Azure Administrator Certification Pathway

Getting Started

Azure Skills Navigator

Microsoft

System Administrator

Looking to develop your Microsoft Azure knowledge and skills? You're on the right path!

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This Azure learning journey is designed for two different types of explorers:

Systems administrators just beginning their careers in the cloud. These IT professionals manage the configuration, performance, and security of Windows Server environments on-premises or operate, protect, and monitor cloud workloads. This includes IT Managers looking to enhance their existing on-premises systems with the hybrid benefits of cloud capabilities.

Students who are just getting started learning about Azure

This guide maps out your itinerary for deepening your Azure knowledge, drawing on a wide array of Microsoft resources. You'll begin by diving into the fundamental concepts of cloud computing and Azure core infrastructure services, then move on to management, monitoring, security, and compliance. These modules are designed to be completed in order, step by step, as outlined in this guide

Microsoft Resources:

- Build your Tech resilience
- Azure Fundamentals
- Virtualization - Sharing cloud resources
- Linux on Azure
- Microsoft Azure Blog
- Microsoft Trust Centre | Compliance

- Azure Community Support
- Threat Modeling Security Fundamentals
- Intro to data protection and privacy regulations
- Get started with Azure Advisor
- Automate administrative tasks by using__PowerShell

Role Based Certification
Microsoft Certified: Azure Administrator Associate

AZ-104: Microsoft Azure Administrator

Skills Measured:

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

Course Page

GitHub Labs

Exam Page

Resource Guide

- Prerequisites for Azure Administrators

Manage Azure identities and governance
- Configure Azure Active Directory
- Configure user and group accounts
- Configure subscriptions
- Configure Azure policy
- Configure role-based access control
- Create Azure users and groups in Azure Active__Directory
- Secure your Azure resources with Azure role-__based access control (Azure RBAC)
- Allow users to reset their password with Azure__Active Directory self-service password reset

Implement and manage storage
- Configure storage accounts
- Configure blob storage
- Configure storage security
- Configure Azure files and Azure File Sync
- Configure storage with tools
- Create an Azure Storage account
- Control access to Azure Storage with shared access signatures
- Upload, download, and manage data with Azure__Storage Explorer

Deploy and manage Azure compute resources
- Configure virtual machines
- Configure virtual machine availability
- Configure virtual machine extensions
- Configure app service plans
- Configure Azure App Services
- Configure Azure Container Instances
- Configure Azure Kubernetes Service
- Manage virtual machines with the Azure CLI
- Create a Windows virtual machine in Azure
- Host a web application with Azure App__Service
- Protect your virtual machine settings with__Azure Automation State Configuration

Configure and manage virtual networking
- Configure virtual networks
- Configure network security groups
- Configure Azure Firewall
- Configure Azure DNS
- Configure virtual network peering
- Configure VPN Gateway
- Configure ExpressRoute and Virtual WAN
- Configure network routing and endpoints

- Configure Azure Load Balancer
- Configure Azure Application Gateway
- Design an IP addressing schema for your__Azure deployment
- Distribute your services across Azure virtual networks and integrate them by__using virtual network peering
- Host your domain on Azure DNS
- Manage and control traffic flow in your__Azure deployment with routes
- Improve application scalability and resiliency by using Azure Load Balancer

Monitor and back up Azure resources
- Configure file and folder backups
- Configure virtual machine backups
- Configure Azure Monitor
- Configure Azure alerts
- Configure Log Analytics
- Configure Network Watcher
- Improve incident response with alerting on__Azure
- Analyze your Azure infrastructure by using__Azure Monitor logs
- Monitor performance of virtual machines__by using Azure Monitor VM Insights

See Page 2 for additional resources and links

Azure Administrator Certification Pathway

Supporting Documentation

Managing Azure Active Directory (Azure AD)
- What is Azure Active Directory?
- Compare AD to Azure AD
- Azure AD Objects
- Creating & Managing Users
- Setting up self service password resets
- What is Azure AD join?

