GitLab and GitLab CI

In the context of
Fab Academy

Overview

- **History**
  DevOps, Ukraine and Zaporozhets

- **Essence**
  FabCloud GitLab vs gitlab.com

- **Demo**
  Setting up for Fab Academy

History

- GitLab is a web-based DevOps tool

- Open source, open-core business model, MIT license

- Developed by Ukrainian developers:
 Valery Sizov and Dmitriy Zaporozhets

GitLab logo

History

- ZAZ Zaporozhets

- Ukrainian: Запорóжець

- Supermini People's car for the citizen of the Soviet Union

- Similar to Volkswagen in Germany

- 1958, ZAZ factory, Soviet Ukraine

Arkhangelskoye. Vadim Zadorozhny's Vehicle Museum. ZAZ-968 and ZAZ-965
By Alexxx1979 (Wikipedia user)
https://creativecommons.org/licenses/by-sa/4.0/
No changes were made to the image.

Essence

- Git repository hosting

- Similar to GitHub

- A tool to automate the entire DevOps cycle:
  - from planning to creation,
  - build, verification,
  - security testing,
  - deploying and monitoring
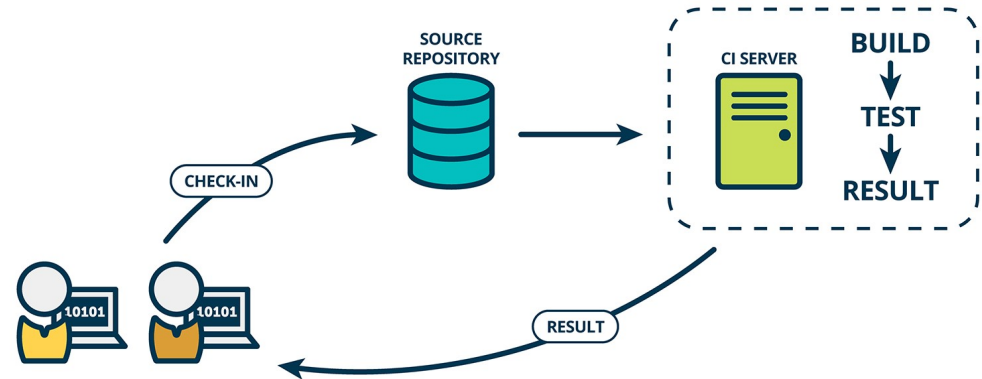
The Product Managers' Guide to Continuous Delivery and DevOps
by Suzie Prince Feb 11, 2016
Acessed Jan 20, 2021
https://www.mindtheproduct.com/what-the-hell-are-ci-cd-and-devops-a-cheatsheet-for-the-rest-of-us/

Essence

index.html

https://gitlab.com/kris/fab-academy

https://kris.gitlab.io/fab-academy

git commit

Our HTML
Project

GitLab
account

Contains
.gitlab-ci.yml

Git
Repository

git push

GitLab
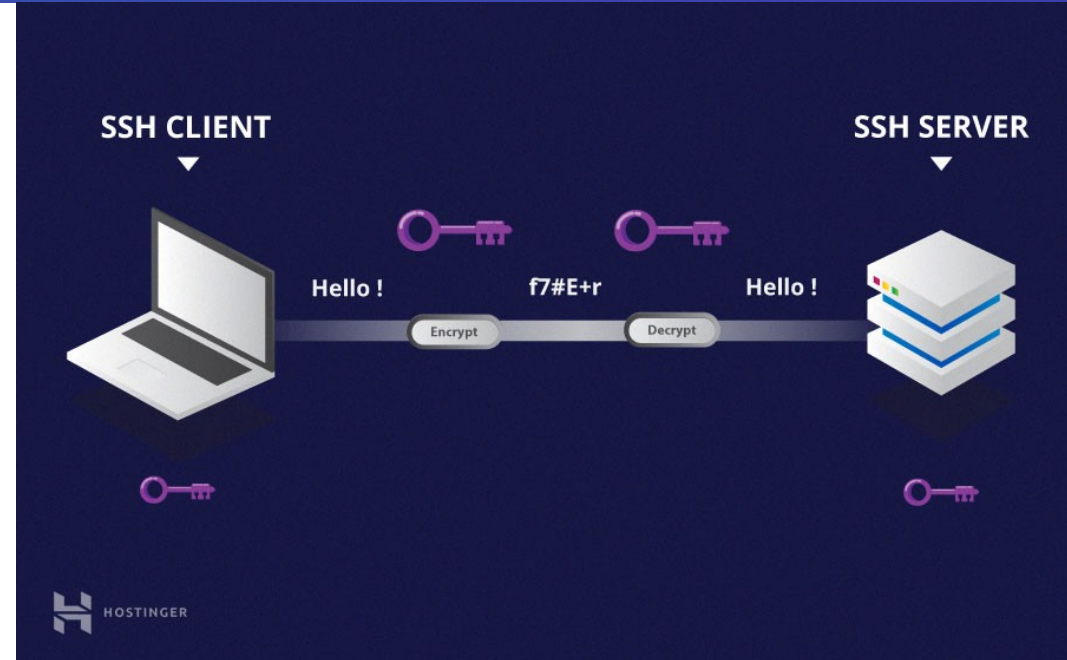repository

Activates
GitLab CI
Pipeline

Publishes
website

GitLab

CI/CD

Essence

- GitLab needs your ssh public key

- SSH or Secure Shell

- cryptographic network protocol

- Enables password-less transactions

From How Does SSH Work
By Aman L. Jun 16, 2020
Accessed Jan 20, 2021
https://www.hostinger.com/tutorials/ssh-tutorial-how-does-ssh-work

Essence

1   Generate SSH key

`ssh-keygen -t ed25519 -C "My Key"`

2   Print SSH public key

`cat ~/.ssh/id_ed25519.pub`

Visit this site for more detail:
https://docs.gitlab.com/ee/ssh/

3   Copy and paste it to the SSH Keys
section of your GitLab Account

Essence

Basic .gitlab-ci.yml file to publish your website

.gitlab-ci.yml

```
pages:
  stage: deploy
  script:
    - mkdir .public
    - cp -r * .public
    - mv .public public
  artifacts:
    paths:
      - public
  only:
    - master
```

Demo Time !!!

Thank you!