 Hub usage will be metered and integrated into one bill with your Azure usage. Please visit our site for more pricing information.

Capacity Model

The capacity model offers a more traditional licensing model to address the needs of customers who need to deploy Azure Stack Hub in disconnected scenarios and cannot report their usage to Microsoft. As shown in Table 3, an annual subscription fee is required for all the physical cores on your Azure Stack Hub. The capacity model is available in an IaaS package ($144/core/year) or a PaaS Service package ($400/core/year). The IaaS package allows use of the compute and storage services. The App Service package includes all the services in the IaaS package, plus Azure App Service (including Web, Mobile, Logic Apps, and Functions).

Table 3. Azure Stack Hub Capacity Model—Licensing Packages

Packaging	IaaS Package $/physical core/year	App Service Package $/physical core/year
Azure App Service		X
Azure Storage	X	X
Base Virtual Machine	X	X
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 in the capacity model. Details on how existing licensing works in conjunction with Azure Stack Hub are discussed in the "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 Hub support

Azure Stack Hub support is a consistent, integrated, hybrid support experience that covers the full system lifecycle. To fully support your Azure Stack Hub 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 Hub 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 partner) for any Azure Stack Hub issue. That vendor will help you diagnose the source of the issue and route your question accordingly.

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Using existing software with Azure Stack Hub

Customers may use existing software licenses (e.g., Windows Server, SQL Server, Marketplace services) in conjunction with Azure Stack Hub. Azure Stack Hub is treated like on-premises hardware for purposes of Microsoft Azure Stack Hub licensing existing software. Customers may use licenses from any channel (EA, SPLA, Open, and others) and must comply with all product licensing terms under which the software is acquired. When other software is used in conjunction with Azure Stack Hub, 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 Hub systems are discussed in the following sections.

Windows Server licensing

When deploying Windows Server virtual machines on Azure Stack Hub, 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 Hub 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 Hub:

1. **Number of licenses required for Windows Server used with Azure Stack Hub**
   To comply with Windows Server licensing, all cores in an Azure Stack Hub 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 Hub. We recommend Windows Server Datacenter for Azure Stack Hub, 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 Hub is on your own hardware, you do not need Azure Hybrid Use Benefit (AHUB) rights to use Windows Server in conjunction with Azure Stack Hub.

2. **AHUB with Azure Stack Hub**
   Azure Stack Hub 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 Hub 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 Hub by using separately acquired SQL Server licenses in conjunction with Windows virtual machines. SQL Server licenses acquired outside Azure Stack Hub 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 Hub:

1. **Number of core licenses required for SQL Server used with Azure Stack Hub**
   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 Hub region. If licensing by virtual machines, you only need enough licenses to cover the virtual machines using SQL Server (subject to a minimum

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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 Hub runs on the customer's own hardware, you do not need License Mobility when using SQL Server under EA on your own Azure Stack Hub hardware.
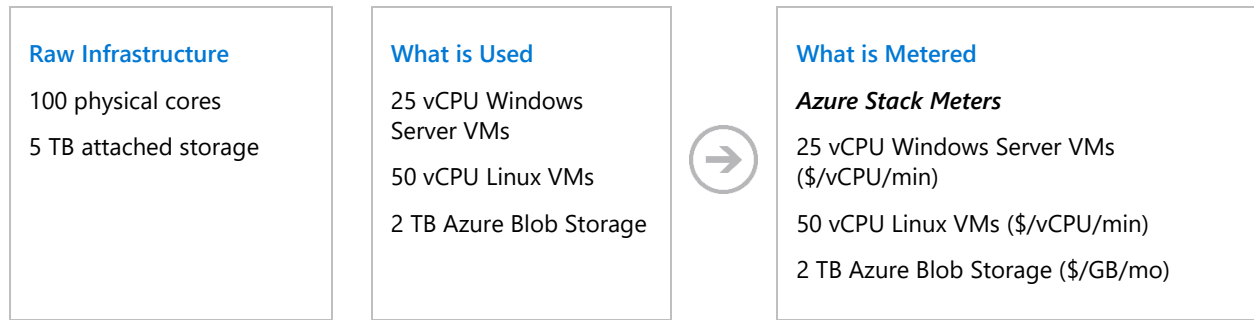
2. **License Mobility**
Azure Stack Hub is considered on-premises hardware for licensing purposes. As such, you do not need License Mobility to use SQL Server licenses in dedicated Azure Stack Hub environments. You will, however, need License Mobility if you bring your own SQL Server EA licenses to a 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 Hub, particularly focused on contrasting the licensing for pure Azure Stack Hub meters with scenarios where on-premises licenses are used in conjunction with Azure Stack Hub.
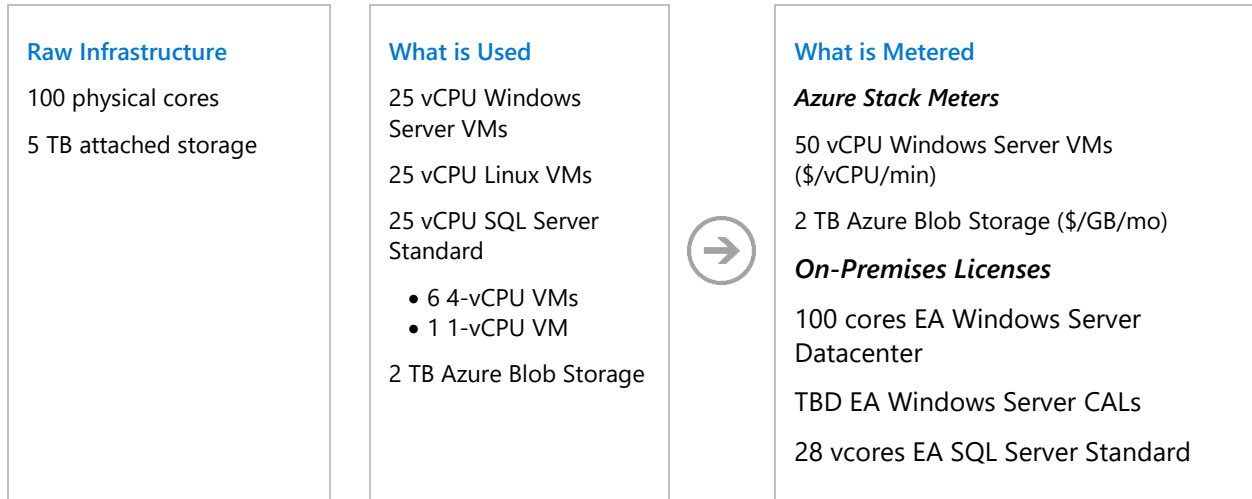
If using all native meters, as in Figure 1, you pay only for what you use. Usage is metered on a per minute basis. Storage is decoupled from virtual-machine instances and paid for separately.

