**What is Git Lab:**

A web-based DevOps lifecycle tool (Building, Testing, Deploy).

**Provide Feature Like**

--CI/CD pipeline features

--Collaboration on code and project management.

--Monitoring and Security tool

**Diff /w GitLab and GitHub**

You can run GitLab on your own self hosted Server, but Git Hub Can’t.

Login to gitlab.com and create an account,

**Create Group**

A screenshot of a computer

AI-generated content may be incorrect.

**Create Project in this group.**

**A screenshot of a computer

AI-generated content may be incorrect.**

**Import from GitHub project in GitLab Project.**

A screenshot of a video game

AI-generated content may be incorrect.

A black background with white text

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

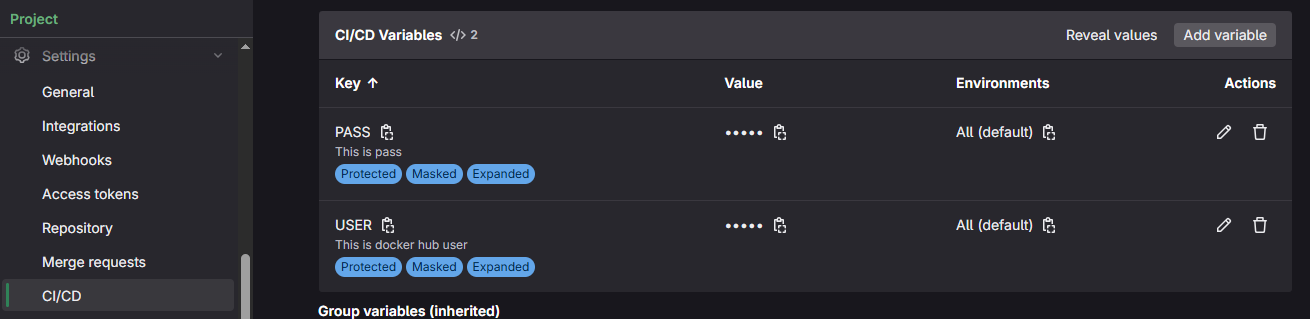
AI-generated content may be incorrect.

**Now My GitHub repo is in GitLab**  
A screenshot of a computer

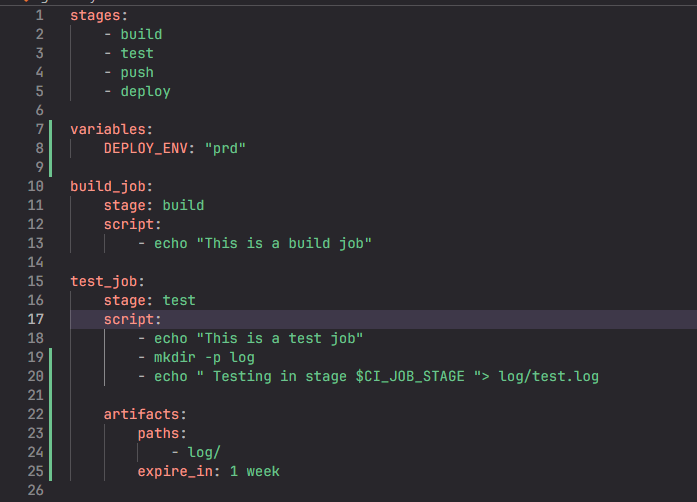
AI-generated content may be incorrect.

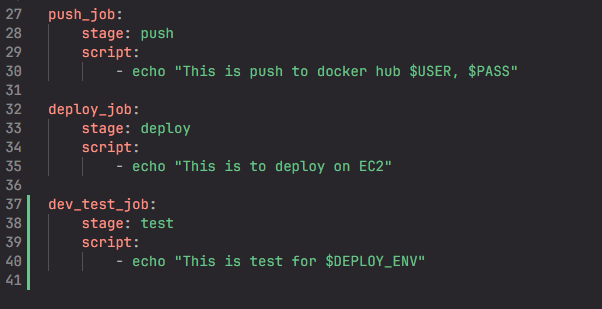
**Environment Variables: -**

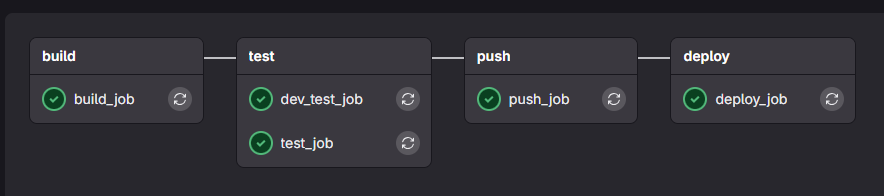
**Setting----CICD---Variable----Add variable**

