Lab 4

GitLab Installation Lab on Ubuntu VM

Prerequisites

- Ubuntu 20.04 or 22.04 VM (recommended)

- At least 4 GB RAM and 2 CPUs

- Root or sudo access

- Internet access

- A hostname pointing to your VM's IP (e.g., gitlab.example.com) – optional but recommended for external access

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Step 1: Update Your System

```
sudo apt update && sudo apt upgrade-y
```

Step 2: Install Required Dependencies

```
sudo apt install-y curl openssh-server ca-certificates tzdata perl

sudo apt install-y postfix
```

Step 3: Add GitLab Repository

```
curl https://packages.gitlab.com/install/repositories/gitlab/gitlab-ee/script.deb.sh | sudo bash
```

Step 4: Install GitLab

In terminal

ip addr|grep ens

Replace http://gitlab.example.com with your actual domain or public IP:

```
sudo EXTERNAL_URL="http://gitlab.example.com" apt install-y gitlab-ee
```

```
root@amitserver:~# sudo EXTERNAL_URL="http://192.168.111.130" apt install -y gitlab-ee
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
gitlab-ee is already the newest version (17.10.3-ee.0).
The following packages were automatically installed and are no longer required:
  apache2-bin apache2-data apache2-utils bnd ebtables groovy ivy java-wrappers libapr1t64
  libaprutil1-dbd-sqlite3 libaprutil1-ldap libaprutil1t64 libbcpg-java libbcprov-java libbindex-java
  libcommons-codec-java libcommons-collections3-java libcommons-compress-java libcommons-lang-java
  libdd-plist-java libdom4j-java libeclipse-jdt-annotation-java libfelix-framework-java
  libfelix-gogo-runtime-java libfelix-osgi-obr-java libfelix-resolver-java libfindbugs-java
  libgoogle-gson-java libgpars-groovy-java libgradle-core-java libgradle-plugins-java libhawtjni-runt:
  libhttpclient-java libhttpcore-java libjansi-native-java libjansi1-java libjarjar-java libjatl-java
  libjavaewah-java libjaxen-java libjcifs-java libjcip-annotations-java libjcsp-java libjformatstring
  libjgit-java libjline2-java libjna-java libjna-jni libjsoup-java libjsr166y-java libkryo-java libkxu
  libllvm17t64 libminlog-java libmultiverse-core-java libnative-platform-java libnative-platform-jni
  libnekohtml-java libobjenesis-java libosgi-annotation-java libosgi-compendium-java libosgi-core-jav:
  libplexus-container-default-java libpolyglot-maven-java libqdox-java libreflectasm-java
  libreflectasm-java-doc librhino-java libsimple-http-java libwagon-http-java libxbean-reflect-java
  libxerces2-java libxml-commons-external-java libxpp3-java libxstream-java socat
```

Step 5: Configure GitLab

sudo gitlab-ctl reconfigure

This may take a few minutes. It will set up NGINX, PostgreSQL, Redis, and other required components.

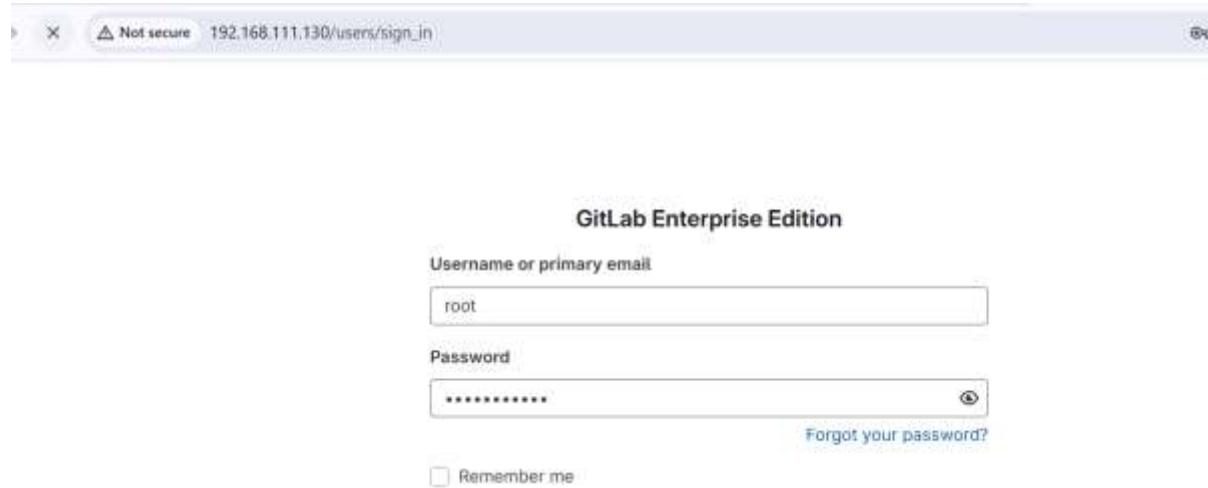## Step 6: Access GitLab

Open a browser and go to:

http://<your-domain-or-ip>

Default Admin User

- **Username:** root

- **Password location: /etc/gitlab/initial_root_password**

On the first visit, GitLab will ask you to set the **admin password**.