200 XP

What is Azure Stack?

4 minutes

Cloud computing isn't an all-or-nothing proposition. Customers can choose to use the cloud to whatever extent they deem necessary in order to fulfill their business requirements. Efficient use of cloud technologies isn't limited to migration scenarios, but also plays a significant role in hybrid environments, with some computing resources remaining in on-premises datacenters. Customers such as Contoso that use Azure as their public cloud, can optimize that hybrid model, by using the Azure Stack offering. In this unit, you learn about Azure Stack and its characteristics.

What is Azure Stack?

Azure Stack is a family of products that provide an extension of Azure to consistently build and run hybrid applications across datacenters, edge locations, remote offices, and clouds. The Azure Stack family consists of Azure Stack Hub, Azure Stack HCI, and Azure Stack Edge.

As part of its hybrid cloud strategy, Microsoft has structured its offerings to provide a clear implementation path for customers such as Contoso that seek to innovate the way they provision and manage their on-premises workloads. As a result, Microsoft has rebranded Microsoft Azure Stack, which it introduced in 2017, as *Azure Stack Hub*. In addition, in November 2019, Microsoft announced two more products: *Azure Stack HCI* and *Azure Stack Edge*. Although each of these products is intended to address different sets of hybrid cloud needs, distinct features and functionalities of these three products of the Azure Stack family complement each other. This module explores these products and their interconnectedness in further detail.

Despite their differences, Azure Stack products share some characteristics that facilitate transition to the hybrid cloud model, including:

- On-premises deployments.
- Close integration with Azure.
- Modern technologies that accelerate replacement and consolidation of legacy infrastructure.
- Pay-as-you-use pricing, using the same subscriptions, monetary commitments, and billing tools as Azure.
- Purpose-built, preconfigured, and Microsoft-certified hardware available either from Microsoft or third-party vendors.

Azure Arc and Azure Stack

Azure Arc consists of a set of technologies that you can use to simplify administration of complex, distributed, hybrid environments. It provides a centralized, scalable, and consistent multicloud and on-premises governance and management platform. Azure Arc facilitates adoption of DevOps practices, such as desired state configuration and automation. It delivers built-in monitoring and security, and promotes the cloud-first strategy, regardless of where your resources are located. At the same time, Azure Arc still allows you to continue using traditional ITOps tools and practices, as you transition to the DevOps model to fully benefit from cloud native architectural and operational patterns.

Azure Arc delivers further integration between management of Azure services and on-premises infrastructure. Azure Arc and Azure Stack complement each other. You can combine the benefits of Azure Arc with Azure Stack. Azure Arc can manage virtualized and containerized workloads running on Azure Stack hardware, and use the compute and cloud capabilities of Azure Stack.

> ⓘ **Note**
>
> Azure Arc provides integration with Azure Stack HCI and Azure Stack Edge. Azure Stack Hub has its own Azure Resource Manager layer.

Choose the best response for each of the following questions. Then select **Check your answers**.

Check your knowledge

1. **Which of the following features is common across the three Azure Stack products?** *

  ◯   Purpose-built, preconfigured, and Microsoft-certified hardware.

  ◯   Built-in support for disaster recovery.

  ◯   Support for up to 16 nodes.

2. **What is the common pricing model supported by Azure Stack products?** *

  ◯   Reserved instances

◯   Spot pricing

◯   Pay-as-you use

Check your answers