



## OVERVIEW OF THE MICROSOFT AZURE PLATFORM

- Azure Services
- Management Portals
- Lab : Using the Azure Preview Portal

## Establishing a Development Environment using Azure Virtual Machines

- Constructing Azure Virtual Machines
- Azure Virtual Machine Workloads
- Using Remote Desktop Protocol (RDP) to Connect to a Virtual Machine
- Lab : Creating an Azure Virtual Machine for Development & Testing

## Hosting Web Applications on the Azure Platform

- Azure Web Sites
- Hosting Web Applications in Azure
- Configuring an Azure Web Site
- Publishing an Azure Web Site
- Monitoring and Analyzing Running Azure Web Sites
- Lab : Creating an ASP.NET Web Site Using Azure Websites

## Storing SQL Data in Azure

- Azure SQL Database Overview

- Managing SQL Databases in Azure
- Using Azure SQL Databases with SQL Server Data Tools
- Migrating Data to Azure SQL Databases
- Replication and Recovery of Azure SQL Database Instances
- Lab : Storing Event Data in Azure SQL

### Designing Cloud Applications For Resiliency

- Design Considerations for Scale with Cloud Applications
- Application Design Practices for Highly Available Applications
- Building High Performance Applications using ASP.NET
- Common Cloud Application Patterns
- Application Analytics
- Caching Application Data

### Managing Cloud Services in Azure

- Overview of Cloud Services
- Cloud Service Web Roles
- Customizing Cloud Service Configurations
- Updating and Managing Cloud Service Deployments
- Cloud Service Worker Role
- Cloud Service Worker Role Processing
- Analyzing Application Cloud Service Role Instances
- Lab : Creating Azure Web Roles Using Visual Studio 2013
- Lab : Creating a Background Process Using Azure Worker Roles

### Storing NoSQL Data in Azure

- Azure Storage Overview
- Azure Storage Tables Overview
- Table Entity Transactions
- Azure Document DB
- Lab : Storing Attendee Registration Data in Azure Table Storage

### Storing and Consuming Files from Azure Storage

- Azure Storage Blobs
- Controlling Access to Storage Blobs & Containers
- Monitoring Storage Blobs

- Configuring Azure Storage Accounts
- Azure Files
- Uploading and Migrating Storage Data
- Lab : Storing Generated Documents in Azure Blob Storage
- Lab : Creating File Shares using Azure Files

### Designing a Communication Strategy using Queues and Service Bus

- Queue Mechanisms in Azure
- Azure Storage Queues
- Handling Storage Queue Messages
- Azure Service Bus
- Azure Service Bus Queues
- Azure Service Bus Relay
- Azure Service Bus Notification Hubs
- Lab : Using Storage Queues to Manage Requests Between Web Applications in Azure
- Lab : Using Service Bus to Manage Communication Between Web Applications in Azure

### Managing Infrastructure in Azure

- Azure Virtual Networks
- Highly Available Azure Virtual Machines
- Customize Azure Virtual Machine Networking
- Lab : Managing Multiple Virtual Machines in a Virtual Network

### Automating Integration with Azure Resources

- Azure SDK Client Libraries
- Virtual Machine Configuration Management
- Scripting Azure Service Management using PowerShell
- Azure REST Interface
- Azure Resource Manager
- Lab : Automating the Creation of a Test Environment using PowerShell

### Securing Azure Web Applications

- Azure Active Directory
- Introduction to Identity Providers
- Azure AD Directories
- Azure AD Multi-Factor Authentication

- Azure Role-Based Access Control
- Lab : Integrating Azure Active Directory with the Events Administration Portal

### Maintaining and Monitoring Web Solutions in Azure

- Deployment Strategies for Web Applications
- Deploying Azure Services
- Continuous Integration
- Monitoring Cloud Applications
- Lab : Deploying the Events Web Application to Azure