20533: Implementing Microsoft® Azure® Infrastructure Solutions

Duration: 5 Days
Method: Instructor-Led Training (ILT) | Live Online Training

Course Description

This course teaches participants how to provision and manage services in Microsoft Azure. They will learn how to implement infrastructure components such as virtual networks, virtual machines, containers, web and mobile apps, and storage in Azure. Participants also will learn how to plan for and manage Azure AD and configure Azure AD integration with on-premises Active Directory® domains.

Target Audience

This course is intended for:

- IT professionals who:
    - Have some knowledge of cloud technologies and want to learn more about Azure.
    - Want to deploy, configure, and administer services, containers, and virtual machines (VMs) in Azure.
    - Use Microsoft System Centre to manage and orchestrate server infrastructure.
    - Want to use Azure to host websites and mobile app back-end services.
    - Are experienced in other non-Microsoft cloud technologies, meet the course prerequisites, and want to cross-train on Azure.
- Windows Server administrators who are looking to evaluate and migrate on-premises Active Directory roles and services to the cloud.

Prerequisites

To attend this course, candidates must have:

- Completed the *10979: Introduction to Microsoft Azure for IT Professionals* course or have the equivalent knowledge and skills.

Course Objectives

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

- Describe Azure architecture components, including infrastructure, tools, and portals.
- Implement and manage virtual networking within Azure and configure cross-premises connectivity.
- Plan and create Azure VMs.
- Configure, manage, and monitor Azure VMs to optimize availability and reliability.
- Implement the Azure App Service.
- Plan and implement storage, backup, and recovery services.
- Implement container-based workloads in Azure.
- Deploy, configure, monitor, and diagnose cloud services.
- Implement Azure AD. Manage an Active Directory infrastructure in a hybrid environment.
- Automate operations in Azure by using Azure Automation runbooks.

Course Topics

Module 1: Introduction to Azure

- Cloud Technology Overview
- Overview of Azure
- Managing Azure with the Azure Portal
- Managing Azure with Windows PowerShell
- Managing Azure with Azure CLI
- Overview of Azure Deployment Models
- Managing and Monitoring Azure Resources

Module 2: Implementing and Managing Azure Networks

- Overview of Azure Networking
- Implementing and Managing Virtual Networks
- Configuring an Azure Virtual Network
- Configuring Virtual Network Connectivity
- Overview of Azure Classic Networking

Module 3: Implement Virtual Machines

- Overview of Azure VMs
- Planning Deployment of Azure VMs
- Deploying Azure VMs
- Overview of Classic Azure VMs

Module 4: Managing Virtual Machines

- Configuring Azure VMs
- Managing Disks of Azure VMs
- Managing and Monitoring Azure VMs
- Managing Classic Azure VMs

Module 5: Implementing Azure App Services

- Introduction to App Service
- Planning App Deployment in App Service
- Implementing and Maintaining Web Apps
- Configuring Web Apps
- Monitoring Web Apps and WebJobs
- Implementing Mobile Apps
- Implementing Traffic Manager

Course Topics *Continued*

Module 6: Planning and Implementing Storage, Backup, and Recovery Services

- Planning Storage
- Implementing and Managing Azure Storage
- Implementing Azure CDNs
- Implementing Azure Backup
- Planning and Implementing Azure Site Recovery

Module 7: Implementing Containers in Azure

- Implementing Windows and Linux Containers in Azure
- Implementing Azure Container Service

Module 8: Implementing Azure Cloud Services

- Planning and Deploying Azure Cloud Services
- Managing and Maintaining Azure Cloud Services

Module 9: Implementing the Azure Active Directory

- Creating and Managing Azure AD Tenants
- Configuring Application and Resource Access with Azure AD
- Overview of Azure AD Premium

Module 10: Managing an Active Directory in a Hybrid Environment

- Extending an On-Premises Active Directory Domain to Azure IaaS
- Implementing Directory Synchronization by Using Azure AD Connect
- Implementing SSO in Hybrid Scenarios

Module 11: Implementing Azure-Based Management and Automation

- Implementing OMS
- Implementing Azure Automation
- Implementing Automation Runbooks
- Implementing Azure Automation–Based Management

LABS INCLUDED