Git With Atlassian Bitbucket Essentials (Server/DC)

1 Day

Classroom, Webinar

Clearvision's Git With Atlassian Bitbucket training course provides an understanding of using Bitbucket with Git and focuses on giving a comprehensive overview of concepts, workflows and more.

About this course

Is this course right for me?

This course is aimed at developers adopting Git with Atlassian Bitbucket (Server/DataCenter) for the first time.

No previous experience is required.

Objectives and outcomes

-The full lifecycle of a development process using Atlassian Bitbucket.

-Work on a project while collaborating with your colleagues to perform code reviews, pull requests and releases.

-Understand the underlying Git architecture and prepare for the challenges you'll encounter along the way.

-The difference between the command line, or Atlassian Sourcetree.

Prerequisites

-Access to a laptop.

-Internet connection

Modules breakdown

Module 1: Introduction

Module Sections

- Introduction
- Version control
- Introduction to Bitbucket
- Introduction to Git

Lab Exercises

- Verify Git installation
- Access Bitbucket

Module 2: Getting started

Module Sections

- Setting up your Git environment
- Accessing Bitbucket
- Bitbucket permissions
- Joining a project

Lab Exercises

- Join a Bitbucket project
- Configure your Git environment
- Ask Git for help

Module 3: Introduction to branches

Module Sections

- Branch definition
- Git references
- Creating branches
- Sharing branches
- Switching branches

Lab Exercises

Basics

1. Identify branches
2. Create a branch
3. Switch to the branch

Advanced

1. Create a shared branch
2. Retrieve a shared branch
3. View references

Module 4: Working with Git

Module Sections

Repository design

- Commit objects
- The Git workflow
  - Staging changes
  - Commit
  - Diffing
- Hashes

Lab Exercises

Basics

1. Making changes
2. Viewing the status
3. Removing and renaming files

Advanced

1. Fixing mistakes
   - Amending commits
   - Correcting log messages
   - Reverting and unstaging files

Module 5: Communicating with Bitbucket

Module Sections

- Remotes and the origin
- Pushing your changes to Bitbucket
- Fast forward merges
- Getting the latest code

Lab Exercises

Basics

1. Push changes to Bitbucket
2. Fetching changes made by others
3. Viewing changes in Bitbucket

Advanced

1. Retrieving shared work

Module 6: Pull requests

Module Sections

- Code reviews
- Create a pull request
- Assign pull requests
- Collaborating on code reviews
- Completing pull requests
- Automatic merges

Lab Exercises

Basics

1. Create a pull request
2. Perform a pull request
3. Assign tasks to a pull request
4. Approve a pull request

Advanced

1. Update a pull request
2. Resolve a task
3. Perform a pull request merge

Module 7: Branching strategies

Module Sections

- The Bitbucket branching model
- The GitFlow workflow
- Workflow variations
- Tags
- Forks
- Automated merges

Lab Exercises

- Listing Tags
- Creating and Deleting Tags
- Creating Release Branches
- Integrating Releases
- Tagging Releases

Module 8: Merging

Module Sections

- Performing complex merges
- Merge conflicts
- Rebasing
- Merging from forks

Lab Exercises

Basics

1. Merging between branches
2. Resolving conflicts

Advanced

1. Rebasing
2. Squashing

Module 9: Reading history

Module Sections

- The Git log
- History through Bitbucket
- Comparing versions
- Blame

Lab Exercises

Basics

1. Create history
2. View history
3. Blame history
4. Interactive rebase

Advanced

1. Rewrite history
2. Use the reflog
3. Recover lost commits