Role Based Access Control (RBAC)
- What is Azure RBAC? | Built in RBAC roles
- RBAC – add/remove assignments

Subscriptions & Governance
- Principles of resource groups
- Get started with the Azure Enterprise portal
- Management/Resource Groups
- What is Azure Policy?

Storage:
- Azure Storage Overview | Storage Services
- Replication – Azure Storage Redundancy
- Azure Key Vault – Customer Managed Keys
- Azure Blob Storage | Files vs Blobs
- What is Azure Import/Export?

Virtual Machines:
- Windows VM in Azure Documentation
- Availability options for VMs in Azure
- Regions and Availability Zones in Azure
- Use VM Images from Azure Marketplace
- Define Azure Resource Manager templates
- Using Custom Script Extensions
- Moving a VM
- Azure Disk Encryption for Windows VMs

Containers:
- Container Instances Documentation
- YAML Files | Docker
- AKS Kubernetes – 50 days zero to hero

Virtual Networking:
- Virtual Network Documentation
- Manage DNS Records
- What is Azure Load Balancer?

Microsoft Learn
- Best practices for Azure migration
- Prepare to migrate VMware workloads to Azure by deploying Azure VMware Solution
- Improve your reliability with modern operations practices
- Secure your cloud applications in Azure
- Managing bulk Azure Reserved Instances
- Protect identity and access with Azure Active Directory
- Implement Windows Server IaaS VM Identity
- Implement Windows Server IaaS VM Security
- Secure your cloud data
- Architect secure infrastructure in Azure
- Azure security best practices and patterns
- Deploy and configure Windows Server IaaS Virtual Machine
- Implement a Windows Server hybrid cloud infrastructure
- Implement Windows Server hybrid cloud management, monitoring, and security
- Monitor and maintain Windows Server IaaS Virtual Machine

Azure Active Directory | Identity

- Azure Active Directory Documentation
- Azure AD Domain Services Documentation
- External Identities Documentation
- Azure Information Protection
- Implement Microsoft Identity
- Describe the identity and access management_capabilities of Microsoft 365
- Protect identity and access with Azure Active Directory
- Manage identity and access in Azure Active Directory
- Manage identities and governance for Azure administrators
- Monitor and report on security events in Azure AD
- Monitor and maintain Azure Active Directory
- Implement hybrid identity with Windows Server
- Deploy and manage Azure IaaS Active Directory domain_controllers in Azure

Cloud Adoption Framework

The Cloud Adoption Framework is a collection of documentation, implementation guidance, best practices, and tools that are proven guidance from Microsoft designed to accelerate your cloud adoption journey

- Framework Overview
- What's New
- Find Cloud Adoption Tools
- Get Started
- Strategy
- Plan
- Ready
- Migrate

- Get started with the Cloud Adoption Framework and Templates
- Innovate
- Govern
- Manage
- Organise
- Architectural Decision Guides
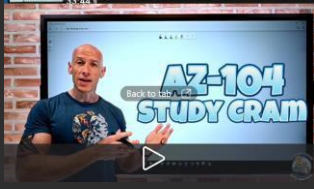- Software Defined Networking

Microsoft Learn:
- Prepare for successful cloud adoption with a well-defined strategy

AZ-900 Azure Fundamentals Certification Course

AZ-104 Study Cram

Infrastructure Updates

Backup and Disaster Recovery

This beginners guide maps out your itinerary for deepening your Azure knowledge, drawing on a wide array of Microsoft resources. You'll begin by learning   why centrally managed backup for on-premises and cloud data is best for reducing the management burden and costs of a BDR infrastructure while   optimizing the speed and reliability of backup and data recovery operations. Then dive into the Azure backup architecture and learn how to design your   backup and recovery solution and then configure, deploy, and troubleshoot your BDR solution.

Azure Skills Navigator

Backup and Disaster Recovery

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