

AZ-104T00 Microsoft Azure Administrator

Duration
4 Days

Delivery Methods
VILT, Private Group



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.

Who Should Attend

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.

Agenda

1 - CONFIGURE MICROSOFT ENTRA ID

- Describe Azure Active Directory benefits and features
- Describe Azure Active Directory concepts
- Compare Active Directory Domain Services to Azure Active Directory
- Select Azure Active Directory editions
- Implement Azure Active Directory join
- Implement Azure Active Directory self-service password reset

2 - CONFIGURE USER AND GROUP ACCOUNTS

- Create user accounts
- Manage user accounts
- Create bulk user accounts
- Create group accounts
- Create administrative units

3 - CONFIGURE SUBSCRIPTIONS

- Identify Azure regions
- Implement Azure subscriptions
- Obtain an Azure subscription
- Identify Azure subscription usage
- Implement Microsoft Cost Management
- Apply resource tagging
- Apply cost savings

4 - CONFIGURE AZURE POLICY

- Create management groups
- Implement Azure policies
- Create Azure policies
- Create policy definitions
- Create an initiative definition
- Scope the initiative definition
- Determine compliance

5 - CONFIGURE ROLE-BASED ACCESS CONTROL

- Implement role-based access control
- Create a role definition
- Create a role assignment
- Compare Azure roles to Azure Active Directory roles
- Apply role-based access control
- Review fundamental Azure RBAC roles

6 - CONFIGURE AZURE RESOURCES WITH TOOLS

- Use the Azure portal
- Use Azure Cloud Shell
- Use Azure PowerShell
- Use Azure CLI

7 - USE AZURE RESOURCE MANAGER

- Review Azure Resource Manager benefits
- Review Azure resource terminology

- Create resource groups
- Create Azure Resource Manager locks
- Reorganize Azure resources
- Remove resources and resource groups
- Determine resource limits

8 - CONFIGURE RESOURCES WITH AZURE RESOURCE MANAGER TEMPLATES

- Review Azure Resource Manager template advantages
- Explore the Azure Resource Manager template schema
- Explore the Azure Resource Manager template parameters
- Consider Bicep templates
- Review QuickStart templates

9 - CONFIGURE VIRTUAL NETWORKS

- Plan virtual networks
- Create subnets
- Create virtual networks
- Plan IP addressing
- Create public IP addressing
- Associate public IP addresses
- Allocate or assign private IP addresses

10 - CONFIGURE NETWORK SECURITY GROUPS

- Implement network security groups
- Determine network security group rules
- Determine network security group effective rules
- Create network security group rules
- Implement application security groups

11 - CONFIGURE AZURE DNS

- Identify domains and custom domains
- Verify custom domain names
- Create Azure DNS zones
- Delegate DNS domains
- Add DNS record sets
- Plan for Azure Private DNS zones
- Review Azure Private DNS zone scenarios

12 - CONFIGURE AZURE VIRTUAL NETWORK PEERING

- Determine Azure Virtual Network peering uses
- Determine gateway transit and connectivity
- Create virtual network peering
- Extend peering with user-defined routes and service chaining

13 - CONFIGURE NETWORK ROUTING AND ENDPOINTS

- Review system routes
- Identify user-defined routes
- Determine service endpoint uses
- Determine service endpoint services
- Identify private link uses

14 - CONFIGURE AZURE LOAD BALANCER

- Determine Azure Load Balancer uses
- Implement a public load balancer
- Implement an internal load balancer
- Determine load balancer SKUs
- Create back-end pools
- Create health probes
- Create load balancer rules

15 - CONFIGURE AZURE APPLICATION GATEWAY

- Implement Azure Application Gateway
- Determine Azure Application Gateway routing
- Configure Azure Application Gateway components

16 - CONFIGURE STORAGE ACCOUNTS

- Implement Azure Storage
- Explore Azure Storage services
- Determine storage account types
- Determine replication strategies
- Access storage
- Secure storage endpoints

