Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack Hub (AZ-600T00)

Modality: Virtual Classroom

Duration: 4 Days

If you enroll in this course at the listed price, you receive a *Free Official Exam Voucher* *for the AZ-600 Exam. This course does not include Exam Voucher if enrolled within the Master Subscription, however, you can request to purchase the Official Exam Voucher separately.*

About this Course:

This course teaches Azure administrators and Azure Stack Hub operators how to plan, deploy, package, update, and maintain the Azure Stack Hub infrastructure. Lessons include deploying Azure Stack Hub, managing the Azure Stack Hub Marketplace, offering App Services and Event Hub resource providers, managing Azure Stack Hub registration, and maintaining system health.

Course Objectives:

- Prepare for Azure Stack Hub deployment
- Manage infrastructure certificates for Azure Stack Hub
- Manage Azure Stack Hub registration
- Configure an Azure Stack Hub home directory
- Provision a service principal for Azure Stack Hub
- Recommend a business continuity disaster recovery (BCDR) strategy
- Manage Azure Stack Hub by using privileged endpoints
- Manage Azure Stack Hub Marketplace
- Offer App Services and Event Hub resource providers
- Manage usage and billing

Audience:

- Students for AZ-600: Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack Hub are interested in becoming Azure Stack Hub operators who provide cloud services to end users or customers from within their own datacenter using Azure Stack Hub. Azure Stack Hub operators responsibilities include planning, deploying, packaging, updating, and maintaining the Azure Stack Hub infrastructure. They also offer hybrid cloud resources and requested services and manage infrastructure as a service (IaaS) and platform as a service (PaaS).

Prerequisites:

Successful Azure Stack Hub students have prior experience with operating systems, virtualization, cloud infrastructure, storage structures, and networking:

- Understanding of on-premises virtualization technologies, including VMs and virtual

networking

- Understanding of network configuration, including TCP/IP, Domain Name System (DNS), virtual private networks (VPNs), firewalls, and encryption technologies
- Understanding of Active Directory concepts, including domains, forests, and domain controllers

Course Outline:

Module 1: Overview of Azure Stack Hub

In this module, you will learn how Azure Stack Hub is an extension of Azure that provides a way to run apps in an on-premises environment and deliver Azure services in your datacenter.

Lessons

- Why use Azure Stack Hub?
- Azure Stack Hub architecture
- How Azure Stack Hub is managed
- About Resource providers
- Differences between global Azure, Azure Stack Hub, and Azure Stack HCI

Lab : Connecting to Azure Stack using Azure PowerShell

After completing this module, students will be able to:

- Describe edge and disconnected solutions
- Describe Azure Stack Hub integrated systems architecture
- Explain Azure Stack Hub deployment options
- Define differences between Azure Stack Hub, Azure Stack HCI, and global Azure

Module 2: Provide Services for Azure Stack Hub

In this module, you will learn how to populate Azure Stack Hub Marketplace in a disconnected environment, deploy an App Services resource provider, deploy Event Hubs resource provides, create and manage quotas, plans, offers, and subscriptions, and manage usage and billing.

Lessons

- Manage Azure Stack Hub Marketplace
- Offer an App Services resource provider
- Offer an Event Hubs resource provider
- Offer services (quotas, plans, offers, and subscriptions)
- Manage usage and billing

Lab : Configuring Offers Plans Services using the Azure Stack Admin Portal

Lab : Add a Linux Image to Azure Stack (Disconnected Scenarios)

Lab : Create custom Marketplace Items

After completing this module, students will be able to:

- Create a custom Azure Stack Hub Marketplace item
- Deploy and update an App Services resource provider
- Plan an Event Hubs resource provider deployment
- Create and manage user subscriptions
- Manage usage and billing in multi-tenant and CSP scenarios

Module 3: Implement Data Center Integration

In this module, you will learn how prepare an Stack Hub deployment, recommend and validate certificates, and register in a connected and disconnected environment.

Lessons

- Prepare for Azure Stack Hub deployment
- Manage infrastructure certificates for Azure Stack Hub
- Manage Azure Stack Hub registration

Lab : Registering Azure Stack with an Azure Subscription

Lab : Add a Windows Server Image to Azure Stack (Disconnected Scenarios)

Lab : Add a Windows Server Image to Azure Stack (Connected Scenarios)

Lab : Implement MySQL Server Resource Provider in Azure Stack

After completing this module, students will be able to:

- View and retrieve usage data by using the Usage API
- Recommend a name resolution strategy
- Validate identity provider integration
- Validate certificates
- Recommend a registration mode

Module 4: Manage Identity and Access for Azure Stack Hub

In this module, you will learn how to configure the Azure Stack Hub home directory, register the guest tenant directory with Azure Stack Hub, and identify an appropriate method for access (service principal, users, groups).

Lessons

- Manage multi-tenancy
- Manage access

After completing this module, students will be able to:

- Register the guest tenant directory with Azure Stack Hub
- Update the guest tenant directory
- Configure access in Azure Stack Hub
- Create a custom role

Module 5: Manage the Azure Stack Hub Infrastructure

In this module, you will learn how monitor system health by using the REST API, monitor system health by using Syslog Server, collect diagnostic logs on demand by using Powershell, configure a storage target for infrastructure backup, and download and import update packages manually.

Lessons

- Manage system health
- Plan and configure business continuity and disaster recovery
- Manage capacity
- Update infrastructure
- Manage Azure Stack Hub by using privileged endpoints

Lab : Validating ARM Templates with Azure Stack

Lab : Using the privileged endpoint in Azure Stack

After completing this module, students will be able to:

- Include resource providers such as Event Hubs
- Manage field replacement or repair
- Configure storage targets for infrastructure backups
- Update Azure Stack Hub
- Unlock a support session
- Connect to a privileged endpoin
- Perform system diagnostics by using Test-AzureStack
- Manage partitioned GPUs