

# WorkshopPLUS - Essentials on Azure DevOps Services and GitHub

## WorkshopPLUS

Focus Area: Upgrade, Migration, and Deployment

Duration: 3 days

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) 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

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

## Azure Repos: Git (or) GitHub Repos

### Azure Repos: Git

- Git Overview
- Develop by Using Git
- Collaborate by Using Git
- 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

## For more information

Contact your Microsoft Account Representative for further details.