

Microsoft Azure Administrator

Learn via: **Classroom/Virtual**

Duration: **5 Days**

Overview

This course teaches IT Professionals how to manage their Azure subscriptions, create and scale virtual machines, implement storage solutions, configure virtual networking, back up and share data, connect Azure and on-premises sites, manage network traffic, implement Azure Active Directory, secure identities, and monitor your solution.

Target Audience

This course is for Azure Administrators. Azure Administrators manage the cloud services that span storage, networking, and compute cloud capabilities, with a deep understanding of each service across the full IT lifecycle. They take end-user requests for new cloud applications and make recommendations on services to use for optimal performance and scale, as well as provision, size, monitor and adjust as appropriate. This role requires communicating and coordinating with vendors. Azure Administrators use the Azure Portal and as they become more proficient they use PowerShell and the Command Line Interface.

Prerequisites

- 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 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.

Outline

Module 1: Azure Administration

In this module, you'll learn about tooling Azure Administrator uses to manage their infrastructure. This includes the Azure Portal, Cloud Shell, Azure PowerShell, CLI, Resource Manager, and Resource Manager Templates. The demonstrations in this module will ensure you are successful in the course labs.

Lessons

- Resource Groups
- Azure PowerShell and CLI
- Resource Manager
- ARM Templates

Module 2: Virtual Machines

In this module, you'll learn about Azure virtual machines including planning, creating, availability and extensions.

Lessons

- Virtual Machine Planning
- Creating Virtual Machines
- Virtual Machine Availability
- Virtual Machine Extensions
- Lab : Deploy and Manage Virtual Machines

Module 3: Azure Storage

In this module, you'll learn about basic storage features including storage accounts, blob storage, Azure files, and storage security.

Lessons

- Storage Accounts
- Azure Blobs
- Azure Files
- Storage Security
- Lab : Deploy and Manage Virtual Machines

Module 4: Virtual Networking

In this module, you'll learn about basic virtual networking concepts like virtual networks, IP addressing, Azure DNS, and network security groups.

Lessons

- Virtual Networks
- IP Addressing
- Azure DNS
- Network Security Groups
- Lab : Implement and Manage Virtual Networking

Module 5: Data Protection

In this module, you'll learn about data replication strategies, backing up files and folders, and virtual machine backups.

Lessons

- Data Replication
- File and Folder Backups
- Virtual Machine Backups
- Lab : Azure Site Recovery Between Regions

Module 6: Intersite Connectivity

In this module, you'll learn about intersite connectivity features including VNet Peering, VNet-to-VNet connections, Site-to-Site Connections, and ExpressRoute.

Lessons

- Service Endpoints and Network Routing
- VNet-to-VNet Connections
- ExpressRoute
- Lab : VNet Peering and Service Chaining

Module 7: Network Traffic Management

In this module, you'll learn about network traffic strategies including service endpoints, network routing, Azure Load Balancer, and Azure Traffic Manager.

Lessons

- Service Endpoints and Network Routing
- Azure Load Balancer
- Azure Traffic Manager
- Lab : Load Balancer and Traffic Manager

Module 8: Subscriptions and Accounts

In this module, you'll learn about managing your subscriptions and accounts including role-based access control, users and groups, Azure policy, and billing.

Lessons

- Subscriptions and Accounts
- Role-based Access Control (RBAC)
- Users and Groups
- Azure Policy
- Billing
- Lab : Governance and Compliance

Module 9: Azure Active Directory

In this module, you'll learn about Azure Active Directory (AD) including Azure AD Connect and Azure AD Join.

Lessons

- Azure Active Directory
- Azure AD Connect
- Azure AD Join
- Lab : Implement Directory Synchronization

Module 10: Securing Identities

In this module, you'll learn how to secure identities including Multi-Factor Authentication, Azure AD Identity Protection, and Self-Service Password Reset.

Lessons

- Multi-Factor Authentication
- Azure AD Identity Protection
- Self-Service Password Reset
- Lab : Azure AD Identity Protection
- Lab : Self-Service Password Reset

Module 11: Sharing Data

In this module, you'll learn how to effectively share data using Import and Export service, Data Box, Content Delivery Network, and File Sync.

Lessons

- Import and Export Service
- Data Box
- Content Delivery Network
- File Sync
- Lab : File Sync

Module 12: Monitoring

In this module, you'll learn about monitoring your Azure infrastructure including Azure Monitor, alerting, log analytics, and Network Watcher.

Lessons

- Azure Monitor
- Azure Alerts
- Log Analytics
- Network Watcher
- Lab : File Sync