

Sela.

CI-CD-With-GitLab

CI/CD with GitLab

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CI/CD with GitLab

CI-CD-With-GitLab - Version: 1

 1 days Course

Description:

Intended audience:

Prerequisites:

Basic scripting knowledge
Basic Linux OS knowledge.
Basic understanding of terminal and command line usage

Objectives:

Topics:

Introduction to CI/CD (Continuous Integration and Continuous Delivery) & GitLab

- The concepts of CI/CD and how they can help improve the software development process
- The benefits of using a CI/CD tool such as GitLab
- History of GitLab
- Introduction to GitLab



Setting up a GitLab project

- The process of creating a new project in GitLab
- Connecting a local repository to a GitLab project
- Discuss the various options for version control (e.g. Git, Mercurial, Subversion)
- Lab 01 - connect a local repository to a GitLab project

GitLab CI/CD pipeline

- Introduce the concept of a pipeline and how it is used to automate the build, test, and deploy
- process
- The .gitlab-ci.yml file
- Triggering a pipeline manually or automatically
- Lab 02 - create a first GitLab pipeline

Testing in GitLab

- Discuss the importance of testing in CI/CD and the different types of tests that can be run (e.g.
 - unit tests, integration tests, performance tests)
- Explain how to configure tests in the
 - .gitlab-ci.yml
 - file
- Demonstrate how to view test results in GitLab
- Lab 03 - adding test to a GitLab pipeline

Deployment in GitLab

- Explain the different deployment options available in GitLab (e.g. to a server, to a cloud provider)



- Demonstrate how to configure a deployment in the
- .gitlab-ci.yml
- file
- Discuss strategies for rolling back deployments if necessary
- Lab 04 - deploy as part of a GitLab pipeline

Best practices for CI/CD with GitLab

- Discuss best practices for using GitLab in a CI/CD workflow, such as:
 - Keeping pipelines fast and efficient
 - Managing secrets and credentials
 - Collaborating with team members
 - Maintaining a stable and reliable CI/CD process

Advanced GitLab features

- Introduce additional features of GitLab that can enhance your CI/CD process, such as:
 - Environments and environment variables
 - GitLab pages
 - Advanced pipeline configuration (e.g. dependencies, artifacts)