



Introduction to GitLab / GitLab Quick Start

Explore Improving Your Daily Workflow, Branching and Merging, Rebasing, Controlling Access, Remote Repositories & More

www.triveratech.com

Course Snapshot

- **Course: Introduction to GitLab / GitLab Quick Start (TTDV7553)**
- **Duration:** 2 to 3 days
- **Audience & Skill-Level:** Introductory level
- **Hands-on Learning:** This course is approximately **50% hands-on**, combining expert lecture, real-world demonstrations and group discussions with machine-based practical labs and exercises. Student machines are required.
- **Delivery Options:** This course is available for **onsite private classroom presentation, live online virtual presentation**, or can be presented in a **flexible blended learning format** for combined onsite and remote attendees. Please also ask about our **Self-Paced / Video / QuickSkills or Mini-Camp Flex Hours / Short Course** options.
- **Public Schedule:** This course has active dates on our live-online open enrollment **Public Schedule**.
- **Customizable:** This course agenda, topics and labs can be further adjusted to target your specific training skills objectives, tools, and learning goals. Please inquire for details.

Overview

Git and GitLab is distributed, free, and appropriate for development projects in almost any language. **Introduction to GitLab / GitLab Quick Start** is a two day, fast-paced hands-on course teaches application developers and others associated with the software development life cycle to use Git, the leading software version control system.

Objectives

This course is approximately **50% hands-on**, combining expert lecture, real-world demonstrations and group discussions with machine-based practical labs and exercises. Working in a hands-on learning environment led by our expert practitioner you'll explore:

- Source Code Management Essentials
- Git and GitLab Introduction and Basics
- Reviewing and Editing the Commit History
- Improving Your Daily Workflow
- Branching
- Merging
- Remote Repositories
- Centralizing and Controlling Access
- Rebasing
- Resetting Trees
- Including External Repositories
- Git as a Debugging Tool
- Workflow Management
- Continuous Integration / Continuous Design (CI/CD) Essentials

Need different skills or topics? If your team requires different topics or tools, additional skills or custom approach, this course may be further adjusted to accommodate. We offer additional Git / GitHub / GitLab, DevOps, Docker, container, security, programming, and other related topics that may be blended with this course for a track that best suits your needs.

Audience & Pre-Requisites

Attending students should have a basic understanding of application development principles, as well as **basic Linux skills**, including familiarity with command-line options such as ls, cd, cp, and su.

Related Git / GitHub / GitLab Training Courses:

- TTDV7550 Introduction to Git | Git Quick Start
- TTDV7551 Introduction to GitHub for Developers
- TTDV7553 Working with GitLab
- TTDV7555 Advanced Git and GitHub
- TTDV7560 Explore CI/CD, GIT, GIT Tools, Jenkins Integration, Functional Testing, Jenkins & More
- Please see our complete course catalog for additional Git and related course

Course Topics / Agenda

Please note that this list of topics is based on our standard course offering, evolved from typical industry uses and trends. We will work with you to tune this course and level of coverage to target the skills you need most. Topics, agenda, and labs are subject to change, and may adjust during live delivery based on audience interests, participation, and skill-level.

1. Introduction to Source Code Management

- The Core Principles of Change Management
- The Power to Undo Changes
- Audit Trails and Investigations
- Reproducible Software
- Changing code-hosting platform
- Moving from another version control system

2. Git and GitLab Introduction and Basics

- Introduction to Git
- GitFlow
- GitLab Flow
- Trees and Commits
- Configuring Git
- Adding, Renaming, and Removing Files

3. Reviewing and Editing the Commit History

- Reviewing the Commit History
- Revision Shortcuts
- Fixing Mistakes

4. Improving Your Daily Workflow

- Simplifying Common Commands with Aliases
- Ignoring Build Artifacts
- Saving Changes for Later Use (Stashing)

5. Branching

- Branching Basics
- Listing Differences Between

Branches

- Visualizing Branches
- Deleting Branches
- Tagging

6. Merging

- Merging Basics
- Merge Conflicts
- Merging Remote Branches

7. Remote Repositories

- Remote Repositories
- Synchronizing Objects with Remotes
- Tracking Branches

8. Centralizing and Controlling Access

- Introduction to GitLab
- Git Repositories on GitLab
- Daily Workflow

9. Reviewing Branching and Merging

- Branch Review
- Merging Basics

10. Rebasing

- Rebasing Basics
- Rebasing with Local Branches
- Rebasing with Remote Branches
- Interactive Rebasing
- Squashing Commits
- Getting Out of Trouble

11. Git as a Debugging Tool

- Using the Blame Command to

See File History

- Performing a Binary Search

12. Continuous Integration / Continuous Design (CI/CD)

- How to install GitLab Runner
- Adding to our example project
- Breaking down .gitlab-ci.yml
- Adding .gitlab-ci.yml to our example project
- Deconstructing an advanced .gitlab-ci.yml file
- GitLab CI/CD web UI

Optional Day Three Topics**13. Optional: Resetting Trees**

- Introduction to Resetting
- Resetting Branch Pointers
- Resetting Branches and the Index
- Resetting the Working Directory
- Making Good Use of the Reset Command

14. Optional More on Improving Your Daily Workflow

- Interactively Staging Changes

15. Optional: Including External Repositories

- Submodules
- Subtrees
- Choosing Between Submodules and Subtrees

16. Workflow Management

- Branch Management

Student Materials & Lab Environment: All course software (limited versions, for course use only), digital courseware files or course notes, labs / data sets and solutions (as applicable) are provided for you in our “easy access / no install required” high-speed remote lab environment. Our tech team works with every student to ensure everyone is set up with working access and ready to go prior to every course start date, ensuring a smooth delivery and great hands-on experience. Please ask for details.

For More Information

All courses can be presented **onsite** or **online**, or in a **combined / flex / blended learning format**, tailored to target your specific audience, needs and learning goals. We also offer focused, flexible **short courses**, **self-paced learning** options, **recorded sessions** and more. We train beginner to advanced skills in all areas we cover, and offer **New Hire / Cohort Training**, **Boot Camps**, **Skills Immersion Programs**, **Reskilling Programs**, **Skills Migration & Transition Programs**, and more. We collaborate with you to ensure all courses are truly targeted to meet your specific needs and learning skills, maximizing your valuable training time, as well as your important budget.

Please also visit our extensive **Public Training Schedule** for training for smaller groups or individuals. Please contact us for course details, **Corporate Rates** and **Special Discount Offers**.

For more information about our dedicated training services, collaborative coaching services, courseware licensing options, public course schedule, training management services, partner programs, or to see our complete list of course offerings and special offers please visit us at www.triveratech.com, email Info@triveratech.com or call us toll free at **844-475-4559**. Our pricing and services are always satisfaction guaranteed.

TRIVERA TECHNOLOGIES • Collaborative IT Training, Coaching & Skills Development Solutions
www.triveratech.com • toll free +1-844-475-4559 • Info@triveratech.com • Twitter TriveraTech

ONSITE, ONLINE & BLENDED TRAINING SOLUTIONS • PUBLIC / OPEN ENROLLMENT COURSES • COURSEWARE LICENSING & DEVELOPMENT MENTORING • ASSESSMENTS • LEARNING PLAN DEVELOPMENT • SKILLS IMMERSION PROGRAMS / RESKILLING / NEW HIRE / BOOT CAMPS PARTNER & RESELLER PROGRAMS • CORPORATE TRAINING MANAGEMENT • VENDOR MANAGEMENT SERVICES

Trivera Technologies is a Woman-Owned Small-Business Firm

Explore Trivera's Ways to Learn!

