COURSE OUTLINE

Course Code: AZ-104T00

Course Name: Microsoft Azure Administrator

DURATION	SKILL LEVEL	DELIVERY METHOD	TRAINING CREDITS	TECHNOLOGY
4 days	Intermediate	VILT/ILT	N/A	Azure

Course Overview

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.

Target Audience

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.

Job role:	Exam Requirements
Administrator	AZ-104

Prerequisites

- Basic knowledge of virtual networking in cloud environments.
- Familiarity with IP address formats and subnetting.
- Familiarity with Azure virtual networks and resources such as virtual machines.
- Working knowledge of the Azure portal so you can configure the network security groups.
- Basic understanding of traffic routing and traffic control strategies

Topics

Module 1

Configure Microsoft Entra ID

- 19 min
- Module
- 8 Units

Feedback

Intermediate

Administrator

Azure

Learn how to configure Microsoft Entra ID, including features like Microsoft Entra join and self-service password reset.

 Note

This content was partially created with the help of AI. An author reviewed and revised the content as needed. **Read more**.

Learning objectives

In this module, you learn how to:

- Define Microsoft Entra concepts, including identities, accounts, and tenants.
- Describe Microsoft Entra features to support different configurations.
- Understand differences between Microsoft Entra ID and Active Directory Domain Services (AD DS).

- Choose between supported editions of Microsoft Entra ID.

- Use the Microsoft Entra self-service password reset feature.

Module 2:

Configure user and group accounts

- 50 min

- Module

- 9 Units

Feedback

Intermediate

Administrator

Azure

Learn how to configure user and group accounts.

Learning objectives

In this module, you learn how to:

- Configure users accounts and user account properties.

- Create new user accounts.

- Import bulk user accounts with a template.

- Configure group accounts and assignment types.

Module 3:

Configure subscriptions

- 27 min

- Module

- 10 Units

Feedback

Intermediate

Administrator

Azure

Learn how to configure Azure subscriptions, including how to obtain a subscription, implement cost management, and
apply Azure resource tags.

Learning objectives

In this module, you learn how to:

- Determine the correct region to locate Azure services.

- Review features and use cases for Azure subscriptions.

- Obtain an Azure subscription.

- Understand billing and features for different Azure subscriptions.

- Use Microsoft Cost Management for cost analysis.

- Discover when to use Azure resource tagging.

- Identify ways to reduce costs.

Module 4:

Configure Azure Policy

- 40 min

- Module

- 11 Units

Feedback

Intermediate

Administrator

Azure

Learn how to configure Azure Policy to implement compliance requirements.

 Note

This content was partially created with the help of AI. An author reviewed and revised the content as needed. **Read more**.

Learning objectives

In this module, you learn how to:

- Create management groups to target policies and spending budgets.

- Implement Azure Policy with policy and initiative definitions.

- Scope Azure policies and determine compliance.

Module 5:

Configure role-based access control

- 46 min

- Module

- 10 Units

Feedback

Intermediate

Administrator

Azure

Learn how to use role-based access control (RBAC) to ensure resources are protected, but users can still access the resources they need.

 Note

This content was partially created with the help of AI. An author reviewed and revised the content as needed. **Read more**.

Learning objectives

In this module, you learn how to:

- Identify features and use cases for role-based access control.
- List and create role definitions.
- Create role assignments.
- Identify differences between Azure RBAC and Microsoft Entra roles.
- Manage access to subscriptions with RBAC.
- Review built-in Azure RBAC roles.

Module 6:

Configure Azure resources with tools

- 46 min
- Module
- 9 Units

Feedback

Beginner

Administrator

Azure

You will learn how to select a tooling option such as Azure portal, Azure PowerShell, Azure CLI, or Azure Cloud Shell.

Learning objectives

After completing this module, you will be able to:

- Manage resources with the Azure portal.
- Manage resources with Azure Cloud Shell.
- Manage resources with Azure PowerShell.
- Manage resources with Azure CLI.

Module 7:

Use Azure Resource Manager

- 30 min
- Module

- 10 Units

Feedback

Beginner

Administrator

Azure

You'll learn how to use resource groups to organize your Azure resources.

Learning objectives

After completing this module, you'll be able to:

- Identify the features and usage cases for Azure Resource Manager.

