

# DevOps with TFS

Lesson 00 :



## Document History



Add instructor notes here.

| Date        | Course Version No. | Software Version No. | Developer / SME          | Change Record Remarks        |
|-------------|--------------------|----------------------|--------------------------|------------------------------|
| 29-Mar-2017 | 1.0                | Visual Studio 2015   | Sangeetha Chandrasekaran | Reviewed by Vaishali Kasture |
|             |                    |                      |                          |                              |

## Course Goal and Non Goals

- Course Goals
  - To understand DevOps Fundamentals
  - To understand DevOps with TFS and VSTS
- Course Non Goals
  - Learning Tools of DevOps



## Prerequisites



- Understanding of SDLC and SDLC Models
- Source Control usage
- Basic understanding of Cloud

# Intended Audience



Add instructor notes here.

- This course is suitable for
  - System Administrators
  - Developers
  - IT Managers
  - IT Operations team members who want to learn more about DevOps with TFS.



## Day Wise Schedule



- Day 1
  - Lesson 1: Introducing DevOps
  - Lesson 2: Consolidation using Version Control
- Day 2
  - Lesson 3: Build and Release Management
  - Lesson 4: Unit Testing and DevOps
  - Lesson 5: Deploy to Azure

## Table of Contents



- Lesson 1: Introducing DevOps
  - Visual Studio
  - What is DevOps?
  - Agile Vs DevOps
  - DevOps Lifecycle
  - Tools for Adopting DevOps
  - DevOps Practices
  - Microsoft DevOps Solution
- Lesson 2: Consolidation using Version Control
  - Why Version Control?
  - Version Control in TFS
  - Team Projects & Team Project Collections
  - TFVC Overview
  - Git + TFS Overview
  - Git or TFVC

## Table of Contents



- Lesson 3: Build and Release Management
  - Configuring Build Environment
  - Authoring Build Definition
  - Customizing the Build Process
  - Overview of Release Management
  - Release Management for VS 2015
- Lesson 4: Unit Testing and DevOps
  - Test with VSTS
  - Continuous Testing
  - Developer Tools and Unit Testing
- Lesson 5: Deploy to Azure
  - Continuous Integration
  - Continuous Deployment



## References

### ➤ Student Guide

- PPT along with notes

### ➤ Lab Book

- Lab Book consists of Walkthroughs to guide the participants throughout and <<To Do>> Exercises to test their knowledge and skills



## References



Add instructor notes here.

- <https://www.visualstudio.com/en-us/docs/concepts>
- <https://www.visualstudio.com/team-services/>
- <https://www.visualstudio.com/en-us/docs/git/overview>
- <https://www.visualstudio.com/en-us/docs/build/get-started/ci-cd-part-1>
- <http://searchwindevelopment.techtarget.com/definition/Visual-Studio-Team-System>
- <https://www.devbridge.com/articles/continuous-integration-delivery-and-deployment-in-net-projects/>

