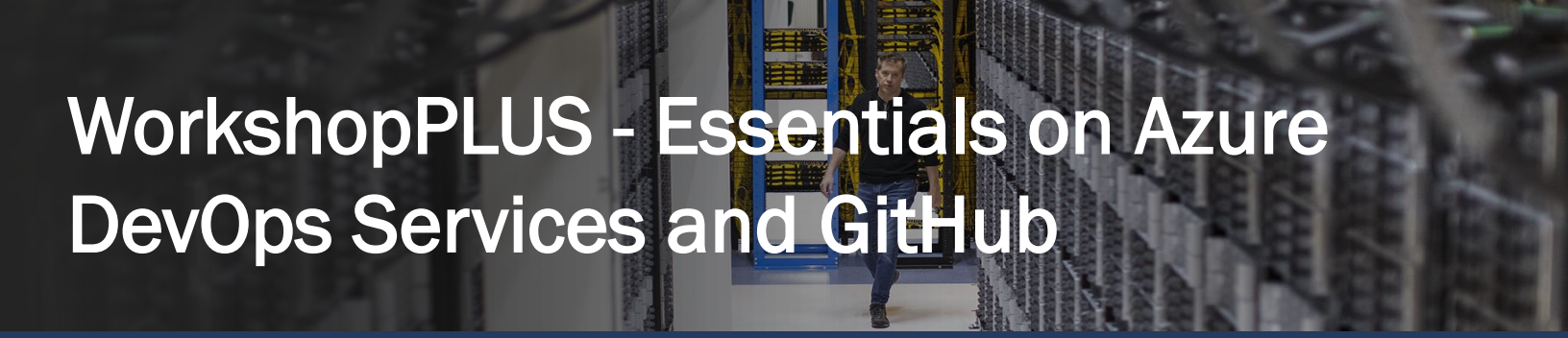

WorkshopPLUS - Essentials on Azure DevOps Services and GitHub

WorkshopPLUS

Focus Area: Upgrade, Migration, and Deployment

Duration: 3 days [Remote/Onsite]

Difficulty Level: 300

Description

This offering is designed to provide participants with the fundamental knowledge necessary to use Azure DevOps Services and/or GitHub. You can choose modules from Azure DevOps Services and/or GitHub. We will examine in detail the best practices for working with version control, project management, and automation & CI/CD. Proficiency in these three areas is the key to unlocking the full potential of your software development efforts and becoming skillful with DevOps practices.

Objectives

After completing this training, students will:

- Gain a deeper understanding of how to use Azure DevOps Services and/or GitHub to maximize team collaboration, project transparency, software quality, and overall DevOps maturity

Outcomes

- Recommendations and guidance on how to apply the knowledge acquired to resolve real problems at the workplace.

Hands-on labs

- Most of the concepts covered above will be supported by hands-on labs and demos

Skill requirements

- This WorkshopPLUS includes content that is targeted at developers but is beneficial to all team members that use Visual Studio and Azure DevOps Services and/or GitHub.

Day 1

- Introduction to DevOps
- Projects
- Azure Repos – Git (or) Azure Repos – Team Foundation Version Control (or) GitHub Repositories

Day 2

- Azure Pipelines (or) GitHub Actions
- Azure Artifacts
- Azure Boards – Work Items

Day 3

- Azure Boards – Plan and Track Projects
- Collaboration, Reporting, and Extensions
- Open Source Software (OSS) (or) Integrating GitHub with Azure DevOps Services

Optional modules

- Azure Test Plans, Azure Test Plans – Test & Feedback, Azure Policy Compliance with Azure DevOps
- Plan for three full days. Early departure on any day is not recommended.

Hardware requirements

- An Intel Core-i5-based PC, 4 GB RAM, 128 GB HDD
- Windows 7 SP1 or later, Office 2010 or later
- Internet access with at least 1 Mbps bandwidth per student
- Azure subscription
- Azure DevOps organization.
- Visual Studio Enterprise
- Visual Studio Code
- GitHub account

Delivery outline

Introduction to DevOps

- DevOps Overview
- Azure DevOps Services
- GitHub

Projects

- Hierarchy of Azure DevOps Services
- Projects
- Understanding Teams
- Process
- Team Explorer

Azure Repos: Git (or) Azure Repos: Team Foundation

Version Control (or) GitHub Repos

Azure Repos: Git

- Git Overview
- Develop by Using Git
- Collaborate by Using Git
- Use Branches

Azure Repos: Team Foundation Version Control

- TFVC Overview
- Develop by Using TFVC
- Collaborate by Using TFVC
- Use Branches

GitHub Repositories

- Git Overview
- Create and Manage Repositories
- Collaborate By Using GitHub

Azure Pipelines (or) GitHub Actions

Azure Pipelines

- Introduction to Azure Pipelines
- Azure Pipelines Agents
- Azure Pipelines - YAML
- Build Pipelines (classic)
- Release Pipelines (classic)
- Library

GitHub Actions

- Learn GitHub Actions
- Deploy with GitHub Actions
- Migrating from Azure Pipelines to GitHub Actions

Azure Artifacts

- Package Management
- NuGet
- Azure Artifacts

Azure Boards: Work Items

- Work Item Fundamentals
- Classification and Work Item Links
- Work Item Queries
- Customizing Work Items

Azure Boards: Plan and Track Projects

- Agile Planning Tools
- Kanban Tools
- Agile Portfolio Management
- Charts, Dashboards, and Widgets

Collaboration, Reporting, and Extensions

- Collaboration: Wiki, Feedback
- Dashboards and Reports
- Service Hooks and Extensions

OSS (or) Integrating GitHub with Azure DevOps Services

OSS

- Azure DevOps Services and Open Source Software

Integrating GitHub with Azure DevOps Services

- Integrating GitHub with Azure DevOps Services

Optional: Azure Test Plans

- Azure Test Plans
- Creating Manual Test Cases
- Running Manual Test Cases
- Exploratory Testing with Feedback Client

Optional: Azure Test Plans: Test & Feedback Extension

- Introduction to Test & Feedback
- Using Test & Feedback

Optional: Azure Policy Compliance with Azure DevOps

- Controlling Release Pipelines with Gates and Azure Policy Compliance

For more information

Contact your Microsoft Account Representative for further details.

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