

AZ100T03

# Deploying and Managing Virtual Machines







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AZ100T03 - Version: 1



## **Description:**

This course teaches IT Professionals how to create and manage virtual machines as part of an Infrastructure as a Service (IaaS) computing infrastructure. Students learn how to assess their on-premises environment for virtual machine readiness in preparation for moving resources to the cloud, including sizing, pricing, and design considerations.

#### Intended audience:

This course is for Azure Administrators. Azure Administrators manage the cloud services that span storage, networking, and compute cloud capabilities, with a deep understanding of each service across the full IT lifecycle. They take end-user requests for new cloud applications and make recommendations on services to use for optimal performance and scale, as well as provision, size, monitor and adjust as appropriate. This role requires communicating and coordinating with vendors. Azure Administrators use the Azure Portal and as they become more proficient they use PowerShell and the Command Line Interface

# **Prerequisites:**

Successful Azure Administrators start this role with experience on operating systems, virtualization, cloud infrastructure, storage structures, and networking.

# **Objectives:**



After completing this course, students will be able to:

Explain virtual machine usage cases, storage options, pricing, operating systems, networking capabilities, and general planning considerations.

Create Windows virtual machines in the Azure Portal, with Azure PowerShell, or using ARM Templates.

Deploy custom server images and Linux virtual machines.

Configure virtual machine networking and storage options.

Implement virtual machine high availability, scalability, and custom scripts extensions.

Backup, restore, and monitor virtual machines.

## **Topics:**

#### Module 1 - Overview of Azure Machines

- Azure Virtual Machines Overview
- Planning Considerations

# Module 2 - Creating Virtual Machines

- Overview of the Virtual Machine Creation Overview
- Creating Virtual Machines in the Azure Portal
- Creating Virtual Machines (PowerShell)
- Creating Virtual Machines using ARM Templates

# Module 3 - Deploying Virtual Machine Images

- Deploying Custom Images
- Deploying Linux Virtual Machines



# Module 4 - Configuring Virtual Machines

- Overview of Virtual Machine Configuration
- Virtual Machine Networking
- Virtual Machine Storage

# Module 5 - Configuring Availability and Extensibility

- Virtual Machine Availability
- Virtual Machine Scalability
- Applying Virtual Machine Extensions

# Module 6 - Managing and Monitoring Virtual Machines

- Backup and Restore
- Monitoring Virtual Machines