- Describe each Azure Resource Manager component and its usage.

- Organize your Azure resources with resource groups.

- Apply Azure Resource Manager locks.

- Move Azure resources between groups, subscriptions, and regions.

- Remove resources and resource groups.

- Apply and track resource limits.

Module 8:

Configure resources with Azure Resource Manager templates

- 41 min

- Module

- 9 Units

Feedback

Beginner

Administrator

Azure

You'll learn how to use Azure Resource Manager templates to consistently deploy assets.

Learning objectives

- List the advantages of Azure templates.

- Identify the Azure template schema components.

- Specify Azure template parameters.

- Locate and use Azure Quickstart Templates.

Module 9

Configure virtual networks

- 35 min
- Module
- 11 Units

Feedback

Intermediate

Administrator

Azure Virtual Network

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

 Note

This content was partially created with the help of AI. An author reviewed and revised the content as needed. **Read more**.

Learning objectives

In this module, you learn how to:

- Describe Azure virtual network features and components.
- Identify features and usage cases for subnets and subnetting.
- Identify usage cases for private and public IP addresses.
- Create a virtual network and assign IP address.

Module 10:

Configure network security groups

- 36 min
- Module
- 9 Units

Feedback

Intermediate

Administrator

Azure

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

 Note

This content was partially created with the help of AI. An author reviewed and revised the content as needed. **Read more**.

Learning objectives

In this module, you learn how to:

- Determine when to use network security groups.
- Create network security groups.

- Implement and evaluate network security group rules.

- Describe the function of application security groups.

Module 11
Configure Azure DNS

- 31 min

- Module

- 11 Units

Feedback

Intermediate

Administrator

Azure DNS

Learn how to configure Azure DNS including custom domain names and record sets.

Note

This content was partially created with the help of AI. An author reviewed and revised the content as needed. **Read more**.

Learning objectives

In this module, you learn how to:

- Identify features and usage cases for domains, custom domains, and private zones.

- Verify custom domain names by using DNS records.

- Implement DNS zones, DNS delegation, and DNS record sets.

Module 12

Configure Azure Virtual Network peering

- 41 min

- Module

- 8 Units

Feedback

Intermediate

Administrator

Azure Virtual Network

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

Note

This content was partially created with the help of AI. An author reviewed and revised the content as needed. **Read more**.

Learning objectives

In this module, you learn how to:

- Identify usage cases and product features of Azure Virtual Network peering.

- Configure your network to implement Azure VPN Gateway for transit connectivity.

- Extend peering by using a hub and spoke network with user-defined routes and service chaining.

Module 13
Configure network routing and endpoints

- 51 min

- Module

- 9 Units

Feedback

Intermediate

Administrator

Azure Virtual Network

Learn how to configure network routes, including endpoints and private links.

Learning objectives

In this module, you learn how to:

- Implement system routes and user-defined routes.

- Configure a custom route.

- Implement service endpoints.

- Identify features and usage cases for Azure Private Link and endpoint services.

Module 14
Configure Azure Load Balancer

- 1 hr 10 min

- Module

- 11 Units

Feedback

Intermediate

Administrator

Azure Load Balancer

Learn how to configure an internal or public load balancer.

 Note

This content was partially created with the help of AI. An author reviewed and revised the content as needed. **Read more**.

Learning objectives

In this module, you learn how to:

- Identify features and usage cases for Azure Load Balancer.

- Implement public and internal Azure load balancers.

- Compare features of load balancer SKUs and configuration differences.

- Configure back-end pools, load-balancing rules, session persistence, and health probes.

Module 15
Configure Azure Application Gateway

- 19 min

- Module

- 6 Units

Feedback

Intermediate

Administrator

Azure VPN Gateway

Learn how to configure Azure Application Gateway.

Learning objectives

In this module, you learn how to:

- Identify features and usage cases for Azure Application Gateway.

- Implement an Azure application gateway, including selecting a routing method.

- Configure gateway components, such as listeners, health probes, and routing rules.

Module 16

Configure storage accounts

- 38 min

- Module

- 9 Units

Feedback

Intermediate

Administrator

Azure Storage Accounts

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

 Note

This content was partially created with the help of AI. An author reviewed and revised the content as needed. **Read more**.

