

MS-AZ104T00: MICROSOFT AZURE ADMINISTRATOR

DURATION	LEVEL	TECHNOLOGY	DELIVERY METHOD	CERTIFICATION
4 Days	Intermediate	Azure	Instructor-led	AZ-104 Exam

INTRODUCTION

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

AUDIENCE PROFILE

This course is for Azure Administrators. The Azure Administrator implements, manages, and monitors identity, governance, storage, compute, and virtual networks in a cloud environment. The Azure Administrator will provision, size, monitor, and adjust resources as appropriate.

PREREQUISITES

Successful Azure Administrators start this role with experience in virtualization, networking, identity, and storage.

- Understanding of on-premises virtualization technologies, including: VMs, virtual networking, and virtual hard disks.
- Understanding of network configurations, including TCP/IP, Domain Name System (DNS), virtual private networks (VPNs), firewalls, and encryption technologies.
- Understanding of Active Directory concepts, including users, groups, and role-based access control.
- Understanding resilience and disaster recovery, including backup and restore operations.

COURSE CONTENT

Module 1: Prerequisites for Azure administrators

Learn the basic Azure concepts you need to know as an Azure administrator.

Module 1.1: Introduction to Azure Cloud Shell

Describe Microsoft Azure Cloud Shell, learn how it works, and explore basic steps for its usage.

Module 1.3: Deploy Azure infrastructure by using JSON ARM templates

Write JSON Azure Resource Manager templates (ARM templates) by using Visual Studio Code to deploy your infrastructure to Azure consistently and reliably.

Module 2: Manage identities and governance in Azure

Learn how to manage Azure Active Directory objects, role-based access control (RBAC), subscriptions, and governance in Azure

Module 2.1: Understand Microsoft Entra ID

This module explains Microsoft Entra ID. You'll compare Microsoft Entra ID to Active Directory DS, learn about Microsoft Entra ID P1 and P2, and explore Microsoft Entra Domain Services for managing domain-joined devices and apps in the cloud.

COURSE OBJECTIVES

After completing this course, students will be able to:

- Manage Azure identities and governance
- Implement and manage storage
- Deploy and manage Azure compute resources
- Configure and manage virtual networking
- Monitor and back up Azure resources

Module 1.2: Introduction to PowerShell

Learn about the basics of PowerShell, a cross-platform command-line shell and scripting language that's built for task automation and configuration management. Learn what PowerShell is, what it's used for, and how to use it.

Module 1.2: Create, configure, and manage identities

Access to cloud-based workloads needs to be controlled centrally by providing a definitive identity for each user and resource. You can ensure employees and vendors have just-enough access to do their job.

Module 2.4: Azure Policy initiatives

Module 2.3: Describe the core architectural components of Azure

This module explains the basic infrastructure components of Microsoft Azure. You'll learn about the physical infrastructure, how resources are managed, and have a chance to create an Azure resource.

Module 2.5: Secure your Azure resources with Azure role-based access control (Azure RBAC)

Learn how to use Azure RBAC to manage access to resources in Azure.

Module 3: Configure and manage virtual networks for Azure administrators

Learn how to configure and manage Azure network capabilities like connectivity services, application protection, application delivery, and network monitoring services.

Module 3.1: Configure virtual networks

Learn to configure virtual networks and subnets, including IP addressing.

Module 3.3: Host your domain on Azure DNS

Create a DNS zone for your domain name. Create DNS records to map the domain to an IP address. Test that the domain name resolves to your web server.

Module 3.5: Introduction to Azure Load Balancer

This module explains what Azure Load Balancer does, how it works, and when you should choose to use Load Balancer as a solution to meet your organization's needs.

Module 3.7: Introduction to Azure Network Watcher

Azure Network Watcher allows your organization to detect and monitor issues related to the network performance of infrastructure as a service (IaaS) resource in Microsoft Azure. This module explains what Network Watcher does, how it works, and when you should choose to use Network Watcher as a solution to meet your organization's needs.

Module 4: Implement and manage storage in Azure

Learn how to manage storage accounts, data in Azure Storage, and Azure File and Blob storage.

Module 4.1: Configure storage accounts

Learn how to configure storage accounts, including replication and endpoints.

Module 4.3: Configure Azure Storage security

Learn how to configure common Azure Storage security features like storage access signatures.

Module 5: Deploy and manage Azure compute resources

Learn how to deploy and configure virtual machines, containers, and Web Apps in Azure.

Module 5.1: Introduction to Azure virtual machines

Learn about the decisions you make before creating a virtual machine, the options to create and manage the VM, and the extensions and services you use to manage your VM.

Module 5.3: Configure Azure App Service plans

Learn how to configure an Azure App Service plan, including pricing and scaling.

Module 5.5: Configure Azure Container Instances

In this module, you learn how Azure Policy initiatives can be used to enforce organizational standards, assess compliance at scale, and manage Azure resources effectively.

Module 2.6: Allow users to reset their password with Microsoft Entra self-service password reset

Evaluate self-service password reset to allow users in your organization to reset their passwords or unlock their accounts. Set up, configure, and test self-service password reset.

Module 3.2: Configure network security groups

Learn how to implement network security groups, and ensure network security group rules are correctly applied.

Module 3.4: Configure Azure Virtual Network peering

Learn to configure an Azure Virtual Network peering connection and address transit and connectivity concerns.

Module 3.6: Introduction to Azure Application Gateway

This module explains what Azure Application Gateway does, how it works, and when you should choose to use Application Gateway as a solution to meet your organization's needs.

Module 4.2: Configure Azure Blob Storage

Learn how to configure Azure Blob Storage, including tiers and object replication.

Module 4.4: Configure Azure Files

Learn how to configure Azure Files and Azure File Sync.

Module 5.2: Configure virtual machine availability

Learn how to configure virtual machine availability including vertical and horizontal scaling.

Module 5.4: Configure Azure App Service

Learn how to configure and monitor Azure App Service instances, including deployment slots.

Learn how to configure Azure Container Instances including container groups.

Module 6: Monitor and back up Azure resources

Learn how to monitor resources by using Azure Monitor and implement backup and recover in Azure.

Module 6.1: Introduction to Azure Backup

Evaluate whether Azure Backup is appropriate to use for your backup needs.

Module 6.2: Protect your virtual machines by using Azure Backup

Use Azure Backup to help protect on-premises servers, virtual machines, SQL Server, Azure file shares, and other workloads.

ASSOCIATED CERTIFICATIONS & EXAM

This course will prepare delegates to write the AZ-104 Microsoft Certified: Azure Administrator Associate Exam.