Git

Duration 2 day(s) (DVCS-GIT-02)

Know how to set up and configure Git

Description

Git is the decentralized version control system (DVCS) of the moment. Created by Linus Torvald to manage the versioning of the Linux kernel source code, this tool is geared towards speed, efficiency and lightness. Helping to manage large projects with extreme flexibility in the contribution workflow, Git is making its mark in the OpenSource world: countless projects are now managed with Git and the Eclipse Foundation has even put in place a multi-year migration plan to migrate its projects under Git. It has become a staple of the DVCS domain and its use in business is gradually coming.

Goals

- Understand DVCS principles - Learn Git specificities - Know how to set up and configure Git - Learn how to manage your source code with Git - Learn to collaborate with Git repositories - Knowing how to handle the tools attached to Git

Public

- Architect
- Developer
- Project Manager
- System administrator

Prerequisites

- Nil

Structure

50% Theory, 50% Practice

Program

Version control

- Why versioning its source code?
- The basic concepts of version control

DVCS principles

- What does decentralization bring?
- Principle of operation
- Branch, deposit, merge, rebase and all DVCS concepts

Presentation of Git

- A little history
- The operation of Git
- Git objects: blob, tree, commit and tag
- The index or staging area

Set up and configuration

- Installation
- Configuration

Day-to-day use

- Create / clone a deposit
- View the status of the working tree
- View changes
- Save Changes
- Browse Revision History
- Find the author of a modification

Deposit and branch management

- Create a branch
- Pass from branch to branch with merges or rebase
- Update a deposit
- Export your deposit
- Remote repositories

Tools around Git

- Git-gui and TortoiseGit to graphically navigate
- Gitweb, web interface for Git
- GitHub, THE Git collaboration platform
- Gerrit to handle code re-reads