

Professional Microsoft Azure DevOps Engineering

Course Description

Streamline your software development lifecycle with Microsoft Azure's integrated cloud tools and resources.

Learn everything you need to get started with DevOps on Microsoft Azure, including automation, testing, development, and the provisioning of services. You'll learn all about the practical aspects of DevOps by understanding how different teams (such as development, QA, cloud, and build engineers) collaborate to develop an application and create high-quality products with Azure.

Overview

The course begins by giving you an overview of PaaS and aPaaS. You'll also learn about Visual Studio Team Services (VSTS) and its integration with Eclipse IDE. You'll see how to configure the application code for automated compilation and run a unit test.

As you progress, you'll explore continuous development with Microsoft Azure Web Apps by learning to create different environments for deploying web applications. You'll also explore the difference between Azure Web Apps and Azure App Service Environments. Next, you'll gain insight into end-to-end automation for deploying an application in PaaS. When you complete this course, you will feel confident and excited to apply your skills in real-life business scenarios.

After completing this course, you will be able to:

- Explore the features of PaaS and aPaaS in DevOps
- Use Visual Studio Team Services (VSTS) to manage code versions
- Understand and configure continuous integration in VSTS
- Build different environments for continuously deploying an application
- Configure role-based access to enable secure access for Azure Web Apps
- Execute an end-to-end automation process
- Test an app for performance using JMeter
- Creating and configuring Traffic Manager with endpoints
- Understand disaster recovery and high availability of Azure Web Apps

Course Length

2 days.

Scope

This course starts with the hands-on approach to develop an application and create a quality product using DevOps with Azure. This course provides a perfect blend of real-world examples and hands-on exercises to help you learn key concepts and techniques.

Target Audience

Professional Microsoft Azure DevOps Engineering is an ideal course for developers, technical leads, testers, and operational professionals, who want to jump-start Microsoft Azure PaaS offerings, such as App Services and SQL Database, to host applications.

Technical Requirements

Hardware:

This course will require a computer system for the instructor and one for each student. The minimum hardware requirements are as follows:

- Processor: Intel Core i7 or equivalent
- Memory: 8GB RAM
- Storage: 40 GB available space

Software:

- Windows 8.1 64-bit
- Browser: We recommend the latest version of one or more browsers (Internet Explorer 11, Chrome 54.0.2840, or Mozilla Firefox)
- GLIBC 2.3 to 2.11 for Linux
- Visual Studio IDE
- Azure subscription

Course Outline

Lesson 1: Visual Studio Team Services Fundamentals

- Overview of Visual Studio Team Services (VSTS)
- Integrating VSTS with Visual Studio IDE
- Managing Code Using VSTS and Visual Studio

Lesson 2: Microsoft Azure Fundamentals

- What is Cloud Computing?
- Azure Web Apps
- Azure Data and Storage
- Azure Web App Key Concepts

Lesson 3: Agile with Visual Studio Team Services

- Introducing Agile in VSTS
- Working with Kanban Boards

Lesson 4: Continuous Integration with VSTS

- Overview of Continuous Integration in VSTS
- Customizing Your CI Build

Lesson 5: Continuous Deployment with VSTS

- An Overview of Continuous Deployment in VSTS
- Extending the Release Definition

Lesson 6: Continuous Monitoring with VSTS

- Performance Testing Using VSTS
- Azure Web Apps Troubleshooting