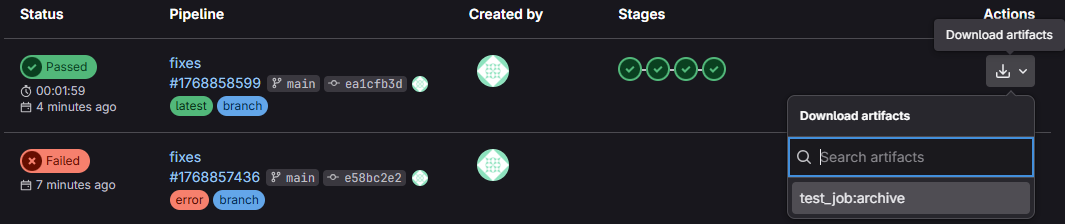
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**Create a pipeline with Pre-defined Variable, User-Defined Variable and Setup Artifacts to store logs: -**

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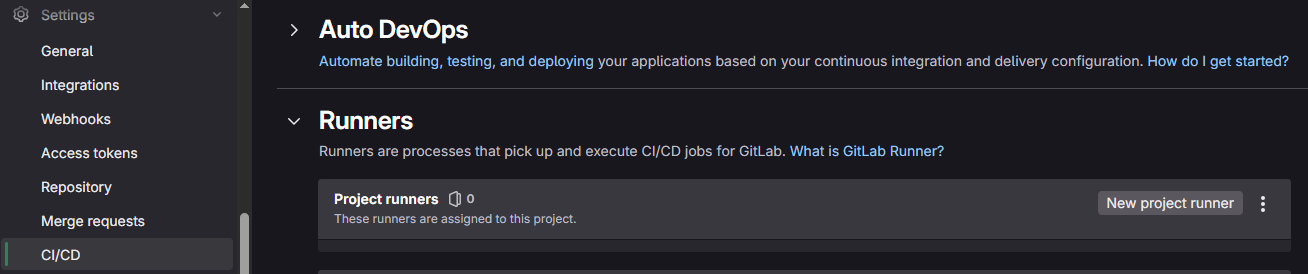
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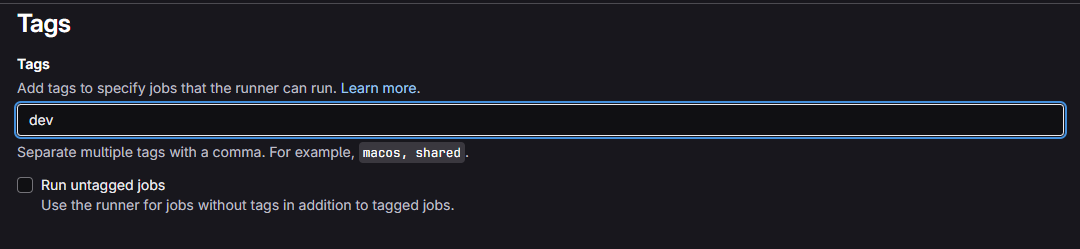
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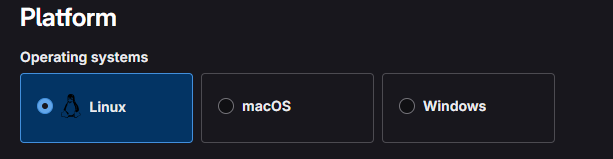
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**GitLab Runner: -**

Runners are processes that pick up and execute CI/CD jobs for GitLab.







**Install Runner on your EC2**

# Download the binary for your system

sudo curl -L --output /usr/local/bin/gitlab-runner https://gitlab-runner-downloads.s3.amazonaws.com/latest/binaries/gitlab-runner-linux-amd64

# Give it permission to execute

sudo chmod +x /usr/local/bin/gitlab-runner

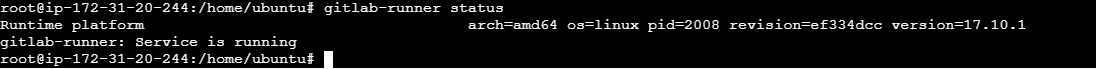
# Create a GitLab Runner user

sudo useradd --comment 'GitLab Runner' --create-home gitlab-runner --shell /bin/bash

# Install and run as a service

sudo gitlab-runner install --user=gitlab-runner --working-directory=/home/gitlab-runner

