Migrate DevOps to GitHub

Course Overview

Duration - 12 Hours | Level - Intermediate

Migrate DevOps to GitHub is designed to help organizations migrate their code, issues, and pipelines securely to GitHub. The course covers everything from preparing your environment, understanding migration-supported elements, to validating post-migration readiness. It offers an end-to-end approach for moving repositories, setting up GitHub Actions workflows, enabling security features, and scaling agile management. Attend this course to gain a streamlined experience from migration planning to operational optimization with GitHub Enterprise Cloud.

Course Modules

Day 1

Introduction to GitHub

Overview of GitHub GitHub Products: Free, Team, Enterprise Core GitHub services for DevOps

Know Before You Go

Source vs Target Platforms Migration-supported vs manually-configured elements GitHub Organizations, Teams, Permissions, Branch Policies Lift-and-shift vs Transformative migration Migration best practices

Planning for migration

Decide migration scope: What to migrate? What to leave? Inventory repositories, issues, pipelines, permissions

Hands on Labs

Set up GitHub Organization, create teams and roles Create sample repositories, configure branch protections Setup repo visibility

Day 2

Migration Tooling

GitHub Importer GitHub CLI GitHub Enterprise Importer

Work with migration tools

Architecture and workflows Pre-checks and requirements - Personal Access Tokens, Repo size limits Understand CI/CD translation: GitLab CI vs GitHub Actions Syntax

Move Code, Issues, and Pipelines

Manual and automated migration Migrate a repo to GitHub using the command line Migrate repositories using GitHub Importer Migrate GitLab, Bitbucket, and Azure DevOps pipelines to GitHub Actions

Mitigate Common Migration Pitfalls

Permission mapping issues Git Large File Storage migration considerations Work Item migration gaps

Hands on Labs

Migrate a sample repo manually Use GitHub CLI to automate a migration Import Issues using GitHub API Convert a simple GitLab CI or ADO pipeline to GitHub Actions

Day 3

Validate migration completeness and operational readiness

Verify Git history Review Branch Protection and Access Settings Compare Issues, PRs, Wikis

Secure Repositories Post-Migration

Enable GitHub Advanced Security Set up branch protection, SSO, and audit logging

Optimize DevOps and scale Agile management

GitHub Actions best practices Using Codespaces for faster dev onboarding Using GitHub Projects for Agile planning Using GitHub Insights and Metrics for repo health

Hands on Labs

Audit and validate migrated repositories Configure GitHub Advanced Security for migrated repos Enable Branch Protection Rules and fine-tune role permissions Set up a GitHub Actions workflow post-migration