17 - CONFIGURE AZURE BLOB STORAGE

- Implement Azure Blob Storage
- Create blob containers
- Assign blob access tiers
- Add blob lifecycle management rules
- Determine blob object replication
- Upload blobs
- Determine Blob Storage pricing

18 - CONFIGURE AZURE STORAGE SECURITY

- Review Azure Storage security strategies
- Create shared access signatures
- Identify URI and SAS parameters

- Determine Azure Storage encryption
- Create customer-managed keys
- Apply Azure Storage security best practices

19 - CONFIGURE AZURE FILES AND AZURE FILE SYNC

- Compare storage for file shares and blob data
- Manage Azure file shares
- Create file share snapshots
- Implement Azure File Sync
- Identify Azure File Sync components
- Deploy Azure File Sync

20 - CONFIGURE AZURE STORAGE WITH TOOLS

- Use Azure Storage Explorer
- Use the Azure Import/Export service
- Use the WAImportExport tool
- Use the AzCopy tool

21 - CONFIGURE VIRTUAL MACHINES

- Review cloud services responsibilities
- Plan virtual machines
- Determine virtual machine sizing
- Determine virtual machine storage
- Create virtual machines in the Azure portal
- Connect to virtual machines

22 - CONFIGURE VIRTUAL MACHINE AVAILABILITY

- Plan for maintenance and downtime
- Create availability sets
- Review update domains and fault domains
- Review availability zones
- Compare vertical and horizontal scaling
- Implement Azure Virtual Machine Scale Sets
- Create Virtual Machine Scale Sets
- Implement autoscale
- Configure autoscale

23 - CONFIGURE AZURE APP SERVICE PLANS

- Implement Azure App Service plans
- Determine Azure App Service plan pricing
- Scale up and scale out Azure App Service
- Configure Azure App Service autoscale

24 - CONFIGURE AZURE APP SERVICE

- Implement Azure App Service
- Create an app with App Service
- Explore continuous integration and deployment
- Create deployment slots
- Add deployment slots
- Secure your App Service app
- Create custom domain names
- Back up and restore your App Service app
- Use Azure Application Insights

25 - CONFIGURE AZURE CONTAINER INSTANCES

- Compare containers to virtual machines
- Review Azure Container Instances
- Implement container groups
- Review the Docker platform

26 - CONFIGURE FILE AND FOLDER BACKUPS

- Describe Azure Backup benefits
- Implement Backup center for Azure Backup
- Configure Azure Recovery Services vault backup options
- Use the Microsoft Azure Recovery Services (MARS) agent
- Configure on-premises file and folder backups

27 - CONFIGURE VIRTUAL MACHINE BACKUPS

- Explore options to protect virtual machine data
- Create virtual machine snapshots in Azure Backup
- Set up Azure Recovery Services vault backup options
- Back up your virtual machines
- Restore your virtual machines
- Implement System Center DPM and Azure Backup Server
- Compare the MARS agent and Azure Backup Server
- Implement soft delete for your virtual machines
- Implement Azure Site Recovery

28 - CONFIGURE AZURE MONITOR

- Describe Azure Monitor key capabilities
- Describe Azure Monitor components
- Define metrics and logs
- Identify monitoring data and tiers
- Describe activity log events
- Query the activity log

29 - CONFIGURE AZURE ALERTS

- Describe Azure Monitor alerts
- Manage Azure Monitor alerts
- Create alert rules
- Create action groups

30 - CONFIGURE LOG ANALYTICS

- Determine Log Analytics uses
- Create a Log Analytics workspace
- Create Kusto (KQL) queries
- Structure Log Analytics queries

31 - CONFIGURE NETWORK WATCHER

- Describe Azure Network Watcher features
- Review IP flow verify diagnostics
- Review next hop diagnostics
- Visualize the network topology