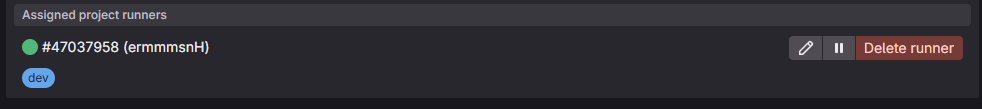
sudo gitlab-runner start



**Now register your runner with your project**

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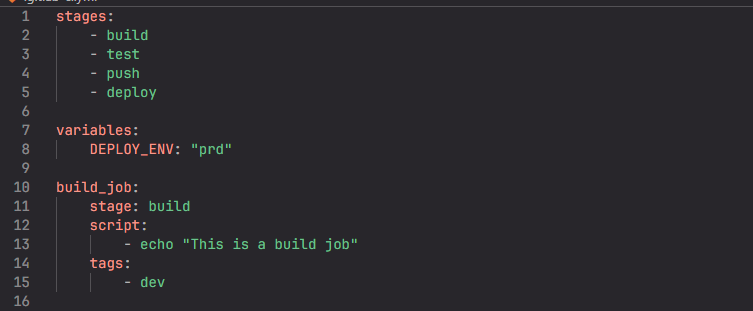
**My Runner is created**

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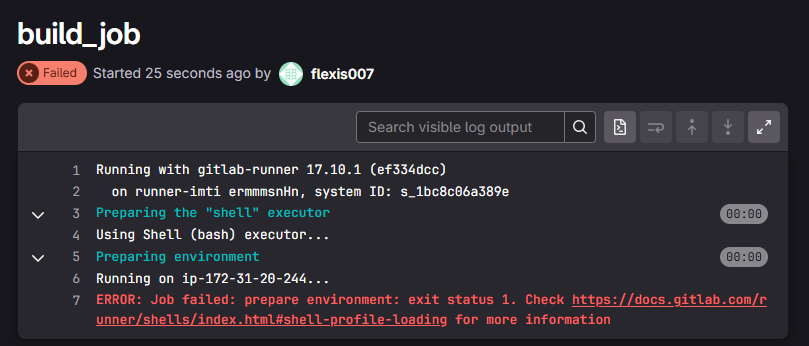
**Now run a job in my runner**

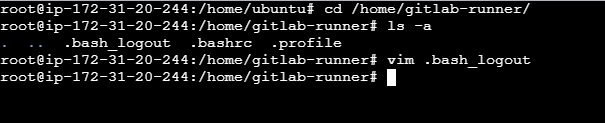
**Tags:**

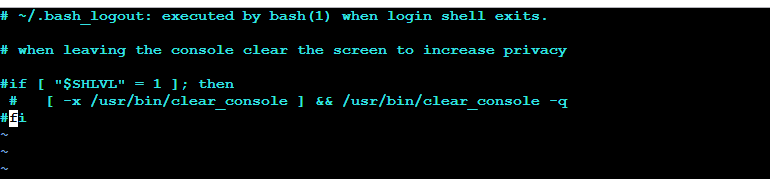
* **dev**

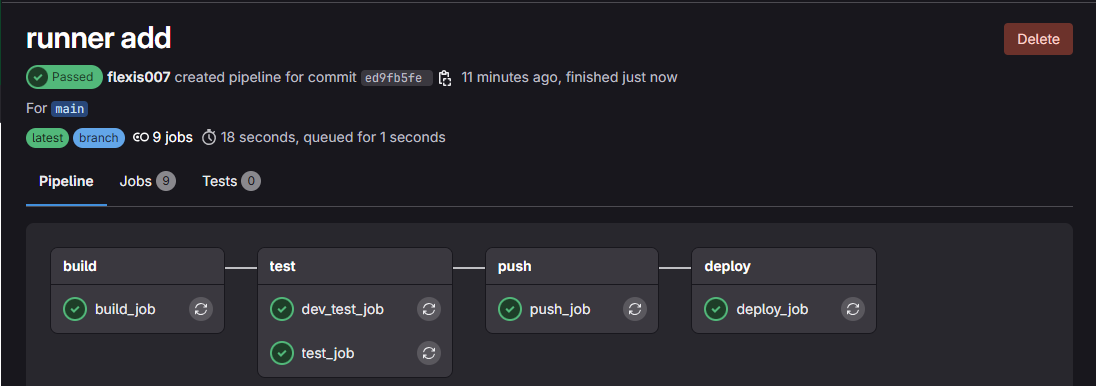
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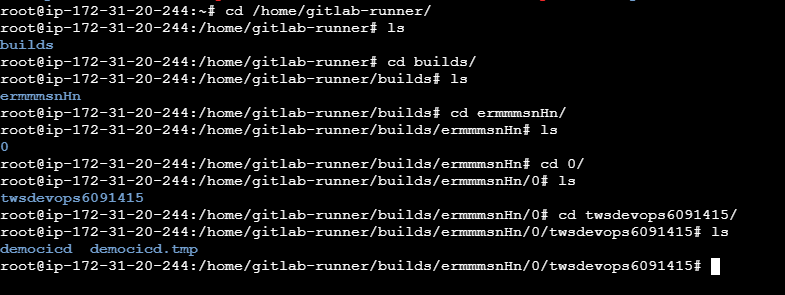
**How to solve if getting error like this**

