



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

Course Duration: 4 Days

Class times: 9am-4pm

Course Level: Intermediate

Language: English

Mode of Training: Virtually Instructor-Led

Prerequisites

Job Role: Administrator

Related Exam: AZ-600

Audience Profile: 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).

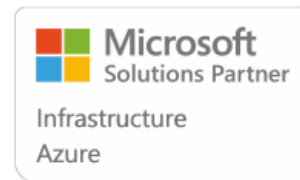
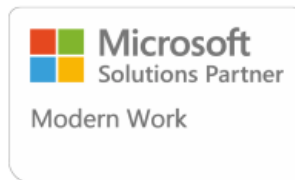
Course Outline

Module 1: Azure Stack Hub

Azure Stack Hub runs apps in an on-premises environment and delivers Azure services in your datacenter. This module aligns with the exam AZ-600: Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack Hub.

Learning objectives

-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: Manage Azure Stack Hub Marketplace

Azure Stack Hub Marketplace is used to create resources, deploy apps, and choose items. This learning path helps you prepare for Exam AZ-600: Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack Hub.

Learning objectives

- Provide an overview of Azure Stack Hub Marketplace.
- Download Marketplace items to Azure Stack Hub.
- Populate Azure Stack Hub Marketplace in a disconnected environment.
- Import and publish to Azure Stack Hub Marketplace using PowerShell.
- Add and remove a custom VM image to Azure Stack Hub.
- Create a custom Azure Stack Hub Marketplace item.
- Publish a custom Azure Stack Hub Marketplace item

Module 3: Offer an App Services resource provider for Azure Stack Hub

Azure App Service is a platform-as-a-service (PaaS) offering available on Azure Stack Hub. This learning path help you prepare for Exam AZ-600: Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack Hub.

Learning objectives

- Provide an overview of Azure App Service on Azure Stack Hub.
- Plan an App Services resource provider deployment for Azure Stack Hub.
- Deploy an App Services resource provider for Azure Stack Hub.
- Update an App Services resource provider for Azure Stack Hub.
- Scale roles based on capacity requirements for Azure Stack Hub.
- Rotate App Services secrets and certificates for Azure Stack Hub.
- Back up App Services for Azure Stack Hub.

Module 4: Offer an Event Hubs resource provider for Azure Stack Hub

Streaming and event-based solutions are supported, for both on-premises and Azure cloud processing. This learning path help you prepare for Exam AZ-600: Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack Hub.



Learning objectives

- Plan an Event Hubs resource provider deployment for Azure Stack Hub.
- Deploy an Event Hubs resource provider for Azure Stack Hub.
- Update an Event Hubs resource provider for Azure Stack Hub.
- Rotate Event Hubs secrets and certificates for Azure Stack Hub.

Module 5: Manage usage and billing for Azure Stack Hub

Azure Commerce bills you for Azure Stack Hub usage as it bills for Azure usage. This learning path helps you prepare for Exam AZ-600: Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack Hub.

Learning objectives

- Understand usage and billing for Azure Stack Hub.
- Set up usage data reporting for Azure Stack Hub.
- View and retrieve usage data by using the Usage API for Azure Stack Hub.
- Usage and billing in multi-tenant and Cloud Solution Provider (CSP) scenarios for Azure Stack Hub.
- Add a tenant for usage and billing for Azure Stack Hub.
- Usage reporting infrastructure for Cloud Solution Providers for Azure Stack Hub.

Module 6: Prepare for Azure Stack Hub deployment

This module provides the information for Azure Stack Hub deployment including networking, security, and identity. This learning path helps you prepare for Exam AZ-600: Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack Hub.

Learning objectives

- Recommend a name resolution strategy for Azure Stack Hub.
- Recommend a public and internal IP strategy for Azure Stack Hub.
- Recommend a data center firewall integration strategy for Azure Stack Hub.
- Recommend an identity provider for Azure Stack Hub.
- Validate identity provider integration for Azure Stack Hub.
- Configure the Time Server (NTP) for Azure Stack Hub.



Module 7: Manage infrastructure certificates for Azure Stack Hub

Learn to validate the generated public key infrastructure (PKI) certificates are for pre-deployment of Azure Stack Hub. This module prepares you for Exam AZ-600: Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack Hub.

