

# Administering Team Foundation Server 2010

## 50430: Administering Team Foundation Server 2010 (3 Days)

### About this Course

This three-day instructor-led course provides students with the knowledge and skills to manage Microsoft Team Foundation Server 2010. The course focuses on the technologies used in Team Foundation Server 2010 and the techniques used to deploy, manage and support Team Foundation Server 2010.

### Audience Profile

This course is intended for novice experienced administrators with either a background in software development or a background in system administration. This course is intended to provide administrators with knowledge to effectively manage and administer TFS 2010. This course is not intended to provide developers with comprehensive knowledge covering how to use Team Foundation Server to support development, but instead provides administrators with the requisite knowledge to manage Team Foundation Server in a development environment.

### At Course Completion

After completing this course, students will be able to:

- Plan for and deploy Team Foundation Server.
- Manage Team Foundation Server security and permissions.
- Configure and manage Team Foundation Server Build.
- Perform basic customization of Process Templates, work items and workflow.
- Support developers that use workspaces and shelvesets.
- Deploy Team Server Proxy.
- Backup, restore and monitor Team Foundation.

### Course Outline

#### Module 1: Introduction to Team Foundation Server Administration

This module introduces the student to the TFS administration process by explaining, in brief, the development process, how TFS supports a development environment and the role of the administrator in supporting the development process. Application Lifecycle Management concepts will be explained and TFS specific terminology will be defined and explained. Students will be introduced to the responsibilities of administering TFS 2010.

#### Lessons

- What is Application Lifecycle Management?
- Visual Studio and Application Lifecycle Management
- What is Team Foundation Server?
- Overview of the Development Process
- TFS Components and Terms
- Role of the Administrator in the Development Process
- TFS Administration Overview

#### Lab : Becoming Familiar with Hyper-V

- Students will be instructed in the use of Hyper-V and the corresponding lab images.

After completing this module, students will be able to:

- Describe the ALM Model
- Describe how TFS supports ALM
- Be able to identify the responsibilities and various tasks a TFS administrator performs in a development environment

## Module 2: Planning and Deploying TFS 2010

This module explains how to plan for, install and configure TFS. Students will become familiar with the architectural requirements and options, installation steps and basic TFS topological and configuration options. Instructors will cover the basic knowledge required to deploy TFS and supply foundational information that will be required for successful completion of other modules.

### Lessons

- TFS Topologies
- Architectural requirements, Hardware considerations and Software considerations
- Networking requirements including firewall and ports
- Domain, Workgroup and Service accounts
- SQL Server and SharePoint requirements
- Topology considerations for small teams, single server, existing infrastructure or more than 1 server, and server farms
- Planning for Version Control Proxy

### Lab : Installing TFS

- Verifying IIS 7.0 is installed on Windows 7
- Preparing for and Installing Team Foundation Server
- Installing SQL Express using the TFS Configuration Tool

After completing this module, students will be able to:

- Describe the various TFS Topologies
- Describe the architectural requirements, hardware and software considerations when planning to deploy Team Foundation Server
- Plan for Domain and Workgroup service accounts for TFS
- Describe the SQL Server and SharePoint requirements for an effective TFS 2010 deployment
- Deploy TFS in a small environment
- Deploy TFS on a Single Server
- Describe the process for deploying TFS on various Topologies

## Module 3: Configuration and Operations of TFS 2010

This module explains this basic principles of configuration and operation of TFS 2010. Students will become familiar with the various TFS security groups and permissions, the practice of administering project collections and team projects, and the administrative knowledge required to support Build. Students will also review administrative information on testing and configuring reporting and analysis services.

### Lessons

- Default TFS Security groups and configuring permissions
- Managing team project collections and team projects
- Managing the TFS build System
- Configuring Reporting and Analysis Services

### Lab : Working with Team Project Collections and Team Projects

- Create a team project collection and team project
- Modify the root folder for report subfolders

### Lab : Configuring Security and Permissions

- Configuring Security and Permissions
- Authorizing Access to a Team Foundation Server Projection
- Modifying SharePoint Services security
- Modifying SQL Server Reporting Services Security

### Lab : Reconfiguring Reporting and Analysis Services

- Reconfiguring Reporting and Analysis Services

After completing this module, students will be able to:

- Work with TFS Security groups and TFS permissions
- Create and manage team project collections and team projects
- Manage the TFS build system
- Configure Reporting and Analysis services

#### **Module 4: Client Connectivity**

This module covers the various clients that can be used to connect to Team Foundation Server 2010. Students will connect to TFS 2010 with Team Explorer, Microsoft Office Excel 2010 and Team Web Access. Students will review the different license requirements, different clients that can be used to connect to TFS and will be able to describe how to configure Visual Studio and Team Explorer for Team Server Proxy.