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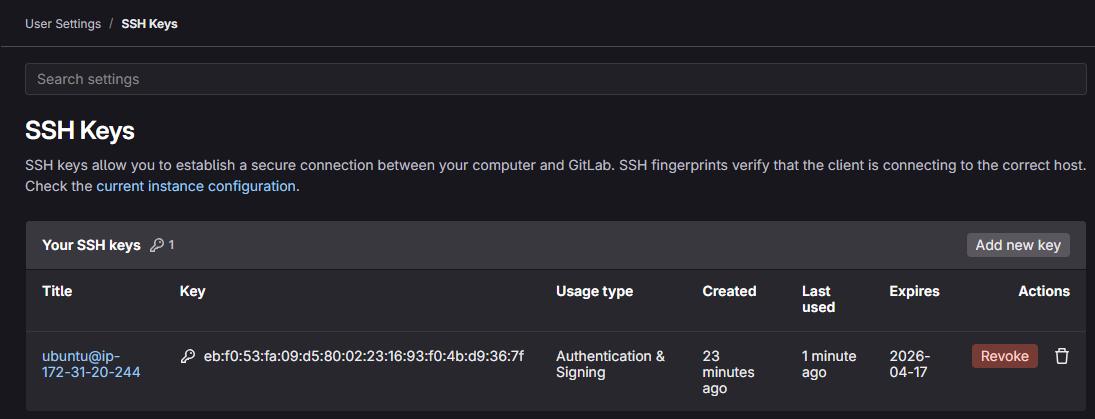
**Create a project in gtlab: -**

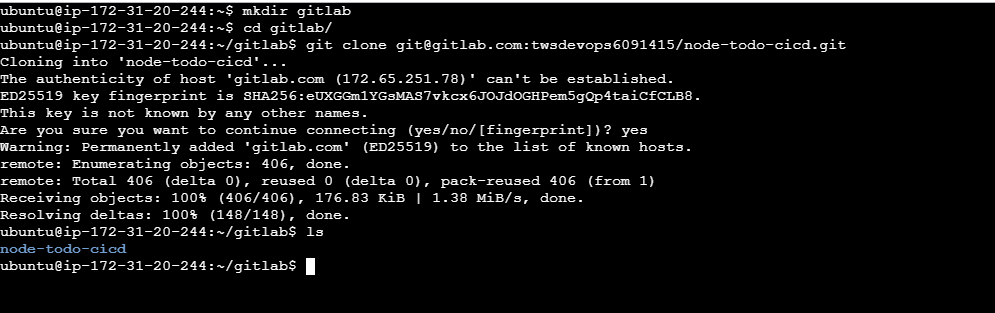
First just put public key on gitlab side, if use username and password just put inside the variable

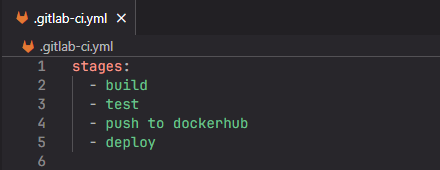
Install docker, docker compose if required and add gitlab-runner user in docker

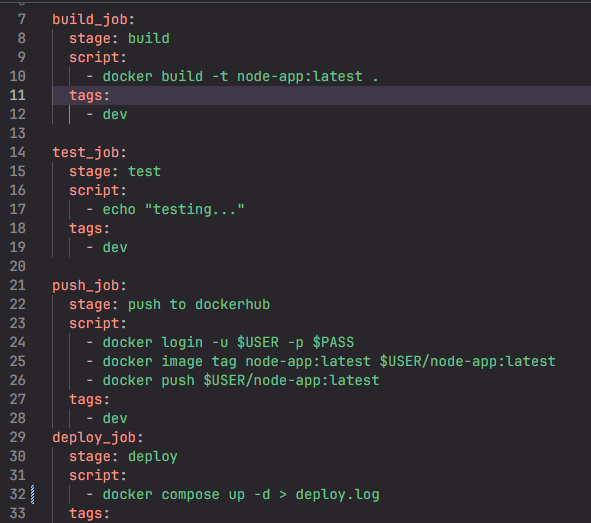
Usermod –aG docker gitlab-runner

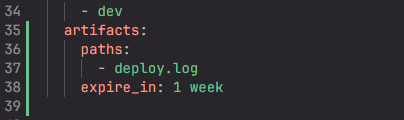
Systemctl restart docker

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**Migrating from Jenkins to GitLab**

Plan Your Migration  
Migrate Repositories  
Convert CI/CD Pipelines  
Set Up Runners  
Test & Optimize