Microsoft Azure Fundamentals (10979)

Duration: 2 Days

MOC On-Demand Price: £650

Delivery Option: Attend via MOC On-Demand.

Students Will Learn

- Describing cloud computing, Azure and Azure subscriptions

- Using Azure PowerShell, the Azure Software Development Kit (SDK) and the Azure command-line interface (CLI) to manage Azure subscriptions

- Creating and configure virtual machines in Azure and managing their disks

- Creating, configuring and monitoring Web apps in Azure and deploying Azure platform as a service (PaaS) cloud services

- Creating and configuring Azure virtual networks

- Creating, managing, and configuring cloud storage in Azure

- Using Azure SQL Database to create, configure and manage SQL databases

- Creating and managing Azure AD

Course Description

This is a Microsoft Official Course (MOC) and includes Microsoft courseware and hands-on labs. This course provides the underlying knowledge required by all individuals who will be evaluating Microsoft Azure, whether they are administrators, developers, or database administrators.

This course will introduce students to the principles of cloud computing. Students will become familiar with how these principles have been implemented in Microsoft Azure. In addition, this course will explain how to implement the core Azure infrastructure, consisting of virtual networks and storage. With this foundation, students will learn how to create the most common Azure services, including Azure Virtual Machines, Web Apps and Azure SQL Database. The course will conclude by describing features of Azure AD and methods of integrating it with on-premises Active Directory.

This course is intended for individuals who want to evaluate deploying, configuring, and administering services and virtual machines (VMs) by using Azure.

Course Prerequisites

Before attending this course, students must have:

- A basic understanding of virtualization
- A basic understanding of Active Directory concepts, including domains, users, and domain controllers
- A basic understanding of database concepts including tables and simple queries

About MOC On-Demand

MIcrosoft Official Courses On-Demand uses a combination of streaming video, text, lab exercises and assessment checks throughout the course. MOC On-Demand courses are available for 90 days and recommend the following system requirements:

- Browser: Current version of Internet Explorer, Microsoft Edge, Google Chrome or Firefox
- Internet: Broadband Internet connection of over 4Mbps
- Screen Resolution: 1280 x 1024 or higher

Course Overview

Module 1: Getting Started with Microsoft Azure

This module introduces students to cloud services and the various Azure services. It describes how to use the Azure portal to access and manage Azure services, and to manage Azure subscription and billing.

Lessons

- What is Cloud Computing?
- What is Azure?
- Managing Azure
- Subscription management, Support and Billing

Labs

- Customizing the Azure portal interface
- Viewing billing, usage, and quotas data

After completing this module, students will be able to:

- Describe cloud computing
- Describe Azure and its various services
- Manage Azure services from the Azure portal
- Manage their Azure subscription and billing.

Module 2: Microsoft Azure Management Tools

This module explains Azure PowerShell and its use in managing Azure subscriptions. It also describes how to use the Azure SDK and the Azure CLI to manage Azure subscriptions.

Lessons

- What is Azure PowerShell?
- Azure SDK and Azure CLI

Labs

- Using the Azure PowerShell modules
- Using the Azure CLI

After completing this module, students will be able to:

- Describe and use Azure PowerShell to manage their Azure subscription
- Describe and use the Azure SDK and the Azure CLI to manage your Azure subscription

Module 3: Virtual Machines in Microsoft Azure

This module explains how to create and configure virtual machines in Azure and how to manage disks for virtual machines.

Lessons

- Creating and configuring VMs
- Configuring disks

Labs

- Create a VM from the Azure portal by using an Azure Marketplace image
- Verify the functionality of the VM
- Configure storage of a VM

After completing this module, students will be able to:

- Create and configure VMs in Azure
- Configure disks for VMs.

Module 4: Web Apps and Cloud Services

This module explains how to create, configure, and monitor web apps in Azure. It also describes how to create and deploy Azure PaaS cloud services.

Lessons

- Creating and configuring web apps
- Deploying and monitoring web apps
- Creating and deploying PaaS cloud services

Labs

- Creating and configuring a WordPress web app
- Creating a cloud service

After completing this module, students will be able to:

- Create and configure web apps by using the Azure portal
- Deploy and monitor web apps in Azure
- Create and deploy Azure PaaS cloud services

Module 5: Creating and Configuring Virtual Networks

This module explains how to create and implement Azure networks and how to use their components to enhance the resiliency and availability of virtual machines.

Lessons

- Getting started with virtual networks
- Configuring Azure networking
- Getting started with Azure Load Balancer

Labs

- Creating virtual networks
- Verifying virtual network functionality

After completing this module, students will be able to:

- Describe the purpose and functionality of Azure virtual networks
- Create Azure virtual networks
- Describe and implement Azure Load Balancer

Module 6: Cloud Storage

This module explains the features and benefits of cloud storage. It also explains how to create, manage, and configure cloud storage in Azure.

Lessons

- Understanding cloud storage
- Create and manage storage

Labs

- Create an Azure Storage account
- Create and manage blobs

After completing this module, students will be able to:

- Describe the features and benefits of cloud storage
- Create and manage storage in Azure

Module 7: Microsoft Azure Databases

This module explains the options available for storing relational data in Azure. It also explains how to use SQL Database to create, configure, and manage SQL databases in Azure.

Lessons

- Understanding options for relational database deployments
- Creating and connecting to Azure SQL databases

Labs

- Create a new Azure SQL database in Azure and configure SQL Server firewall rules
- Manage content of an Azure SQL database by using SQL Server Management

Studio

After completing this module, students will be able to:

- Describe options for relational database deployment in Azure
- Use Azure to create, connect to, and manage content of SQL databases

Module 8: Creating and Managing Azure AD

This module explains how to create users, domains, and directories in Azure AD, integrate applications with Azure AD, and use Multi-Factor Authentication.

Lessons

- Overview of Azure AD
- Manage Azure AD authentication

Labs

- Create users in Azure AD
- Create a new Azure AD tenant and a custom DNS domain

After completing this module, students will be able to:

- Create and manage Azure AD tenants, domains, and users
- Manage Azure AD authentication