Microsoft Team Foundation Server 2015 Cookbook

Over 80 hands-on DevOps and ALM-focused recipes for Scrum Teams to enable the Continuous Delivery of high-quality Software... Faster!

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Synopsis

Over 80 hands-on DevOps and ALM-focused recipes for Scrum Teams to enable the Continuous Delivery of high-quality Software... Faster!

About This Book

Release high quality, reliable software quickly through building, testing, and deployment automation. Improve the predictability, reliability, and availability of TFS in your organization by scheduling administration and maintenance activities. Extend, customize, and integrate tools with TFS, enabling your teams to manage their application lifecycles effectively.

Who This Book Is For

This book is aimed at software professionals including Developers, Testers, Architects, Configuration Analysts, and Release Managers who want to understand the capabilities of TFS to deliver better quality software faster. A working setup of TFS 2015 and some familiarity with the concepts of software life cycle management is assumed.

What You Will Learn

- Creating a Team Project with Dashboards, Assigning License, Adding users, and Auditing Access
- Setting up a Git repository in an existing TFVC-based Team Project
- Setting up branch policies and conducting Pull requests with code reviews
- Mapping, assigning and tracking work items shared by multiple teams
- Setting up and customizing Backlogs, Kanban board, Sprint Taskboard, and dashboards
- Creating a Continuous Integration, Continuous Build, and Release Pipeline
- Integrating SonarQube with TFBuild to manage Technical Debt
- Triggering Selenium Web Tests on a Selenium Test Grid using TFBuild
- Using Visual Studio Team Services Cloud load testing capability with new Build framework
- Extending and customizing the capabilities of Team Foundation Server using API and Process Editor

In Detail

Team Foundation Server (TFS) allows you to manage code repositories, build processes, test infrastructure, and deploy labs. TFS supports your team, enabling you to connect, collaborate, and deliver on time. Microsoft’s approach to Application Lifecycle Management (ALM) provides a flexible and agile environment that adapts to the needs of your team, removes barriers between roles, and streamlines processes.

The book introduces you to creating and setting up team projects for scrum teams. You’ll explore various source control repositories, branching, and merging activities, along with a demonstration of how to embed quality into every code check-in. Then, you’ll discover agile project planning and management tools. Later, emphasis is given to the testing and release management features of TFS which facilitate the automation of the release pipeline in order to create potentially shippable increments.

By the end of the book, you’ll have learned to extend and customize TFS plugins to incorporate them into other platforms and enable teams to manage the software lifecycle effectively.

Style and approach

This book is a recipe-based guide that uses a problem-solution format to call out inefficiencies in the software development lifecycle and then guides you, step-by-step, on how you can use Team Foundation Server to your advantage in those areas.
Customer Reviews

Loved this book. Really helpful and clear. It was great to read something that made the vision/future of build, lab, and release make sense. Microsoft has been a little vague over the last year or so and plans for the on-prem versions of those products was tough to figure out. Tarun Arora tied it together nicely.

In this book, Tarun covers every area of TFS from source control management, work item management, testing, and build/release automation to administration. I enjoyed this book because Tarun goes beyond the basics of TFS 2015, digging into advanced topics such as extended TFS with the TFS Object Model and REST API. Tarun also covers more advanced TFS administration (i.e., analyzing and configuring the database-level test retention policies, managing CodeLens, and analyzing log files for diagnose common issues). As a long-time TFS user, having performed countless upgrades from all versions, including Visual Source Safe, I still found hidden gems in this
book. I particularly enjoyed the chapters on automated testing integration and build/release vNext. I highly recommend this book to anyone that administers, manages, supports, or uses TFS on a regular basis.

I read this book in one week, and it's really interesting. This is not a book of classic TFS, its cookbook approach makes it different from others. This treats almost every theme TFS but also on key topics of DevOps as continuous delivery on TFS 2015, but most also applies to VSTS. The topics addressed are presented in the order of using TFS: Beginning with the creation of a project team, the management of source code for TFVC and Git. Then he addresses topics within builds, tests and Release using the latest version of Release which is integrated with TFS (then Update 2 RC1 or VSTS). Finally, the last themes are managing the TFS and TFS extension part with APIs and customization of work item form. All subjects in the form of cookbooks respond to real issues encountered daily when using or administering TFS. This book is therefore aimed both to administrators, developers, or even at Ops. I recommend you buy it, read it and practice each of these cases.

This is a great book for people who want to introduce DevOps practices into their daily work, but don't have much time to dig all the details of how to do it; with the recipes delivered on this book you can quickly start using TFS/VSTS ranging from how to setup a team project, managing source code repositories, tracking work and building, deploying and testing your apps all in an integrated and cohesive manner. If you want to go beyond it will also help in managing TFS and extending it to integrate with other tools. Let's be clear this is not a reference book or a tutorial, but a great practical how to; even if you are new to TFS/VSTS you can use this book to learn in a practical how to get most of TFS/VSTS and how you can managed your process with it end to end.

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