

Microsoft Azure Foundations

Course ID: MSAZ2017



Course Description

This two-day workshop covers the foundational elements of Microsoft Azure. An interactive workshop with real-time demos, it is designed to serve the needs of engineers who need to understand how Azure can be used to solve real-world problems using Cloud Architecture best practices.

Learning Objectives

After this course you should be able to:

- + Describe the foundational elements of Azure
- + Understand core architectural practices of Azure IaaS and PaaS services
- + Articulate the benefits of Azure and its services to real-world use cases

Who Should Attend

- + Data Center Architects
- + Cloud Solution Architects
- + Cloud Administrators
- + System Administrators
- + Security Team Personnel
- + Executive Sponsors

Prerequisites

- + Understanding of Server System Design and Architecture
- + Familiarity with Server Virtualization
- + Understanding Application Architecture
- + Familiarity with Data Center Networking Technologies and Storage Concepts
- + Familiarity with Cloud concepts

Azure Foundations

(2 Days)

Course Content

Module 1: Cloud Architecture Design Principles and Best Practices

- + Business Challenges
- + Anatomy of a Cloud Solution
- + Service Model Use Cases – IaaS, PaaS, SaaS

Module 2: Azure Foundation

- + Components of Azure
- + Regions + Availability Zones
- + Classic vs. ARM Deployment Models
- + Subscriptions
- + Support Structures
- + Tagging Strategies

Module 3: Network

- + Getting to the Cloud with INET VPNs and ExpressRoute
- + Intra Cloud-VNET Fundamentals
- + VNET Peering and VPN
- + Securing VNETs with NSG and NVAs
- + Load Balancing Options

Module 4: Compute

- + Resource Groups and Resources
- + Azure VMs
- + App Services + Containers
- + Scale Sets and Availability Sets

Module 5: Storage

- + Choosing the Right Storage for the Application
- + Storage Accounts
- + VM Storage, Blob, Table, Queue, and File

Module 6: Security

- + Cloud Shared Responsibility Model
- + Compliance Concerns
- + Encryption
- + Security Center

Module 7: Identity

- + Directory Services in Azure
- + Azure AD Introduction
- + Federation
- + MFA

Module 8: Azure Costing

- + How to Manage and Monitor Cost?
- + Azure Cost Management Services
- + Understanding Azure Service Pricing

Module 9: Business Continuity

- + Prepare for Failure
- + Azure Backup Options
- + Azure Site Recovery (ASR)
- + Be Prepared and Test - Ongoing Failure Injection

Module 10: Automation

- + The Need and Benefits of Automation
- + Azure CLI and PowerShell
- + IaC with ARM Templates and Terraform

Module 11: Migration

- + Greenfield, Lift and Shift and Refactor
- + Migration Planning
- + Carrying out the Migration

Module 12: Database Options

- + Advantages of DBaaS vs DIY on Azure VMs
- + The Advantages of Azure SQL
- + Sizing and Scaling your DBs
- + HA and Global Redundancy

Module 13: Day 2 Ops-Monitoring and Alerting

- + Native Azure Tools and 3rd Party Integrations
- + Azure Monitor Suite
- + Log Analytics, Network Watcher, Application Insights

Module 14: Azure Stack

- + Bring Azure to your Private Datacenter
- + Primary Components
- + Use Cases

To register for an ePlus cloud training course, contact us today.

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