Learning objectives

In this module, you learn how to:

- Identify features and usage cases for Azure storage accounts.

- Select between different types of Azure Storage and create storage accounts.

- Select a storage replication strategy.

- Configure secure network access to storage endpoints.

Module 17

Configure Azure Blob Storage

- 45 min
- Module
- 11 Units
Feedback
Intermediate
Administrator
Azure Blob Storage

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

 Note

This content was partially created with the help of AI. An author reviewed and revised the content as needed. **Read more**.

Learning objectives

In this module, you learn how to:
- Understand the purpose and benefits of Azure Blob Storage.

- Create and configure Azure Blob Storage accounts.

- Manage containers and blobs within Azure Blob Storage.

- Optimize blob storage performance and scalability.

- Implement lifecycle management policies to automate data movement and deletion.

- Determine the best pricing plans for your Azure Blob Storage.

Module 18

Configure Azure Storage security

- 55 min

- Module

- 10 Units

Feedback

Intermediate

Administrator

Azure Storage

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

Learning objectives

In this module, you learn how to:

• Configure a shared access signature (SAS), including the uniform resource identifier (URI) and SAS parameters.

• Configure Azure Storage encryption.

• Implement customer-managed keys.

• Recommend opportunities to improve Azure Storage security.

Module 19

Configure Azure Files and Azure File Sync

• 21 min

• Module

• 9 Units

Feedback

Intermediate

Administrator

Azure

Azure Files

Learn how to configure Azure Files and Azure File Sync.

Learning objectives

In this module, you learn how to:

• Identify storage for file shares and blob data.

• Configure Azure file shares and file share snapshots.

• Identify features and use cases of Azure File Sync.

• Identify Azure File Sync components and configuration steps.

Module 20

Configure Azure Storage with tools

• 20 min

• Module

• 7 Units

Feedback

Intermediate

Administrator

Azure Storage

Learn how to configure Azure Storage with tools like Azure Storage Explorer and AZCopy.

Learning objectives

In this module, you learn how to:

- Configure and use Azure Storage Explorer.

- Configure the Azure Import/Export service.

- Use the WAImportExport tool with the Azure Import/Export service.

- Configure and use AZCopy.

Module 21

Configure virtual machines

- 40 min

- Module

- 10 Units

Feedback

Intermediate

Administrator

Azure Virtual Machines

Learn how to configure virtual machines including sizing, storage, and connections.

 Note

This content was partially created with the help of AI. An author reviewed and revised the content as needed. **Read more**.

Learning objectives

In this module, you learn how to:

- Determine the responsibilities of cloud service providers and customers in a cloud computing environment.

- Identify the key considerations and factors involved in planning for virtual machines. Considerations include workload requirements, resource allocation, and secure access.

- Configure virtual machine storage and virtual machine sizing.

- Create a virtual machine in the Azure portal.

- Practice deploying an Azure virtual machine and verify the configuration

Module 22

Configure virtual machine availability

- 1 hr 3 min

- Module

- 13 Units

Feedback

Intermediate

Administrator

Azure Virtual Machines

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

 Note

This content was partially created with the help of AI. An author reviewed and revised the content as needed. **Read more**.

Learning objectives

In this module, you learn how to:

- Implement availability sets and availability zones.

- Implement update and fault domains.

- Implement Azure Virtual Machine Scale Sets.

- Autoscale virtual machines.

Module 23

Configure Azure App Service plans

- 21 min

- Module

- 7 Units

Feedback

Intermediate

Administrator

Azure App Service

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

 Note

This content was partially created with the help of AI. An author reviewed and revised the content as needed. **Read more**.

Learning objectives

In this module, you learn how to:

- Identify features and usage cases for Azure App Service.

- Select an appropriate Azure App Service plan pricing tier.

- Scale an Azure App Service plan.

Module 24

Configure Azure App Service

- 1 hr 2 min

- Module

- 13 Units

Feedback

Intermediate

Administrator

Dynamics 365

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

 Note

This content was partially created with the help of AI. An author reviewed and revised the content as needed. **Read more**.

Learning objectives

In this module, you learn how to:

- Identify features and usage cases for Azure App Service.

- Create an app with Azure App Service.

- Configure deployment settings, specifically deployment slots.

- Secure your Azure App Service app.

- Configure custom domain names.