Figure 1. All Native Azure Stack Hub Meters

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

When you use existing licenses to deploy Windows Server virtual machines on Azure Stack Hub, 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 Hub region, regardless of how many Windows Server virtual machines are deployed on the Azure Stack Hub. 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 Hub only runs consumption meters at the Base VM rate for the Windows Server virtual machines.

Figure 2. On-Premises License with Azure Stack Hub

Raw Infrastructure	What is Used	What is Metered
100 physical cores 5 TB attached storage	25 vCPU Windows Server VMs 25 vCPU Linux VMs 25 vCPU SQL Server Standard • 6 4-vCPU VMs • 1 1-vCPU VM 2 TB Azure Blob Storage	*Azure Stack Meters* 50 vCPU Windows Server VMs ($/vCPU/min) 2 TB Azure Blob Storage ($/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 Hub, 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 Hub 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.

Acquiring Azure Stack Hub through a service provider

Service providers may offer Azure Stack Hub as part of their portfolio, enabling Azure-consistent hybrid cloud services. The service provider will license Azure Stack Hub from Microsoft through the Cloud Solution Provider channel, and then provide you with finished services, value-add offerings, and support, just like they do in Azure.

Definitions

Azure Stack Hub region: A region is a logical concept describing a set of physical resources to which workloads can be assigned. The Azure Stack Hub ARM may assign a workload deployed to an Azure Stack Hub region to any of the physical resources within the region. Regions have a minimum of 4 physical nodes. At present, Azure Stack Hub supports only one region per deployment.

FAQ

Can I use MSDN, Free Trial, or Biz Spark with Azure Stack Hub?

Only EA and CSP subscription IDs may be used with Azure Stack Hub. Azure MSDN, Free Trial, and Biz Spark subscription IDs cannot be used in conjunction with Azure Stack Hub. However, MSDN software (for example, MSDN Windows Server, MSDN SQL Server) may be used in conjunction with Azure Stack Hub. If you bring you own license, you will be charged only the Azure Stack Hub base virtual machine fees. For example, if you bring an MSDN Windows Server license and deploy a Windows Server virtual machine on Azure Stack Hub, your consumption would be metered only at the base virtual machine rate. MSDN software used in conjunction with Azure Stack Hub must comply with all MSDN licensing terms.

I am an EA customer. Can my monetary commitment be used for Azure Stack Hub?

Your monetary commitment can be applied toward both your Azure and Azure Stack Hub consumption as long as the subscriptions you use fall under the same enrollment. US government, Germany, and China enrollments will be handled separately.

Do I need Azure Hybrid Use Benefit to use my on-premises Windows Server license with Azure Stack Hub?

Azure Hybrid Use Benefit is not required for using Windows Server on Azure Stack Hub because Azure Stack Hub is an on-premises hardware system. Azure Stack Hub systems need only to be properly licensed.

Do I need SQL Server License Mobility to use my on-premises SQL Server license with Azure Stack Hub?

SQL Server License Mobility is needed only if you are using a multi-tenant system shared with multiple entities. For example, if you are a hosting provider operating a multi-tenant Azure Stack Hub system, your customers would need to have SQL Server License Mobility to bring their own SQL Server licenses to Azure Stack Hub. However, if you are operating a single-tenant Azure Stack Hub, or a multi-tenant system within a single enterprise, you do not need SQL Server License Mobility.

I already have Azure Standard, Azure Pro, or Premier—do I need to buy additional support for my Azure Stack Hub?

Support for Azure Stack Hub consists of two parts—one contract with the hardware partner for hardware and system support, and one contract with Microsoft for Azure Stack Hub services support. If you already have an Azure or Premier support contract with Microsoft, your existing Azure or Premier support contract extends to cover Azure Stack Hub at no additional cost. You will, however, still need a support contract with the hardware partner.

Learn more at https://azure.microsoft.com/en-us/products/azure-stack/hub/

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