AZ-1007: Deploy and administer Linux virtual machines on Azure

Course Code: AZ-1007
Duration: 1 day
Instructor-led Training (ILT) | Virtual Instructor-led Training (VILT)

OVERVIEW

In this learning path, you prepare for the Applied Skill, Deploy and administer Linux virtual machines on Microsoft Azure.

SKILLS COVERED

- Configure virtual machines
- Add and size disks in Azure virtual machines
- Monitor your Azure virtual machines with Azure Monitor
- Protect your virtual machines by using Azure Backup
- Manage virtual machines with the Azure CLI
- Implement access management for Azure resources
- Configure Azure Files and Azure File Sync
- Copy and move blobs from one container or storage account to another using the AzCopy command
- Guided Project: Deploy and administer Linux virtual machines on Azure

WHO SHOULD ATTEND?

- Administrator

PREREQUISITES

- Experience using the Azure portal and CLI to create resources.
- Familiarity with identity management and role-based access control.
- Experience creating and configuring Azure virtual machines.
- Working knowledge of administering operating systems based on the Linux kernel.

MODULES

Module 1: Configure virtual machines

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

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.

Prerequisites

- Cloud computing concepts. Familiarity with Infrastructure as a Service (IaaS), virtualization, and resource provisioning in a cloud environment.
- Azure fundamentals. Understanding of basic Azure concepts, including Azure subscriptions, resource groups, and storage accounts.
- Networking fundamentals. Knowledge of basic networking concepts, including

IP addressing, virtual networks, and subnets.
- Azure portal. Ability to create and configure resources in the Azure portal.

Module 2: Add and size disks in Azure virtual machines

Understand and create the different types of disk storage available to Azure virtual machines (VMs).

Learning objectives

In this module, you will:

- Create a virtual machine (VM)
- Configure and attach virtual hard drives (VHDs) to an existing VM
- Determine whether you need premium disks
- Resize disks for a VM

Prerequisites

None

Module 3: Protect your virtual machines by using Azure Backup

Use Azure Backup to help protect on-premises servers, virtual machines, SQL Server, Azure file shares, and other workloads.

Learning objectives

In this module, you'll:

- Identify the scenarios for which Azure Backup provides backup and restore capabilities
- Back up and restore an Azure virtual machine

Prerequisites

- Basic knowledge of Azure virtual machines
- Basic knowledge of disk storage for virtual machines

Module 4: Protect your virtual machines by using Azure Backup

Use Azure Backup to help protect on-premises servers, virtual machines, SQL Server, Azure file shares, and other workloads.

Learning objectives

In this module, you'll:

- Identify the scenarios for which Azure Backup provides backup and restore capabilities
- Back up and restore an Azure virtual machine

Prerequisites

- Basic knowledge of Azure virtual machines
- Basic knowledge of disk storage for virtual machines

Module 5: Manage virtual machines with the Azure CLI

Learn how to use the cross-platform Azure CLI to create, start, stop, and perform other management tasks related to virtual machines in Azure.

Learning objectives

In this module, you will:

- Create a virtual machine with the Azure CLI.
- Resize virtual machines with the Azure CLI.

- Perform basic management tasks using the Azure CLI.
- Connect to a running VM with SSH and the Azure CLI.

Prerequisites

Basic understanding of the Azure CLI tool from the Control Azure services with the CLI module.

Module 6: Implement access management for Azure resources

Explore how to use built-in Azure roles, managed identities, and RBAC-policy to control access to Azure resources. Identity is the key to secure solutions.

Learning objectives

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

- Configure and use Azure roles within Microsoft Entra ID
- Configure and managed identity and assign it to Azure resources
- Analyze the role permissions granted to or inherited by a user
- Configure access to data in Azure Key Vault using RBAC-policy

Prerequisites

None

Module 7: Configure Azure Files and Azure File Sync

Learn how to configure Azure Files and Azure File Sync.

Learning objectives

In this module, you learn how to:

- Identify storage for file shares versus 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.

Prerequisites

None

Module 8: Copy and move blobs from one container or storage account to another using the AzCopy command

Learn how to use AzCopy to copy and move blobs between contains and storage accounts both synchronously and asynchronously.

Learning objectives

By the end of this module, you're able to:

- Copy and move blobs between Azure Storage accounts using the AzCopy tool.

Prerequisites

- Beginner-level knowledge of Azure Storage and blobs

Module 9: Guided Project: Deploy and administer Linux virtual machines on Azure

In this guided project module, you prepare and study for the *Deploy and administer Linux virtual machines on Azure* Applied Skill.

Learning objectives

In this module, you practice for the *Deploy and administer Linux virtual machines on Azure* Applied Skill. You also gain skills to help

with day-to-day administrator job tasks. The content combines topics on compute, storage, and monitoring tasks.

Prerequisites

- Familiarity with the Azure CLI and Azure portal.
- Understand identity management and role-based access control.
- Experience using the Azure portal to create resources.
- Basic knowledge of unstructured data like blobs and files.
- Basic knowledge of security concepts like identities and permissions.

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