Learning objectives

- Recommend certificate strategy for Azure Stack Hub.
- Validate certificates for Azure Stack Hub.
- Run secret rotation PowerShell cmdlet for external certificates for Azure Stack Hub.

Module 8: Manage Azure Stack Hub registration

Certificates with appropriate DNS names for each Azure Stack Hub public infrastructure endpoint are necessary. This module helps you to prepare for Exam AZ-600: Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack Hub.

Learning objectives

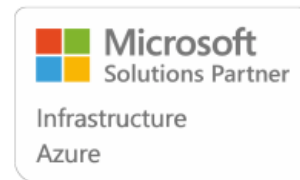
- Recommend certificate strategy for Azure Stack Hub.
- Validate certificates for Azure Stack Hub.
- Run secret rotation PowerShell cmdlet for external certificates for Azure Stack Hub.

Module 10: Manage multi-tenancy for Azure Stack Hub

Learn how to configure Azure Stack Hub to allow sign-ins from Azure AD directory tenants. This module helps you to prepare for Exam AZ-600: Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack Hub.

Learning objectives

- Configure multi-tenancy for Azure Stack Hub.
- Configure Azure Stack Hub guest directory.
- Direct users to sign in for Azure Stack Hub.
- Disable multi-tenancy for Azure Stack Hub.
- Update guest tenant directory for Azure Stack Hub.



Module 11: Manage access for Azure Stack Hub

You configure Azure Stack Hub to support users from multiple Azure Active Directory (Azure AD) tenants. This module helps you prepare for Exam AZ-600: Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack Hub.

Learning objectives

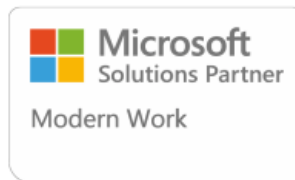
- Describe Hybrid Identity for Azure Stack Hub.
- Identify an appropriate method for access (service principal, users, groups) for Azure Stack Hub.
- Explain authentication and authorization for Azure Stack Hub.
- Provision a service principal for Azure Stack Hub
- Create a service principal that uses a certificate credential for Azure Stack Hub.
- Create a service principal that uses client secret credentials for Azure Stack Hub.
- Recommend a permission model for Azure Stack Hub.
- Set access permissions using role-based access control for Azure Stack Hub.
- Add a new Azure Stack Hub user account in AAD for Azure Stack Hub.
- Create an Azure custom role using Azure PowerShell for Azure Stack Hub.

Module 12: Manage system health on Azure Stack Hub

Use syslog to integrate Azure Stack Hub infrastructure with security solutions already deployed in your datacenter. This module prepares you for Exam AZ-600: Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack Hub.

Learning objectives

- Monitor health and alerts in Azure Stack Hub.
- Integrate external monitoring with Azure Stack Hub.
- Monitor system health by using Syslog Server.
- Manage field replacement or repair for Azure Stack Hub.
- Configure automatic diagnostic log collection for Azure Stack Hub.
- Find your Cloud ID for Azure Stack Hub.
- Collect diagnostic logs on demand by using PowerShell for Azure Stack Hub.
- Send Azure Stack Hub diagnostic logs by using the privileged endpoint.



Module 13: Azure Monitor on Azure Stack Hub

Azure Monitor on Azure Stack Hub provides base-level infrastructure metrics and logs for most services. This module prepares you for Exam AZ-600: Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack Hub.

Learning objectives

- Describe the Azure Monitor service in Azure Stack Hub.
- Explain how to use Azure Monitor on Azure Stack Hub.
- Consume monitoring data from Azure Stack Hub.

Module 14: Manage capacity for Azure Stack Hub

In this module, you will learn how to manage compute and storage capacity for Azure Stack Hub. This module prepares you for Exam AZ-600: Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack Hub.

Learning objectives

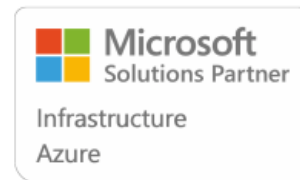
- Manage compute capacity for Azure Stack Hub.
- Manage partitioned GPUs in Azure Stack Hub.
- Add nodes in Azure Stack Hub.
- Manage storage capacity for Azure Stack Hub.
- Add IP pools in Azure Stack Hub.

