

40 HORAS

INTRODUCTION

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

AUDIENCIA

This course is intended for IT professionals who are familiar with managing on-premises IT deployments that include Active Directory Domain Services (AD DS), virtualization technologies, and applications. 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 Microsoft Azure Infrastructure Solutions."

AT COURSE COMPLETION

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 configure cross-premises connectivity.
- Plan and create Azure VMs.
- Configure, manage, and monitor Azure VMs to optimize availability and reliability.
- Implement 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.

PREREQUISITES

Before attending this course, students must have the following technical knowledge:

- Completed the Microsoft Certified Systems Administrator (MCSA) certification in Windows Server 2012 or Windows Server 2016.

- Understanding of on-premises virtualization technologies, including: VMs, virtual networking, and virtual hard disks.
- Understanding of network configuration, including: TCP/IP, Domain Name System (DNS), virtual private networks (VPNs), firewalls, and encryption technologies.
- Understanding of websites, including: how to create, configure, monitor and deploy a website on Internet Information Services (IIS).
- Understanding of Active Directory concepts, including: domains, forests, domain controllers, replication, Kerberos protocol, and Lightweight Directory Access Protocol (LDAP).
- Understanding of resilience and disaster recovery, including backup and restore operations.

COURSE OUTLINE

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 networking

- 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: Implementing virtual machines

- Overview of Azure VMs
- Planning deployment of Azure VMs
- Deploying Azure VMs
- Overview of classic Azure VMs

Module 4: Managing Azure VMs

- 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

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

- Deploying a cloud service
- Configuring deployment slots and Remote Desktop Protocol (RDP)
- Monitoring cloud services

Module 9: Implementing 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 infrastructure 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