
Implementing Microsoft Azure Infrastructure Solutions

Duration: 5 Days **Course Code: M20533**

Overview:

This course is aimed at experienced IT Professionals who currently administer their on-premises infrastructure. The course introduces the students to Microsoft Azure and then teaches them how to manage their infrastructure in Azure rather than on-premises

Target Audience:

IT professionals who want to deploy, configure, and administer services and virtual machines in Microsoft Azure. IT professional who have used Microsoft System Center to manage and orchestrate a Microsoft server infrastructure. Windows Server administrators who are looking to evaluate and migrate on-premises Active Directory roles and services to the cloud. IT professionals who want to use Windows Azure to host web sites and mobile app back-end services. IT professionals who are experienced in other non-Microsoft cloud technologies, who meet the course prerequisites, and are looking to cross-train on Microsoft Azure. IT professionals who want to take the Microsoft Certification exam, 70-533, Implementing Microsoft Azure Infrastructure Solutions.

Objectives:

- Describe Azure architecture components including infrastructure, tools, and portals.
 - Implement and manage virtual networking within Azure and to connect to on-premises environments.
 - Plan and create Azure virtual machines.
 - Configure, manage, and monitor Azure virtual machines to optimize availability and reliability.
 - Implement, manage, backup and monitor storage solutions.
 - Plan and implement data services based on SQL Database to support applications.
 - Deploy and configure websites.
 - Deploy, configure, monitor, and diagnose cloud services.
 - Publish content through CDNs and publish videos by using Media Services.
 - Create and manage Azure AD directories, and configure application integration with Azure AD.
 - Integrate on-premises Windows AD with Azure AD.
 - Automate operations in Azure management by using PowerShell runbooks.
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Prerequisites:

- Understanding of on-premises virtualization technologies including: virtual machines, virtual networking, and virtual hard disks.
 - Understanding of network configuration including: TCP/IP, DNS, virtual private networks, firewalls, and encryption technologies.
 - Understanding of websites including: create, configure, monitor and deploy a website on Internet Information Services (IIS).
 - Understanding of Active Directory concepts including: Domains, Forests, Domain Controllers, replication, Kerberos, and LDAP.
 - Understanding of database concepts including: Tables, queries, Structured Query Language (SQL), and database schemas
 - Understanding of resilience and disaster recovery including: backup and restore operations.
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Content:

Module 1: Introduction to Azure

- Cloud Technology Overview
- Microsoft Azure
- Azure Portals
- Managing Azure with Windows PowerShell
- Lab : Introduction to Azure
- Using Azure Portals
- Using Azure PowerShell

Module 2: Implement and Manage Virtual Networks

- Planning Virtual Networks
- Implementing and Managing Virtual Networks
- Configuring Connections to Virtual Networks
- Lab : Creating Virtual Networks
- Creating the Virtual Network
- Lab : Connecting Virtual Networks
- Connecting the Virtual Networks
- Validating Virtual Network Connectivity
- Optional: Configuring a Point-to-Site VPN

Module 3: Implement Virtual Machines

- Introduction to IaaS Cloud Services
- Planning Virtual Machine Workloads
- Creating Virtual Machines
- Lab : Implementing Virtual Machines
- Deploying Windows Virtual Machines
- Deploying Linux Virtual Machines

Module 4: Managing Virtual Machines

- Configuring Virtual Machines
- Managing and Configuring Virtual Machine Disks
- Managing and Monitoring Virtual Machines
- Lab : Managing Virtual Machines
- Exploring Availability
- Configuring Virtual Machine Storage
- Using the Cross Platform Command-Line Interface

Module 5: Implementing Websites

- Planning for Website Deployment
- Deploying Websites
- Configuring Websites
- Monitoring Websites
- Traffic Manager
- Lab : Implementing Websites
- Creating Websites
- Deploying a Website
- Managing Websites

Module 6: Planning and Implementing Storage

- Planning Storage
- Implementing and Managing Storage
- Backup and Monitoring Storage
- Lab : Planning and Implementing Storage
- Creating and Configuring Storage
- Using Azure File Storage
- Protecting Data with Azure Backup

Module 7: Planning and Implementing Data Services

- Data Services in Microsoft Azure
- Implementing Azure SQL Database
- Managing Azure SQL Database Security
- Monitoring Azure SQL Database
- Managing Azure SQL Database Business Continuity
- Lab : Planning and Implementing Data Services
- Creating, Securing and Monitoring an Azure SQL Database
- Migrating a SQL Server Database to an Azure SQL Database
- Restoring a Database

Module 8: Implementing PaaS Cloud Services and Mobile Services

- Planning and Deploying PaaS Cloud Services
- Configuring Cloud Services
- Implementing Mobile Services
- Monitoring and Diagnostics
- Lab : Implementing PaaS Cloud Services
- Deploying a PaaS Cloud Service
- Configuring Deployment Slots and Remote Desktop Protocol
- Monitoring Cloud Services

Module 9: Implementing Content Delivery Networks and Media Services

- Implementing Azure Content Delivery Networks
- Publishing Content with Azure Media Services
- Lab : Implementing a Content Delivery Network
- Configuring a Content Delivery Network
- Lab : Implementing Content Delivery Networks and Cloud Services
- Adding Content to the Source Service
- Creating a Media Services Account and Uploading Content
- Publishing and Scaling Media

Module 10: Implement Azure AD

- Creating and Managing Azure Directories
- Configuring Application Integration with Azure Active Directory

Module 11: Managing Active Directory in a Hybrid Environment

- Extending On-Premises Active Directory into Azure
- Directory Synchronization
- Implementing Federation
- Lab : Managing an Active Directory Hybrid Environment
- Configuring Directory Synchronization
- Synchronizing Directories

Module 12: Implementing Automation

- Overview of Automation Components
- Implementing PowerShell Workflows
- Managing Automation
- Lab : Implementing Automation
- Configuring Automation Accounts
- Creating Runbooks

Module 13: Microsoft Azure Solutions

- Tailspin Toys Business Systems Scenario
- Software as a Service Scenario

- Overview of Azure Active Directory Premium
 - Lab : Implementing Azure Active Directory
 - Administering Active Directory
 - Configuring Single Sign-On
 - Configuring Multi-Factor Authentication
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Further Information:

For More information, or to book your course, please Email us on:

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