



20533: Implementing Microsoft® Azure® Infrastructure Solutions

Duration: 5 Days

Method: Instructor-Led

*Certification: Microsoft® Certified Systems Administrator (MCSA):
Linux on Azure® or Cloud Platform — Exam: 70-533 Implementing
Microsoft® Azure® Infrastructure Solutions*

Course Description

This course is intended for IT professionals who are familiar with managing on-premises IT deployments that include AD DS, virtualization technologies, and applications. Participants typically work for organizations that are planning to locate some or all of their infrastructure services on Azure®.

Target Audience

This course is intended for:

- 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 certification exam.

Prerequisites

To attend this course, participants must have the following technical knowledge:

- Completed the MCSA certification in Windows Server® 2012.
- Understanding of on-premises virtualization technologies, including: virtual machines, virtual networking, and virtual hard disks (VHDs).
- Understanding of network configuration, including: TCP/IP, Domain Name System (DNS), virtual private networks (VPNs), firewalls, and encryption technologies.



Prerequisites, *Continued*

- 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 database concepts, including: tables, queries, Structured Query Language (SQL), and database schemas.
- Understanding of resilience and disaster recovery, including backup and restore operations.

Course Objectives

Upon successful completion of this course, participants 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 Content

Module 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

Module 2: Implementing and Managing Azure® Networking

- Overview of Azure® networking
- Implementing and managing Azure® virtual networks
- Configuring Azure® virtual networks
- Configuring Azure® virtual network connectivity
- Overview of Azure® classic networking



Course Content, *Continued*

Module 3: Implementing Virtual Machines

- Overview of Azure® Resource Manager virtual machines
- Planning for Azure® virtual machines
- Deploying Azure® Resource Manager virtual machines
- Authoring Azure® Resource Manager templates
- Overview of classic virtual machines

Module 4: Managing Virtual Machines

- Configuring virtual machines
- Configuring virtual machine disks
- Managing and monitoring Azure® virtual machines
- Managing classic virtual machines

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
- Traffic Manager

Module 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

Module 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

Module 8: Implementing PaaS Cloud Services

- Planning and deploying PaaS cloud services
- Managing and maintaining cloud services



Course Content, *Continued*

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 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 federation

Module 11: Implementing Azure®-Based Management and Automation

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

LABS INCLUDED

