

ADMINISTERING TEAM FOUNDATION SERVER 2013

TFS2013 | 3 Days



OVERVIEW

This three-day, instructor-led course provides students with the knowledge and skills to deploy, configure, and manage Microsoft Team Foundation Server 2013 and related software components.

AUDIENCE

This course is intended for experienced administrators with a background in either software development or system administration. Team leaders, lead developers, and other accidental Team Foundation Server administrators are also encouraged to take this course. This course will also help a student prepare for the relevant Microsoft certification exam.

PREREQUISITES

Before attending this course, students should have experience or familiarity with:

- Windows Server 2008, 2008R2, or 2012
- Windows security and networking basics
- SQL Server 2008, 2008R2, or 2012
- SharePoint 2007, 2010 or 2013
- Visual Studio 2010, 2012, or 2013
- Their organization's ALM processes and tools
- Reading and understanding Visual C# code

AT COURSE COMPLETION

This course teaches students how to effectively plan, deploy, configure, and manage Team Foundation Server. At course completion, attendees will have had exposure to:

- TFS editions and components
- Supported topologies and environments
- Must-have TFS administration tools
- Hardware and software requirements
- Required service accounts and permissions
- Installing Team Foundation Server
- Configuring Team Foundation Server
- Installing and using Team Explorer
- Installing and using TFS Power Tools
- Team project collections and team projects
- Using and customizing process templates
- Managing relevant SQL Server components
- Managing relevant SharePoint components
- Using the TFS Administration Tool (CodePlex)
- Running Best Practice Analyzer
- TFS licensing and Client Access Licenses (CAL)
- Connecting and using Microsoft Excel & Project
- Integrating TFS and SharePoint
- Using Team Web Access
- Managing TFS Version Control
- Creating and managing workspaces
- How to label, shelve, branch, and merge
- Using and customizing check-in policies
- Controlling access to items in version control
- Command-line and third party tools
- Configuring and using Team Foundation Build
- Creating and queuing automated builds
- Using gated check-in and private builds
- Customizing build process templates
- Strategies for upgrading and migrating to TFS
- Integrating TFS with other systems and data
- High availability and scalability options
- Capacity planning and disaster recovery
- Backing up, restoring, and moving TFS data
- Managing the data warehouse
- Using PowerShell to manage TFS
- Customizing Team Foundation Server
- Extending Team Foundation Server

<u>MODULE</u>	<u>LESSONS</u>	<u>HANDS-ON</u>
<p>1. INTRODUCTION TO TEAM FOUNDATION SERVER</p> <p>This module introduces Team Foundation Server, its architecture, components, configurations, and usage.</p>	<ul style="list-style-type: none"> • Introduction to TFS • Editions, components, configurations • Visual Studio Online • Application Lifecycle Management • TFS' support of ALM • Administrator responsibilities & tasks • "Must-have" tools to manage TFS 	<ul style="list-style-type: none"> • Configure Windows and SQL Server • Create security groups • Create users and service accounts • Review relevant guidance and documentation
<p>2. PLANNING AND DEPLOYING</p> <p>This module assists an administrator in planning a Team Foundation Server deployment.</p>	<ul style="list-style-type: none"> • Planning the deployment • System requirements • Prerequisite software and accounts • Installing and configuring TFS • Installing Team Explorer • Installing TFS Power Tools • Troubleshooting 	<ul style="list-style-type: none"> • Create service accounts • Install Team Foundation Server • Configure Team Foundation Server • Install Team Explorer • Install TFS Power Tools
<p>3. CONFIGURING</p> <p>This module introduces the TFS Administration Console and how to use it and other tools to configure TFS.</p>	<ul style="list-style-type: none"> • Administrator roles and tools • Managing team project collections • Managing team projects • Managing process templates • Managing security permissions • Securing SharePoint and SQL Server • Using the TFS Admin Tool (CodePlex) • Deleting a team project 	<ul style="list-style-type: none"> • Create a TFS Administrator account • Create a team project collection • Create a team project • Secure a team project, SharePoint portal, and SQL Server reports • Use TFS Administration Tool (optional) • Run Best Practices Analyzer (optional)
<p>4. CLIENT APPLICATIONS</p> <p>This module introduces the various client applications that can communicate and interact with Team Foundation Server.</p>	<ul style="list-style-type: none"> • Overview of TFS licensing (i.e. CALs) • Team Explorer • Microsoft Excel • Microsoft Project • Team Web Access • SharePoint project portal • Command-line and 3rd party tools 	<ul style="list-style-type: none"> • Configure and use Team Web Access • Configure email-based alerts • Configure and use Team Explorer • Configure and use the SharePoint project portal • Use TFSCfg (command-line tool) • Use BISSubscribe (command-line tool)
<p>5. VERSION CONTROL</p> <p>This module focuses on administering Team Foundation Version Control and related components.</p>	<ul style="list-style-type: none"> • Overview of TFS Version Control • Integration with Visual Studio • Creating and managing workspaces • Basic and advanced workflows • Get, check-out, check-in • Check-in policies • Locking, unlocking, and conflicts • Shelving, unshelving, and labeling • Branching, merging, and patterns • Configuring a team project for Git • Controlling access to version control • TF and TFPT command-line tools • TFS Proxy and MSSCCI Provider • TFS Sidekicks (Attrice) 	<ul style="list-style-type: none"> • Create and manage workspaces • Add folders and files to version control • Create and use labels • Get, check-out, and check-in • Shelve and unshelve code • View history and rollback changes • Branch, merge, and track a changeset • Configure and use Git with a team project • Install and use the MSSCCI Provider (optional) • Install and use TFS Sidekicks (optional)

