

Updated on 29/11/2023

Sign up

Advanced Git training

2 days (14 hours)

Presentation

In just a few years, Git has become the world's most widely used source manager. Based on decentralized versioning, Git is a free, cross-platform software created by the no less famous Linus Torvalds.

Simple yet powerful, Git's main task is to manage the evolution of tree content.

In this training course, you'll learn how to harness its full power, as well as how to use the many tools available for this project, such as Gerrit and **Repo** (created especially for the problems of multiple versions on Android).

Objectives

- Understand the main operating principles of the Git version manager
- Master the use of Git and its advanced tools (such as Gerrit)
- Repo: a powerful tool for multiple repository management

Target audience

- Developers
- Architects
- System administrators

Prerequisites

Knowledge of a source manager, ideally having [taken our Git : GitLab CI & Git-Flow?](#)

Advanced Git training program

Day 1

Going further with GIT on a daily basis

- Day 1, morning: going further with GIT on a daily basis
- Plumbing: manipulating GIT guts (tree, blob, commit)
- Reset and Reflog: nimbly move pointers in the commit history (working copy, index, HEAD)
- Attribute management: keyword injection, binary file comparison, strategy for merger
- Client-side hook management: pre-commit, post-commit, post-merge, pre-push, etc.

REPO basics

- Introducing the REPO * command
- Using REPO in a major project: The Android Source Code *
- Basic commands: init, sync, upload
- REPO project description: the manifest

Day 2

Advanced use of REPO

- Configure your working copy with specific versions of GIT repositories with REPO download
- Manage differences on multiple working copies with REPO diff, status and plum
- Scripting with REPO forall to use GIT's advanced commands
- Managing parallel branches with REPO branch
- Multi-repository development workflow: REPO vs GIT sub-modules vs GIT subrepo (formerly stree)

Companies concerned

This training course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is confirmed, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives with regard to the training to come, within the limits imposed by the format selected. This

The questionnaire also enables us to anticipate any connection or internal security problems (intra-company or virtual classroom) that could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.