

Administering Team Foundation Server 2017

TFS2017 | 3 Days

This three-day course provides students with the knowledge and skills to deploy, configure, and manage Microsoft Team Foundation Server 2017 and related software components.



Course Objectives

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
- ✓ Managing relevant SQL Server components
- ✓ Managing relevant SharePoint components
- ✓ Installing and using Team Explorer
- ✓ Team project collections and team projects
- ✓ Using and customizing process templates
- ✓ TFS licensing and Client Access Licenses
- ✓ Connecting and using Microsoft Excel & Project
- ✓ Installing and using Team Explorer Everywhere
- ✓ Integrating TFS and SharePoint
- ✓ Using the TFS web portal
- ✓ Git and TFVC version control systems
- ✓ Basic and advanced version control workflows
- ✓ Configuring and using code search
- ✓ Controlling access to version controlled items
- ✓ Command-line and third party tools
- ✓ Configuring automated builds
- ✓ Deploying and using Visual Studio agents
- ✓ Configuring agent pools and queues
- ✓ Creating and queuing automated builds
- ✓ Configuring Package Management
- ✓ Configuring Release Management
- ✓ Creating a release definition
- ✓ Creating and deploying a release
- ✓ 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

Who Should Attend

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 2012, 2012 R2, 2016
- ✓ Windows security and networking basics
- ✓ SQL Server 2014 or 2016
- ✓ SharePoint 2013 or SharePoint Foundation 2013
- ✓ Visual Studio 2013, 2015, or 2017
- ✓ Their organization's ALM process and tools
- ✓ Reading and understanding Visual C# code

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Modules

Module 1: Introduction to Team Foundation Server

- ✓ Introduction to Team Foundation Server
- ✓ Editions, components, and configurations
- ✓ Visual Studio Team Services comparison
- ✓ TFS' support of Application Lifecycle Management
- ✓ TFS administrator responsibilities and tasks
- ✓ "Must-have" tools of a TFS administrator

Module 2: Planning and Deploying TFS

- ✓ Planning the deployment
- ✓ System requirements, software, and accounts
- ✓ Installing and configuring TFS
- ✓ Installing Team Explorer
- ✓ Troubleshooting

Module 3: Configuring TFS

- ✓ Administrator roles and tools
- ✓ Managing team project collections
- ✓ Managing team projects
- ✓ Managing process templates
- ✓ Securing TFS, SharePoint, and SQL Server
- ✓ Renaming and deleting a team project

Module 4: Client Applications

- ✓ TFS Client Access Licenses (CAL)
- ✓ Team Explorer and the web portal
- ✓ Microsoft Excel and Microsoft Project
- ✓ SharePoint project portal
- ✓ Team Explorer Everywhere
- ✓ Command-line and 3rd party tools

Module 5: Version Control

- ✓ Overview of Git and TFVC version control systems
- ✓ Integration with Visual Studio
- ✓ Using TFVC and Git version control
- ✓ Basic and advanced workflows
- ✓ Controlling access to version control
- ✓ Command-line tools and utilities
- ✓ TFS Proxy, MSSCCI Provider, and TFS Sidekicks

Module 6: Building and Releasing

- ✓ Overview of the Visual Studio build system
- ✓ Build agents, agent pools, agent queues
- ✓ Creating and queuing a build
- ✓ Monitoring, and managing a build
- ✓ Securing the build process
- ✓ Running tests as part of the build
- ✓ Overview of Package Management
- ✓ Overview of Release Management
- ✓ Defining, creating, and deploying a release

Module 7: Upgrading, Migrating, and Integrating

- ✓ Upgrading Team Foundation Server
- ✓ In-place vs. migration upgrade
- ✓ Performing post-upgrade tasks
- ✓ Migrating work items
- ✓ Migrating items under version controlled
- ✓ Integrating with Team Foundation Server
- ✓ Custom and 3rd party solutions

Module 8: Advanced Administration

- ✓ Monitoring the health of Team Foundation Server
- ✓ Web-based diagnostic tools
- ✓ Options for scalability and high availability
- ✓ Disaster recovery, backup, and restore
- ✓ Moving Team Foundation Server
- ✓ Managing the data warehouse
- ✓ Using PowerShell to manage TFS

Module 9: Customizing and Extending

- ✓ Customizing vs. extending
- ✓ Customizing a process template
- ✓ Customizing a work item type
- ✓ Creating default work items
- ✓ Creating and using a global list
- ✓ Using Witadmin.exe
- ✓ Using work item templates
- ✓ Creating a custom report
- ✓ Using the REST API to extend Team Foundation Server

Course Designer

This course was designed by Richard Hundhausen, a Visual Studio and Development Technologies MVP, and an experienced software developer and trainer. To see other developer courses, visit www.accentient.com.