

20533 Implementing Microsoft Azure Infrastructure Solutions

Duration: 5 Day(s)

Overview

This course is intended for IT professionals who are familiar with managing on-premises IT deployments that include AD DS, virtualization technologies, and applications. The students typically work for organizations that are planning to locate some or all of their infrastructure services on Azure. This course also is intended for IT professionals who want to take the Microsoft Certification exam, 70-533, Implementing Azure Infrastructure Solutions.

Who Should Attend

This course is intended for IT professionals who have some knowledge of cloud technologies and want to learn more about Azure. · IT professionals who want to deploy, configure, and administer services and virtual machines (VMs) in Azure. · IT professional who use Microsoft System Center to manage and orchestrate server infrastructure. · Windows Server administrators who are looking to evaluate and migrate on-premises Active Directory roles and services to the cloud. · IT professionals who want to use Windows Azure to host websites and mobile app backend services. · IT professionals who are experienced in other non-Microsoft cloud technologies, meet the course prerequisites, and want to cross-train on Azure. · IT professionals who want to take the Microsoft Certification exam 70-533, Implementing Azure Infrastructure Solutions.

Course Objectives

After completing this course, students will be able to:

- Describe Azure architecture components, including infrastructure, tools, and portals.
- Implement and manage virtual networking within Azure and connect to on-premises environments.
- Plan and create Azure virtual machines.
- Configure, manage, and monitor Azure virtual machines to optimize availability and reliability.
- Deploy and configure web apps and mobile apps.
- Implement, manage, backup, and monitor storage solutions.
- Plan and implement data services based on SQL Database to support applications.
- Deploy, configure, monitor, and diagnose cloud services.
- Create and manage Azure AD tenants, and configure application integration with Azure AD.
- Integrate on-premises Windows AD with Azure AD.
- Automate operations in Azure management by using automation.

Course Outline

1 - Introduction to Azure

- Cloud technology overview
- Overview of Azure
- Managing Azure with the Azure portal
- Managing Azure with Windows PowerShell
- Overview of Azure Resource Manager
- Azure management services
- Lab : Managing Microsoft Azure

2 - Implementing and Managing Azure Networks

- Overview of Azure networking
- Implementing and managing Azure virtual networks
- Configuring Azure virtual networks
- Configuring Azure virtual network connectivity
- Overview of Azure networking in an infrastructure as a service (IaaS) version 1 (v1)
- Lab : Using a deployment template to implement Azure virtual networks
- Lab : Configuring connectivity between the IaaS v1 and IaaS version 2 (v2)

3 - Implement Virtual Machines

- Overview of IaaS v2 virtual machines
- Planning for Azure virtual machines
- Deploying Azure IaaS v2 virtual machines
- Authoring Azure Resource Manager templates
- Overview of IaaS v1 virtual machines
- Lab : Creating IaaS v2 virtual machines in Azure
- Lab : Deploying IaaS v2 virtual machines by using Azure Resource Manager templates

4 - Managing Virtual Machines

- Configuring virtual machines
- Configuring virtual machine disks
- Managing and monitoring Azure virtual machines
- Managing IaaS v1 virtual machines
- Lab : Managing Azure virtual machines

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
- Traffic Manager
- Lab : Implementing websites

6 - Planning and implementing storage, backup, and recovery services

- Planning storage
- Implementing and managing storage
- Implementing Azure Content Delivery Networks
- Implementing Azure Backup
- Planning for and implementing Azure Site Recovery
- Lab : Planning and implementing storage

7 - Planning and implementing Azure SQL Database

- Planning and deploying Azure SQL Database
- Implementing and managing Azure SQL Database
- Managing Azure SQL Database security
- Monitoring Azure SQL Database
- Managing Azure SQL Database business continuity
- Lab : Planning and implementing Azure SQL Database

8 - Implementing PaaS cloud services

- Planning and deploying PaaS cloud services
- Managing and maintaining cloud services
- Lab : Implementing PaaS cloud services

9 - Implementing Azure Active Directory

- Creating and managing Azure AD tenants
- Configuring application and resource access with Azure AD
- Overview of Azure AD Premium
- Lab : Implementing Azure AD

10 - Managing Active Directory in a hybrid environment

- Extending on-premises Active Directory domain to Azure
- Implementing directory synchronization by using Azure AD Connect
- Implementing federation
- Lab : Implementing and managing Azure AD synchronization

11 - Implementing Azure-based management and automation

- Implementing Microsoft Operations Management Suite (OMS)
- Implementing Azure Automation
- Implementing Automation runbooks
- Managing Azure Automation
- Lab : Implementing Automation