Skills measured as of July 28, 2023

Audience profile

Candidates for this exam should have subject matter expertise in implementing, managing, and monitoring an organization's Microsoft Azure environment, including virtual networks, storage, compute, identity, security, and governance.
An Azure administrator often serves as part of a larger team dedicated to implementing an organization's cloud infrastructure. Azure administrators also coordinate with other roles to deliver Azure networking, security, database, application development, and DevOps solutions.
Candidates for this exam should be familiar with operating systems, networking, servers, and virtualization. In addition, professionals in this role should have experience using PowerShell, Azure Command-Line Interface (CLI), the Azure portal, Azure Resource Manager (ARM) templates, and Microsoft Azure Active Directory (Azure AD), part of Microsoft Entra.

- Manage Azure identities and governance (20–25%)
- Implement and manage storage (15–20%)
- Deploy and manage Azure compute resources (20–25%)
- Implement and manage virtual networking (15–20%)
- Monitor and maintain Azure resources (10–15%)

Manage Azure identities and governance (20–25%)

Manage Azure AD users and groups

- Create users and groups
- Manage user and group properties
- Manage licenses in Azure AD
- Manage external users
- Configure self-service password reset (SSPR)

Manage access to Azure resources

- Manage built-in Azure roles
- Assign roles at different scopes
- Interpret access assignments

Manage Azure subscriptions and governance

- Implement and manage Azure Policy
- Configure resource locks
- Apply and manage tags on resources
- Manage resource groups

- Manage subscriptions
- Manage costs by using alerts, budgets, and Azure Advisor recommendations
- Configure management groups

Implement and manage storage (15–20%)

Configure access to storage

- Configure Azure Storage firewalls and virtual networks
- Create and use shared access signature (SAS) tokens
- Configure stored access policies
- Manage access keys
- Configure identity-based access for Azure Files

Configure and manage storage accounts

- Create and configure storage accounts
- Configure Azure Storage redundancy
- Configure object replication
- Configure storage account encryption
- Manage data by using Azure Storage Explorer and AzCopy

Configure Azure Files and Azure Blob Storage

- Create and configure a file share in Azure Storage
- Create and configure a container in Blob Storage
- Configure storage tiers
- Configure snapshots and soft delete for Azure Files
- Configure blob lifecycle management
- Configure blob versioning

Deploy and manage Azure compute resources (20–25%)

Automate deployment of resources by using Azure Resource Manager (ARM) templates or Bicep files

- Interpret an ARM template or a Bicep file
- Modify an existing ARM template
- Modify an existing Bicep file
- Deploy resources by using an ARM template or a Bicep file
- Export a deployment as an ARM template or compile a deployment as a Bicep file

Create and configure virtual machines

- Create a virtual machine
- Configure Azure Disk Encryption
- Move a virtual machine to another resource group, subscription, or region
- Manage virtual machine sizes
- Manage virtual machine disks
- Deploy virtual machines to availability zones and availability sets
- Deploy and configure an Azure Virtual Machine Scale Sets

Provision and manage containers in the Azure portal

- Create and manage an Azure container registry
- Provision a container by using Azure Container Instances
- Provision a container by using Azure Container Apps
- Manage sizing and scaling for containers, including Azure Container Instances and Azure Container Apps

Create and configure Azure App Service

- Provision an App Service plan
- Configure scaling for an App Service plan
- Create an App Service
- Configure certificates and TLS for an App Service
- Map an existing custom DNS name to an App Service
- Configure backup for an App Service
- Configure networking settings for an App Service
- Configure deployment slots for an App Service

Implement and manage virtual networking (15–20%)

Configure and manage virtual networks in Azure

- Create and configure virtual networks and subnets
- Create and configure virtual network peering
- Configure public IP addresses
- Configure user-defined network routes
- Troubleshoot network connectivity

Configure secure access to virtual networks

- Create and configure network security groups (NSGs) and application security groups
- Evaluate effective security rules in NSGs

- Implement Azure Bastion
- Configure service endpoints for Azure platform as a service (PaaS)
- Configure private endpoints for Azure PaaS

Configure name resolution and load balancing

- Configure Azure DNS
- Configure an internal or public load balancer
- Troubleshoot load balancing

Monitor and maintain Azure resources (10–15%)

Monitor resources in Azure

- Interpret metrics in Azure Monitor
- Configure log settings in Azure Monitor
- Query and analyze logs in Azure Monitor
- Set up alert rules, action groups, and alert processing rules in Azure Monitor
- Configure and interpret monitoring of virtual machines, storage accounts, and networks by using Azure Monitor Insights
- Use Azure Network Watcher and Connection Monitor

Implement backup and recovery

- Create a Recovery Services vault
- Create an Azure Backup vault
- Create and configure a backup policy
- Perform backup and restore operations by using Azure Backup
- Configure Azure Site Recovery for Azure resources
- Perform a failover to a secondary region by using Site Recovery
- Configure and interpret reports and alerts for backups

Completed

1. AZ-104: Manage identities and governance in Azure
2. Configure Azure Active Directory

Introduction

100 XP

- 1 minute

Transitioning workloads to the cloud involves more than just moving servers, websites, and data. Companies need to think about how to secure their resources and identify authorized users.

In this module, your company is planning to implement Azure Active Directory (Azure AD) and features like Azure AD Join and Self-Service Password Reset. You need to understand how to choose the Azure AD edition that works best for your organization, and explore how to implement required features.

Learning objectives

In this module, you learn how to:

- Define Azure AD concepts, including identities, accounts, and tenants.
- Describe Azure AD features to support different configurations.
- Understand differences between Azure AD and Active Directory Domain Services (AD DS).
- Choose between supported editions of Azure AD.
- Implement the Azure AD join feature.
- Use the Azure AD self-service password reset feature.

Skills measured

The content in the module helps you prepare for Exam AZ-104: Microsoft Azure Administrator. The module concepts are covered in:

Manage identities and governance in Azure (15-20%)

- Manage Azure Active Directory objects
- Configure self-service password reset
- Configure Azure AD join