



days



Dev Leads TFS Admins **Build** master

2013

# Build, release and monitor software using Visual Studio 2013



### **Course Description**

This 3-day introductory-level course focuses on building your software using Team Build, using Release Management for Visual Studio 2013 to release it and Application Insights to monitor it.

The modules on Team Build cover configuring a scalable build environment, creating build definitions, executing tests as part of the build and build customization. The course covers Release Management for Visual Studio 2013 including how to install Release Management components and how to create servers and environments for use in Release Management.

Application Insights is an exciting new feature available in Visual Studio Online that allows you to monitor your application availability, performance, exceptions and much more. The course walks you through getting started with Application Insights, creating synthetic monitors, working with dashboards and the Application Insights SDK.

### **Course Objectives**

At the completion of this course, attendees will be able to;

- Install and configure a scalable build environment using build controllers and build agents
- Create a build definition
- Modify and extend the build process
- Configure the execution of different test types as part of the build
- Install and configure Release Management components including the server, client and deployment agents
- Configure continuous release of your software into environments
- Create release templates for a range of applications
- Understand the capabilities and features of Application Insights
- Create custom Application Insights dashboards
- Configure Availability monitors to monitor your application health

#### Who Should Attend?

This course is designed for team members responsible for configuring and administering their build and release solutions. The course is suitable for developers, TFS administrators and build masters.





### **Prerequisites**

Attendees should have familiarity with Visual Studio and the basic use of TFS. They should have had experience deploying software to various environments.

#### **Modules**

#### Module 1: An overview of Visual Studio 2013

- A look at the Visual Studio 2013 family
- Visual Studio Online
- Enhancing your lifecycle using Build-Release-Monitor

### Module 2: Configuring a scalable build environment

- Overview of Team Build
- Planning our scalable build environment
- Installing and configuring Build Controllers and Build Agents

#### Module 3: Creating a Build Definition

- Configuring what we're going to build
- Deciding how to trigger your build
- Understanding the Build processes
- Selecting the staging location and retention policies

### Module 4: Extending and customizing Build workflow

- New extensibility points in Visual Studio 2013
- Modifying the build process file (xaml)

#### Module 5: Executing tests as part of our build

- Automating the execution of unit tests as part of the build
- Options for executing other test types
- Configuring a test controller and test agents

### Module 6: Introduction to Release Management for Visual Studio 2013

- An overview of the features of Release Management
- How to reduce the risks and costs associated with releasing software
- A look at the Build-Deploy-Test-Release process

# Module 7: Installing and configuring Release Management for Visual Studio 2013

- Installing and configuring the Release Management Server and Client
- Installing Deployment Agents
- Configuring roles and permissions in Release Management

# Module 8: Configuring Release Paths and Release Templates

- Defining servers and environments
- Configuring release path stages
- Understanding release templates
- Setting up a deployment procedure for each stage
- Configuring a build definition to use the Release Management process template

### Module 9: An overview of Application Insights

- Why Application Insights?
- What is Application Insights?
- Understanding telemetry sources

# Module 10: Configuring your application and infrastructure for Application Insights

- Using the Application Insights Tools for Visual Studio
- A look at the Application Insights SDK
- Installing the Microsoft Monitoring Agent

#### Module 11: Configuring Application Insights

- Creating a new Applications Insights
   Dashboard
- Monitoring availability
- Monitoring performance
- Monitoring usage
- Configuring alerts