- Back up and restore your Azure App Service app.

- Configure Azure Application Insights.

Module 25

Configure Azure Container Instances

- 26 min

- Module

- 8 Units

Feedback

Intermediate

Administrator

Azure Container Instances

Learn how to configure Azure Container Instances including container groups.

 Note

This content was partially created with the help of AI. An author reviewed and revised the content as needed. **Read more**.

Learning objectives

In this module, you learn how to:

- Identify when to use containers versus virtual machines.

- Identify the features and usage cases of Azure Container Instances.

- Implement Azure container groups.

Module 26

Configure file and folder backups

- 1 hr 3 min

- Module

- 9 Units

Feedback

Intermediate

Administrator

Azure Backup

Learn how to configure backup and restore policies that meet your company's regulatory needs.

 Note

This content was partially created with the help of AI. An author reviewed and revised the content as needed. **Read more**.

Learning objectives

In this module, you learn how to:

- Identify features and usage cases for Azure Backup.

- Configure Azure Recovery Services vault backup options.

- Configure the Microsoft Azure Recovery Services (MARS) agent for Azure Backup.

- Implement on-premises file and folder backups.

Module 27

Configure virtual machine backups

- 1 hr 16 min

- Module

- 13 Units

Feedback

Intermediate

Administrator

Azure Backup

Azure Virtual Machines

Learn how to configure virtual machine backups including restore operations.

Learning objectives

In this module, you learn how to:

- Identify features and usage cases for different Azure backup methods.

- Configure virtual machine snapshots and backup options.

- Implement virtual machine backup and restore, including soft delete.

- Perform site-to-site recovery by using Azure Site Recovery.

- Compare the Azure Backup agent to the Microsoft Azure Backup Server

Module 28

Configure Azure Monitor

- 59 min

- Module

- 10 Units

Feedback

Intermediate

Administrator

Azure Monitor

Learn how to configure Azure Monitor, including querying the Azure Monitor activity log.

 Note

This content was partially created with the help of AI. An author reviewed and revised the content as needed. **Read more**.

Learning objectives

In this module, you learn how to:

- Identify the features and usage cases for Azure Monitor.

- Configure and interpret metrics and logs.

- Identify the Azure Monitor components and data types.

- Configure the Azure Monitor activity log.

Module 29

Configure Azure alerts

- 19 min

- Module

- 7 Units

Feedback

Intermediate

Administrator

Azure Monitor

Learn how to configure Azure alerts including action groups.

Note

This content was partially created with the help of AI. An author reviewed and revised the content as needed. **Read more**.

Learning objectives

In this module, you learn how to:

• Identify Azure Monitor alerts, including alert types and alert states.

• Configure Azure Monitor alerts.

• Create alert rules and action groups.

Module 30

Explore archiving and records management in Microsoft 365

• 35 min

• Module

• 9 Units

Feedback

Intermediate

Administrator

Solution Architect

Technology Manager

Microsoft 365

Office 365

This module examines how Microsoft 365 supports data governance by enabling organizations to archive content by using archive mailboxes, and manage their high-value content for legal, business, or regulatory obligations by implementing records management.

Learning objectives

By the end of this module, you should be able to:

• Enable and disable an archive mailbox in the Microsoft Purview compliance portal and through Windows PowerShell.

• Run diagnostic tests on an archive mailbox.

• Learn how retention labels can be used to allow or block actions when documents and emails are declared records.

• Create your file plan for retention and deletion settings and actions.

- Determine when items should be marked as records by importing an existing plan (if you already have one) or create new retention labels. Restore deleted data in Exchange Online and SharePoint Online.

Module 31

Configure Network Watcher

- 19 min
- Module
- 7 Units

Feedback

Intermediate

Administrator

Azure Network Watcher

You learn how to configure Network Watcher and troubleshoot common networking problems.

 Note

This content was partially created with the help of AI. An author reviewed and revised the content as needed. **Read more**.

Learning objectives

After completing this module, you'll be able to:

- Identify the features and usage cases for Azure Network Watcher.
- Configure diagnostic capabilities like IP Flow Verify, Next Hop, and Network Topology.

Exams and Certifications

 A Certificate of completion is issued at the end of the Course.

Schedule your Microsoft exam here: Microsoft :: Pearson VUE

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