

# Microsoft Azure: PaaS Solutions for Developers

## Workshop*PLUS*

### **Target Audience:**

To help us ensure the high-quality knowledge transfer students expect from this 4-day workshop, class size is limited to a maximum of 16 students who meet the following criteria:

- At least 1 year of experience with C# and .NET
- Line of Business Application developers.
- IT Developers
- Microsoft Certified Technology Specialist (MCTS) or Microsoft Certified Professional Developer (MCPD) or those with similar experience.

## Overview

The Microsoft Azure Platform Application Developer series provides your Development staff with a jumpstart on Microsoft Azure Development and application migration. Each service is delivered by a Microsoft Premier Developer resource, who will bring deep Microsoft Azure technical knowledge, development skills, and best practices to your developer organization. Developers will walk away with a firm grasp on the techniques required to successfully develop and manage enterprise-class applications hosted in Microsoft Azure. Please consider that this workshop contains advanced content, so carefully review the target-audience and contact your Microsoft Services representative to ensure that it is appropriate for your developers.

### Key Features and Benefits

**Focused on your employee needs.** It is important for students to gain knowledge that will enable them to excel on the job. To accomplish that end, the instructor will gauge the students' knowledge gaps and adjust the course content to focus on areas that will provide the most benefit to your employees.

**Knowledge transfer validation.** Students like to know how much they learned as a result of the training. During the workshop, the instructor will revisit the class objectives to help us ensure that students are getting the training they expect and understand the concepts.

**Microsoft Lab Exercises and Demos.** Applying new knowledge to the real world is the key to getting the most value out of your training budget. Our labs and demos highlight key application development concepts, migration blockers, and troubleshooting tasks.

# Syllabus

***Maximize your investment in Microsoft Azure***

*Accelerate your Development staffs effectiveness with Microsoft Azure Platform Application Developer Series offerings.*

This workshop runs for 4 full days. Students should anticipate consistent start and end times for each day. Early departure on any day is not recommended. Throughout the course, both labs and demos will be utilized to help drive better understanding of the materials. Each module includes at least one hands-on lab.

## **Microsoft Azure Resource Manager (ARM)**

- Describe the usage of ARM
- Details of ARM JSON code structure

## **Microsoft Azure Web And API Apps**

This module explores the Azure App Service platform for deploying web-based applications. We contrast the differences between Azure Cloud Services vs. Azure App Services. Emphasis is on Web App scaling, WebJobs and API apps. Students will perform a hands-on lab on deploying a pre-existing web application to an Azure Web App. Finally, we conclude with an in-depth discussion on Azure API Apps, along with a hands-on lab.

## **Microsoft Azure Application Insights**

In this module, we go into a deep dive of the Microsoft Azure Application Diagnostics features. Students will perform a hands on lab where they learn how to add diagnostics to their applications, including custom events.

## **Microsoft Azure Storage**

In this module, we go into a deep dive of the Microsoft Azure Storage features. Students will perform a hands on lab where they learn how to work with Table Storage, Blob Storage, and Queues.

## **Microsoft Azure Cloud Services**

In this module, we continue with an in-depth discussion of PaaS Azure Cloud Services. We will discuss building a multi-tier Cloud application, how to deploy in to Azure and also how to diagnose problems in the Cloud Service. Students will perform a hands-on lab where they will use Visual Studio 2015 to deploy a multi-role web application in to Azure.

## **Microsoft Azure Service Fabric**

This module will include a discussion on microservices and how the Azure Service Fabric is used to manage microservices. Both the Actor and Reliable Services model will be discussed and demoed along with data partitioning. This will be followed up by a hands-on lab.

## **Microsoft Azure SQL Database**

We will have a discussion of the features of SQL Database, the differences between on-premise SQL and Azure SQL Database and things to consider when implementing Azure SQL Database. This will be followed up by a hands-on lab.

## **Identity in the Cloud**

In this module, we discuss Microsoft Azure Active Directory and Cloud Identity. This topic covers securing your web apps with the use of Microsoft Azure Active Directory for Authentication and Role Based Access Control (RBAC).

## **Microsoft Azure Service Bus**

This module will include a discussion on the Microsoft Azure Service Bus namespace and access control, relay patterns and messaging. The discussion on messaging will include Queues, Topics and Subscriptions. There will be a hands-on lab for Queues, Topics and Subscriptions.