



Mildain Solutions

Introduction to Microsoft Azure for IT Professionals - 10979 Course Outline

(2 days)

Overview

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 also provides the prerequisite knowledge for students wishing to attend Course 20532D: Developing Microsoft Azure Solutions, or Course 20533D: Implementing Microsoft Azure Infrastructure Solutions.

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.

***** NOTE: This class also available in On-Demand, eLearning Format *****

Too busy at work to miss 5 days out of the office to take this class? Consider the MOC On-Demand version of this course. Watch videos developed by Microsoft, take the same hands-on labs, access an online expert 24/7, and study at on your own time, at your own pace.

Audience profile

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

Developers who want to evaluate creating Azure solutions.

Windows Server administrators who want to evaluate the migration of on-premises Active



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Directory roles and services to the cloud.

IT professionals who want to evaluate the use of Azure to host websites and mobile app back-end services.

Database administrators who want to evaluate the use of Azure to host SQL databases.

Prerequisites

Before attending this course, students must have a background in IT. In addition to their professional experience, students who attend this training should already have the following technical knowledge:

Understanding of how to deploy websites

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

At course completion

After completing this course, students will be able to:

Describe cloud computing, Azure, and Azure subscriptions.

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

Create and configure virtual machines in Azure, and manage their disks.

Create, configure, and monitor web apps in Azure and deploy Azure platform as a service (PaaS) cloud services.

Create and configure Azure virtual networks.

Create, manage, and configure cloud storage in Azure.

Use Azure SQL Database to create, configure, and manage SQL databases.

Create and manage Azure AD.



Course Outline

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

Lab : Using the Azure portals

Customizing the Azure portal interface

Viewing billing, usage, and quotas data

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

Lab : Using Microsoft Azure management tools

Using the Azure PowerShell modules

Using the Azure CLI

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 Azure VMs

Configuring Azure VM storage



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Lab : Creating a VM in Azure

Creating a VM from the Azure portal by using an Azure Marketplace image

Verifying the functionality of the VM

Configuring storage of a VM

Module 4: Azure Web Apps

This module explains how to create, configure, and monitor web apps in Azure.

Lessons

Creating and configuring Azure web apps

Deploying and monitoring Azure web apps

Lab : Creating and managing Azure web apps

Creating and configuring an Azure web app

Module 5: Implementing Azure networking

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 Azure networking

Getting started with Azure Load Balancer

Lab : Creating and configuring virtual networks

Creating a virtual network

Creating an Azure load balancer

Module 6: Introduction Azure Storage and Data Services

This module explains the features and benefits of Azure storage and data services.

Lessons

Understanding Azure Storage options

Creating and managing storage

Understanding options for relational database deployments

Creating and connecting to Azure SQL databases

Lab : Configuring Azure Storage



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Creating and configuring an Azure Storage account

Creating and managing blobs

Lab : Creating a SQL Database in Azure

Creating a new Azure SQL database in Azure and configuring SQL Server firewall rules

Managing content of an Azure SQL database by using SQL Server Management Studio

Module 7: Introduction to containers and server less computing in Azure

This module explains the options for implementing containers and describes the serverless technologies available in Azure.

Lessons

Implementing Windows and Linux containers in Azure

Introduction to Azure serverless computing

Lab: Implementing containers on Azure VMs

Implementing Docker hosts on Azure VMs

Deploying containers to Azure VMs

Deploying multicontainer applications with Docker Compose to Azure VMs

Module 8: Configuring 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 and authorization

Lab : Create and manage Azure Active Directory