**AZ104: Microsoft Certified: Azure Administrator Associate**

**Manage Azure identities and governance (20–25%)**

**Manage Microsoft Entra users and groups**

* Create users and groups
* Manage user and group properties
* Manage licenses in Microsoft Entra ID
* 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 soft delete for blobs and containers
* 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 Azure Resource Manager template or a Bicep file
* Modify an existing Azure Resource Manager template
* Modify an existing Bicep file
* Deploy resources by using an Azure Resource Manager template or a Bicep file
* Export a deployment as an Azure Resource Manager template or convert an Azure Resource Manager template to 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 Transport Layer Security (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 analyse 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

**Additional Resources**

| **Resources** | **AZ-104** | **AZ-305** |
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| **Microsoft Learning path** | [**Link**](https://learn.microsoft.com/en-us/training/courses/az-104t00) | [**Link**](https://learn.microsoft.com/en-us/credentials/certifications/exams/az-305/#:~:text=Items%20in%20this%20collection) |
| **Free Practise Assessment** | [**Link**](https://learn.microsoft.com/en-us/credentials/certifications/azure-administrator/practice/assessment?assessment-type=practice&assessmentId=21&practice-assessment-type=certification) | [**Link**](https://learn.microsoft.com/en-us/credentials/certifications/exams/az-305/practice/assessment?assessmentId=15&assessment-type=practice) |
| **John Savill's study cram** | [**Link**](https://www.youtube.com/watch?v=0Knf9nub4-k) | [**Link**](https://www.youtube.com/watch?v=vq9LuCM4YP4) |
| **TD's practise exams** | [**Link**](https://portal.tutorialsdojo.com/courses/az-104-microsoft-azure-administrator-practice-exams/) | [**Link**](https://portal.tutorialsdojo.com/courses/az-305-designing-microsoft-azure-infrastructure-solutions-practice-exams/) |
| **TD's free Azure cheat sheets** | [**Link**](https://tutorialsdojo.com/microsoft-azure-cheat-sheets/) | [**Link**](https://tutorialsdojo.com/microsoft-azure-cheat-sheets/) |

**EXTRA**

\*Tagging