WS-013T00: Azure® Stack HCI

Duration: 3 Days
Method: Instructor-Led Training (ILT) | Live Online Training

Course Description

This advanced course is to cover advanced topics related to Windows Server® software-defined datacentre, Azure Stack HCI, and other Azure Stack products. The course also describes the use of existing Microsoft® System Centre products to implement and manage software-defined datacentres with Windows Server 2019.

Target Audience

This course is intended for:
- Administrators
- IT Professionals who:
  - Want to use existing Microsoft System Centre products to implement and manage software-defined datacentres with Windows Server 2019.
  - Manage on-premises Windows Server environments and want to use Azure to manage server workloads and run their virtual workloads on Windows Server 2019.
  - Want to run their virtual workloads on Windows Server 2019 at medium-to-large scale using software-defined datacentre and hyper-converged principles.

Prerequisites

To attend this course, candidates must have:
- Intermediate experience with managing Windows Server operating systems and Windows Server virtualized workloads in on-premises scenarios.
- Intermediate experience with common Windows Server management tools (implied by the first prerequisite).
- Intermediate knowledge of core Microsoft compute, storage, networking, and virtualization technologies.
- Intermediate knowledge of Windows Server-based compute and storage high-availability technologies.
- Basic experience with implementing and managing Infrastructure as a service (IaaS) services in Microsoft Azure.
- Basic knowledge of Azure Active Directory® (Azure AD).
- Intermediate knowledge of Microsoft virtualization security-related technologies.
- Intermediate knowledge of PowerShell® scripting and PowerShell Desired State Configuration (DSC).

Course Objectives

Upon successful completion of this course, attendees will be able to:

- Describe the Azure Stack portfolio, including Azure Stack HCI, Azure Stack Hub, and Azure Stack Edge.
- Describe the Azure Stack HCI core technologies and management tools.
- Describe the process of a typical Azure Stack HCI implementation.
- Identify Azure Stack HCI hybrid capabilities.
- Implement, manage, and maintain workloads on Azure Stack HCI.
- Plan for and implement Azure Stack HCI Storage, including Storage QoS and Storage Replica.
- Plan for Azure Stack HCI Networking.
- Implement Software Defined Networks in Azure Stack HCI.

Course Topics

Module 1: Introducing Azure Stack HCI

- Overview of Azure Stack HCI
- Overview of Azure Stack HCI Technologies
- Overview of Azure Stack HCI Management Tools
- Overview of the Azure Stack HCI Hybrid Capabilities

Module 2: Operating and Maintaining Azure Stack HCI

- Implementing and Managing Workloads on Azure Stack HCI
- Maintaining Azure Stack HCI

Module 3: Planning for and Implementing Azure Stack HCI Storage

- Overview of Azure Stack HCI Storage Core Technologies
- Planning for Storage Spaces Direct in Azure Stack HCI
- Implementing a Storage Spaces Direct-Based Hyper-Converged Infrastructure
- Managing Storage Spaces Direct in Azure Stack HCI
- Planning for and Implementing Storage QoS
- Planning for and Implementing Storage Replica

Module 4: Planning for and Implementing Azure Stack HCI Networking

- Overview of Azure Stack HCI Core Networking Technologies
- Overview of Network Virtualization and Software-Defined Networking
- Planning for and Implementing Switch Embedded Teaming
- Planning for and Implementing Datacenter Firewall
- Planning for and Implementing Software Load Balancing
- Planning for and Implementing RAS Gateways

LABS INCLUDED