Module 15: Update infrastructure for Azure Stack Hub

Learn how Azure Stack Hub updates, when to expect releases, and where to find the current release. This module prepares you for Exam AZ-600: Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack Hub.

Learning objectives

- Update Azure Stack Hub.
- Download and import update packages manually for Azure Stack Hub.
- Prepare for Azure Stack Hub updates.
- Update Azure Active Directory (AD) Home Director for Azure Stack Hub.
- Apply Azure Stack Hub original equipment manufacturer (OEM) updates.
- Use the Azure Stack Hub update activity checklist.
- Monitor updates with PowerShell in Azure Stack Hub.



Module 16: Manage Azure Stack Hub by using privileged endpoints

Learn to access the privileged endpoint (PEP) and invoke the restricted set of cmdlets for Azure Stack. This module prepares you for Exam AZ-600: Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack Hub.

Learning objectives

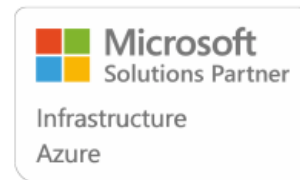
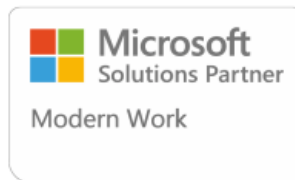
- Connect to a privileged endpoint in Azure Stack Hub.
- Configure the cloud admin user role in Azure Stack Hub.
- Unlock a support session in Azure Stack Hub.
- Close the session on the privileged endpoint in Azure Stack Hub.
- Stop and start Azure Stack Hub.
- Perform system diagnostics by using Test-AzureStack in Azure Stack Hub.

Module 17: Plan and configure business continuity and disaster recovery

Learn the best practices for deploying and managing Azure Stack Hub to help mitigate data loss. This module prepares you for Exam AZ-600: Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack Hub.

Learning objectives

- Recommend a business continuity disaster recovery (BCDR) strategy.
- Recommend a strategy for infrastructure backups.
- Enable backup for Azure Stack Hub.
- Enable backup for Azure Stack Hub with PowerShell.
- Back up Azure Stack Hub.
- Validate backup using the Azure Stack Development Kit.
- Back up storage accounts on Azure Stack Hub.



Module 18: Offer services for Azure Stack Hub

You configure and deliver offers, plans, and subscriptions as an Azure Stack Hub operator. This learning path helps you prepare for Exam AZ-600: Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack Hub.

Learning objectives

- Describe Azure Stack Hub quotas, plans, offers, and subscriptions.
- Create a Plan for Azure Stack Hub.
- Create an add-on plan for Azure Stack Hub.
- Create and manage offers for Azure Stack Hub.
- Delegate offers for Azure Stack Hub.
- Create user subscriptions for Azure Stack Hub.
- Manage subscriptions, plans, and offers using PowerShell for Azure Stack Hub.
- Change user subscription owner for Azure Stack Hub.

Module 19: Azure Stack Hub PowerShell

See how resource providers in Azure Stack Hub can be configured with PowerShell to enhance Azure capabilities. This module aligns with the exam AZ-600: Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack Hub.

Learning objectives

- Understand the resource providers and Azure PowerShell modules used for Azure Stack Hub.
- Work with PowerShell in Azure Stack Hub.

Module 20: Datacenter integration for Azure Stack Hub

For Azure Stack Hub, you apply the same governance to assets in your datacenter as in Azure. This module aligns with the exam AZ-600: Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack Hub.

Learning objectives

- Describe what is necessary for running Azure in your datacenter.
- Outline capacity planning considerations.
- Choose an identity provider for Azure Stack Hub.
- Describe connection models for Azure Stack Hub.



- Distinguish licensing models for Azure Stack Hub.
- Identify naming decisions for Azure Stack Hub.
- Describe certificate requirements for Azure Stack Hub.
- Describe how to connect Azure Stack Hub to Azure.
- Outline hybrid connectivity options for Azure Stack Hub.