Team Foundation Server

ALMA17: TFS 2017 Configuration and Administration

If you're responsible for looking after your organization's TFS server, then this is the course for you.

$2,795.00

- 4 Days

Upcoming Dates

Course Description

This 4-day deep dive course is designed for team members who are responsible for the installation, configuration, and administration of Microsoft Team Foundation Server 2017. This course teaches not only the technical know-how to successfully run your TFS infrastructure, but also best practices based on industry experience.

This course combines both technical presentations as well as hands-on lab exercises designed to ensure attendees gain a solid, practical understanding of how to administer TFS 2017 in modern work environments.

Key topics covered in this course include product installation, configuring security & permissions, reporting, customization, and installing extensions from the Visual Studio marketplace. The course also covers both build and release management and how to configure environments to support modern DevOps best practices.

Course Outline

Module 1: Introducing the Microsoft Visual Studio 2017 family

- What's new in Visual Studio 2017
- Overview of the Visual Studio 2017 family
- Overview of product features
- A lap around Visual Studio Team Services
- Project workflow across the Visual Studio 2017 suite of products

Module 2: Planning a TFS 2017 Deployment

- Overview of TFS architecture
- Planning a TFS deployment
- Optimizing your Code Search deployment
- An overview of product licensing

Module 3: Installing TFS

- Installing and configuring TFS prerequisites
- TFS 2017 installation
- Integration with SharePoint

Module 4: Upgrading to TFS 2017

- Overview of upgrade options
- In-place vs migration-based upgrades
- Performing your upgrade
- Migration options from other version control providers

Module 5: Managing TFS Instances

- Using the TFS Administration Console
- Configuring SMTP support for TFS
- TFS server health monitoring
- Changing service accounts
- Viewing installed updates
- Managing and installing extensions from the Visual Studio Marketplace

Module 6: TFS Backup and Restore

- TFS Backup and Restore strategies
- Understanding the TFS databases
- Creating a backup schedule
- The restore process
- Refreshing the client data cache

Module 7: Creating and Managing Team Projects

- Creating Team Projects
- Understanding Team Project Collections
- Creating Project Welcome pages
- Renaming and deleting Team Projects

Module 8: Configuring Team Project Level Security

- Overview of TFS security
- Configuring security using standard groups
- Understanding and configuring Teams

Module 9: Advanced Security and Permissions

- Fine-grain security options
- TFS server level permissions
- Setting permissions at the Team Project Collection level
- Setting Web Access permissions
- Restricting access in TFS
- Using command line tools for managing security

Module 10: Source Control Configuration

- Setting project-wide source control settings
- Understanding workspaces
- Using the TFS command line utility
- Using the TFS Rollback command
- Using the TFS Proxy to improve performance
- Backward compatibility using the MSSCCI provider

Module 11: Work Items

- Overview of work items
- Creating custom queries
- Work item charting and pinning charts
- Work item tagging

- Configuring project alerts and notifications

Module 12: Managing Process Templates

- Understanding process templates
- Understanding inherited templates
- Basics of template customization
- Adding new fields to Work Item Types
- Updating an upgraded Team Project

Module 13: Reporting

- Understanding the reporting architecture
- Adding new reports
- Creating ad-hoc reports using Excel
- TFS Warehouse and OLAP Cube overview
- Changing the Data Warehouse and Analysis Services Cube processing frequency
- Rebuild the Data Warehouse and Analysis Services Cube

Module 14: Build Automation

- Overview of build infrastructure
- Installing and configuring Build Agents
- Scaling your build infrastructure
- Overview of hosted build services
- Overview of non-Windows Build Agents

Module 15: Release Management

- Overview of release management
- Creating a release definition
- Configuring environments
- Managing configuration variables
- Setting release retention policies

Audience

This course is designed for administrators and software development professionals responsible for the day-to-day administration and operation of a Team Foundation Server. Every organization using TFS should have at least one or two "TFS champions" who are skilled in the topics and areas covered in this course.

Prerequisites

Attendees should have some familiarity with installations of server products such as operating systems, SQL server, etc. Some experience using Visual Studio would also be beneficial.

What You Will Learn

At the completion of this course, attendees will be able to:

- Plan your TFS deployment and install TFS 2017 in a variety of topologies
- Install, configure, and optimize the new Code Search feature
- Troubleshoot issues with Code Search
- Determine appropriate service accounts
- Plan a migration and/or upgrade to TFS 2017
- Understand the value of quarterly updates and how to install them
- Configure SMTP support and customize email alerts
- Install extensions from the Visual Studio Marketplace

- Keep your TFS data safe using backup and restore
- Monitor the health and performance of your TFS server
- Plan your project hierarchies using Team Projects and Team Project Collections
- Create, modify, rename, and delete Team Projects and Team Project Collections
- Configure standard role-based security for team projects
- Use advanced security to manage fine-grained security
- Configure version control settings, including backward compatibility
- Customize the process template to better suit your teams' requirements
- Understand the reporting infrastructure and create custom Excel reports
- Configure Data warehouse and OLAP cube refresh and rebuilds
- Plan, install, and manage the new build environments
- Optimize build infrastructure to provide fast feedback to teams
- Configure a release management environment
- Manage configuration values in release management