

Git for Operations Teams

version control for scripts and configurations

A practical introduction to collaborative version control designed for system administrators and cloud engineers. Participants learn how Git works conceptually and in practice, starting with local repositories and progressing to distributed workflows, enabling “Infrastructure as Code”. Through demonstrations and hands-on labs, attendees experience the lifecycle of an operational change: improving PowerShell scripts, committing changes, resolving conflicts, collaborating in branches.

Overview:

- **Duration:** 1 day
- **Teaching format:** online or on-site, suitable for groups up to 16 participants
- **Target Audience:** system administrators, cloud engineers, and automation specialists maintaining PowerShell scripts or configuration files
- **Prerequisites:** basic familiarity with PowerShell scripting and general system administration concepts

Goals:

- Understand the role of version control in operations as a reliable operational source of truth
- Work effectively with Git in daily administrative workflows to: stage and commit changes, inspect history, and safely revert modifications
- Collaborate safely using distributed version control practices to coordinate work across team members
- Apply disciplined practices when managing automation code and configuration files

Deliverables:

Training delivery includes preparation of hosting environment for hands-on labs, one per each attendee. Attendees also receive access to sample code and a list of reference resources. Classes are not recorded.

Customization:

Topics listed can be modified to suit the needs of the attendees or class hours. Practices taught apply equally to repositories hosted on platforms such as GitLab, GitHub, or Azure DevOps but client can choose which platform to concentrate on. Demonstrations use PowerShell but workflows but other examples can be architected to suit the audience. Additional topics may be added, provided available development time.

Pricing terms:

Training delivery is priced based on group size and includes trainer fee, courseware, hosting for the hands-on labs. Some customizations may incur an additional development charge. Travel expenses are billed as agreed before commencement of contract.

Course outline:

Chapter 1: Operational Source of Truth

- Distributed version control concepts
- Local and remote repositories
- Immutable history and traceability

Chapter 2: Git Basics and Local Repositories

- Core commands for making controlled changes to code
- Understanding commit history

Chapter 3: Versioning Scripts

- Structure for scripts and modules
- Readability, formatting, documentation
- Using changelogs and semantic versioning

Chapter 4: Repository Platforms Governance

- Hosting platform decisions
- Project structure and access control

Chapter 5: Distributed Collaboration

- Cloning and synchronizing repositories
- Understanding divergence and safely resolving merge conflicts

Chapter 6: Workflow and Release Discipline

- Branch-based development workflows
- Merge/Pull Requests and code review
- Issue tracking and traceability
- Release tagging and history inspection



About the trainer

Paul "Dash" Wojcicki-Jarocki

With over two decades of experience in the Microsoft ecosystem, Paul is a trainer and consultant specializing in cloud infrastructure, automation, and deployment. Paul has designed and built solutions for enterprises across EMEA, often for the public and military sectors. As a Microsoft Certified Trainer, he delivers bespoke training, and has presented at industry-leading events (Microsoft Ignite, PowerShell+DevOps Global Summit, MCT Summit).