##### Lessons

- Client Connectivity License Requirements
- IDE Configuration for TFS Integration
- Team Explorer 2010
- Microsoft Office Connectivity
- Team Web Access
- Configuring Visual Studio and Team Explorer for Proxy Server
- Resolving TFS connectivity issues

##### Lab : Add Work Items Using Excel

- Add Work Items using Excel 2010

##### Lab : Use Team Web Access to connect to TFS

- Use Team Web Access to connect to TFS

After completing this module, students will be able to:

- Describe the client connectivity license requirements
- Connect to Team Foundation Server using Team Explorer, Team Web Access and Excel 2010
- Publish data to Team foundation Server using Excel 2010
- Describe how to configure Team Server Proxy

#### **Module 5: Customization of Team Projects**

This module explains how to customize team project workflow, work item features. Students will work with the Team Foundation Server Power Tools and modify the existing project workflow and work items. Students will also create work item queries and modify work item templates.

##### Lessons

- Managing Work item Queries
- Customizing Work items and Workflow
- TFS Power tools
- Reporting

##### Lab : Working with Queries

- Creating a Query Folder, Subfolder and new Query
- Copying work Item Queries
- Renaming Work Item Queries
- Moving a Query

##### Lab : Administering Work Items

- Create Add a new Work Item Type
- Create a New Global List
- Explore an existing process template
- Customize a process template
- Customize the fields of a work item
- Customize work item type

##### Lab : Setting up Alerts

- Setting up an Alert

After completing this module, students will be able to:

- Create, modify and manage Work Item Queries
- Create new Work Item Types
- Customize Work Items
- Create new Process Templates
- Create new global lists
- Setup alerts

## **Module 6: Administering Version Control**

This module explains how to administer version control in Team Foundation Server. Students will review the processes for managing workspaces, work with branching and merging, create shelve sets and discuss the 5 key scenarios for using shelvesets.

Lessons

- Managing Workspaces
- Administering Branching and Merging
- Managing Shelvesets

Lab : Administering Version Control

- Managing Workspaces
- Branching and Merging
- Version Policies and Settings
- Working with labels and Shelvesets

After completing this module, students will be able to:

- Create, modify and remove workspaces
- Describe what administrators need to know to administer workspaces
- Describe the use of cloaking and uncloning folders
- Describe how to effectively manage workspaces
- Describe the effects branching and merging has on the server environment
- Describe the use of shelvesets and what administrators need to be aware of when working with shelvesets

## **Module 7: Upgrading, Migrating, and Integration**

This module covers the process of upgrading to Team Foundation Server, migrating data to Team Foundation Server and how to integrate Team Foundation Server with other Source Control systems.

Lessons

- Upgrading to TFS 2010
- Migrating to TFS 2010
- Visual Source Safe Migrations
- Integration with TFS

After completing this module, students will be able to:

- Describe the various methods for upgrading to TFS 2010
- Describe how to migrate to TFS 2010
- Describe the process for migrating from Visual Source Safe
- Describe integrating other systems with TFS 2010

## **Module 8: Advanced Administration**

This module explains several different advanced administration topics that expand on concepts covered in previous modules. Students will review the process of installation validation, advanced management of TFS Application and Data Tiers, Rebuilding a warehouse, moving a TFS instance to a new server or new domain, and installing and configuring Team Foundation Server Proxy.

Lessons

- Validating an installation
- Manual configuration of SharePoint and reporting services post-installation
- Advanced management of TFS Application and Data Tiers
- Rebuilding the Warehouse
- Service Account management
- Version Control Proxy Deployment
- Fault Tolerant Solutions

Lab : Configuring Email Alerts

- Configuring SMTP for email alerts

Lab : Deploy and Configure a Version Control Proxy

- Deploy and configuring a Team Server Proxy

Lab : Deploy a new Build Controller

- Configuring a Build Machine
- Creating a Team Build

Lab : Deploy a new Application Tier

- Configuring a new Application Tier Server

After completing this module, students will be able to:

- Describe how to validate an installation
- Manually configure SharePoint and reporting services
- Deploy a new App-tier
- Deploy a new Build Controller
- Deploy and configure a Team Server Proxy
- Describe the various TFS Fault Tolerant Solutions

## **Module 9: Backup, Restore and Monitoring TFS 2010**

This module explains how backup and restore Team Foundation Server 2010 and the best practices for monitoring TFS 2010. Students will review the various tools for monitoring TFS 2010 and will review the steps for backing up and restoring TFS in a disaster recovery situation.

Lessons

- Backing Up TFS 2010
- Restoring TFS 2010
- Monitoring TFS 2010

Lab : Monitoring TFS 2010

- Run the Best Practices Analyzer

After completing this module, students will be able to:

- Describe the process for Backing up and restoring TFS 2010
- Describe the various tools for monitoring TFS 2010
- Run the Best Practices Analyzer to monitor TFS 2010

### **Additional Reading**

To help you prepare for this class, review the following resources:

- TFS Administration Guide
- TFS Installation Guide

**Before attending this course, students must have:**

- A+ certification or equivalent knowledge.

- Network+ certification or equivalent knowledge.
- Possess working knowledge of Windows Server administrative tasks.