<u>MODULE</u>	<u>LESSONS</u>	<u>HANDS-ON</u>
<p>6. TEAM FOUNDATION BUILD</p> <p>This module focuses on Team Foundation Build, including a technical look into its architecture, execution, and customization.</p>	<ul style="list-style-type: none"> • Team Foundation Build architecture • Controllers and agents • Securing the build process • Defining and running a build • Using TFSBuild.exe • Automating Team Foundation Build • Gated check-ins and private builds • Using build process templates • Customizing a build process template • Team Foundation Build community 	<ul style="list-style-type: none"> • Configure Team Foundation Build • Configure a build controller and agent • Create a build definition • Queue a build in various ways • Override a build's default behavior • Add an additional build agent • Request an agent by name and tag • Configure a gated check-in build • Manage builds
<p>7. UPGRADING, MIGRATING, INTEGRATING</p> <p>This module discusses the various approaches and strategies for upgrading, migrating-to, or integrating-with Team Foundation Server.</p>	<ul style="list-style-type: none"> • Team Foundation Server upgrade • Standard vs. advanced upgrades • Post upgrade tasks • Migrating work items • Migrating version controlled items • Integrating with TFS • TFS Integration Tools (Microsoft) • TFS Integration Platform (CodePlex) • Custom and 3rd party solutions 	<ul style="list-style-type: none"> • Migrate work items using Microsoft Excel • Migrate work items using TFPT.exe • Migrate test cases using Test Case Migrator Plus" (CodePlex) • Use Team Foundation Server Integration Tools
<p>8. ADVANCED ADMINISTRATION</p> <p>This module dives into the more advanced Team Foundation Server administration topics.</p>	<ul style="list-style-type: none"> • Monitoring the health of TFS • Options for scalability • Options for high availability • Disaster recovery, backup, restore • Moving Team Foundation Server • Managing the data warehouse • Setup automated report delivery • Using PowerShell to manage TFS 	<ul style="list-style-type: none"> • Enable web-based TFS diagnostics • Analyze TFS diagnostic data in Excel • Backup TFS using SQL Server • Backup TFS using the admin console • Refresh the data warehouse • Refresh the Analysis Services cube • Rebuild the data warehouse • Use PowerShell to manage TFS (optional)
<p>9. CUSTOMIZING AND EXTENDING</p> <p>This module discusses the various customization and extensibility points found in Team Foundation Server.</p>	<ul style="list-style-type: none"> • Customizing vs. extending • Customizing a process template • Customizing a work item type • Creating and using a global list • Using Witadmin.exe • Using the TFPT Process Editor • Using work item templates • Creating a custom report • Creating a custom check-in policy 	<ul style="list-style-type: none"> • Explore and manage process templates • Customize a process template • Customize an existing work item type • Create and use a global list • Use work item templates (optional) • Customize Team Web Access (optional) • Create a custom report (optional) • Create a custom check-in policy (optional)

COURSE DESIGNER

This course was designed by Richard Hundhausen, a Visual Studio ALM MVP, Microsoft Regional Director, and an experienced software developer and trainer. For more information about his company, or to see other courses that they offer, visit www.accentient.com.