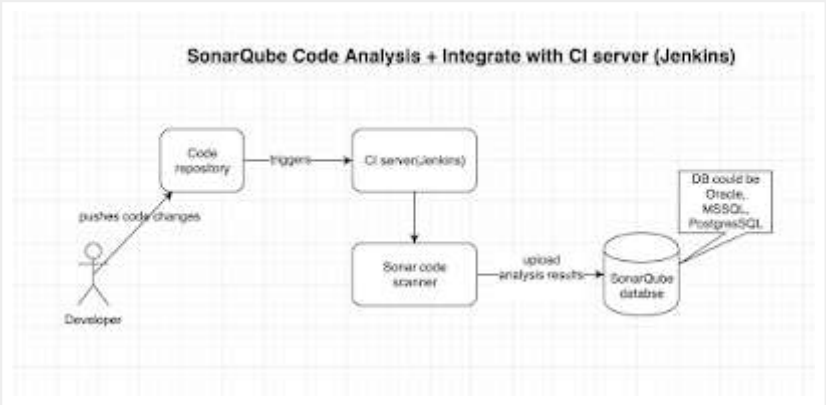
Install Sonarqube on Ubuntu - How to install SonarQube on Ubuntu 16.0.4?

Please find steps for installing SonarQube on Ubuntu EC2. Make sure port 9000 is opened in security group(firewall rule).

SonarQube is java based tool along with back end - back end can be MySQL, Oracle or PostgreSQL. We will use Postgres for set up on Ubuntu.



Let us start with java install (skip java install if you already have it installed)

1. Java steps

sudo apt-get update

sudo apt-get install default-jdk -y

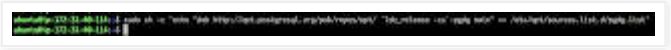
Verify Java Version

java -version

openjdk version "1.8.0_191"
OpenJDK Runtime Environment (build 1.8.0_191-8u191-b12-2ubuntu0.16.04.1-b12)
OpenJDK 64-Bit Server VM (build 25.191-b12, mixed mode)

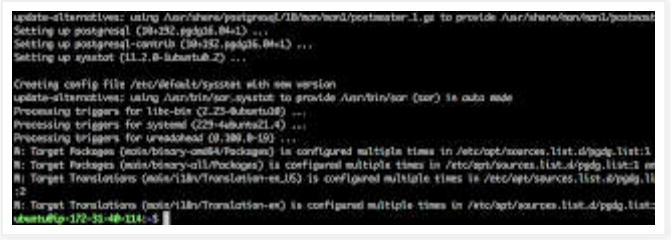
2. Postgres Installation

1. sudo sh -c 'echo "deb http://apt.postgresql.org/pub/repos/apt/ `lsb_release -cs`-pgdg main" >> /etc/apt/sources.list.d/pgdg.list'



2. sudo wget -q https://www.postgresql.org/media/keys/ACCC4CF8.asc -O - | sudo apt-key add -

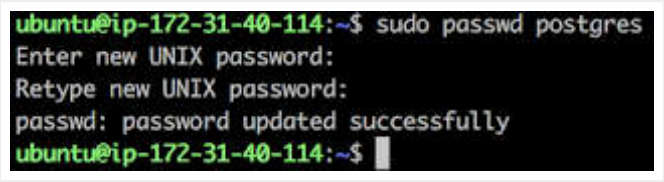
3. sudo apt-get -y install postgresql postgresql-contrib



4. sudo systemctl start postgresql
5. sudo systemctl enable postgresql

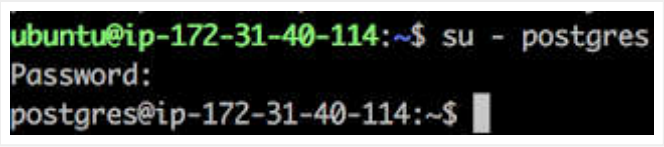
Change the password for postgres user by entering below command
6. sudo passwd postgres

enter as admin (it wont display in screen though, thats fine)
enter admin again for r-typing password



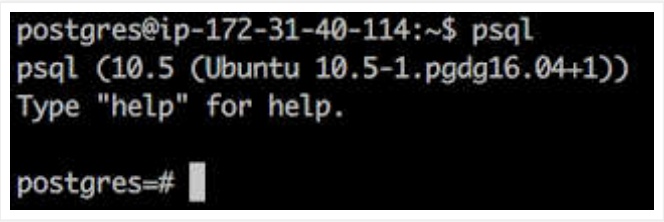
Login as postgres user now
7. su - postgres

enter admin as password



8. Now create a user below
createuser sonar

9. Switch to sql shell by entering
psql



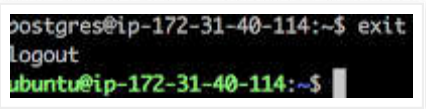
Execute the below three lines (one by one)

ALTER USER sonar WITH ENCRYPTED password 'password';

CREATE DATABASE sonar OWNER sonar;

\q

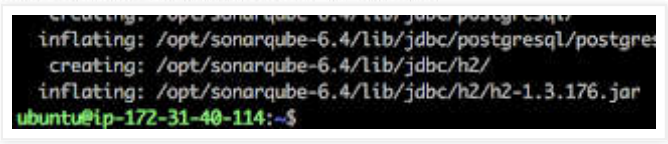
type exit to come out of postgres user.



3. Now install SonarQube Web App

sudo wget https://binaries.sonarsource.com/Distribution/sonarqube/sonarqube-6.4.zip

sudo apt-get -y install unzip
sudo unzip sonarqube-6.4.zip -d /opt



sudo mv /opt/sonarqube-6.4 /opt/sonarqube -v

Modify sonar.properties file

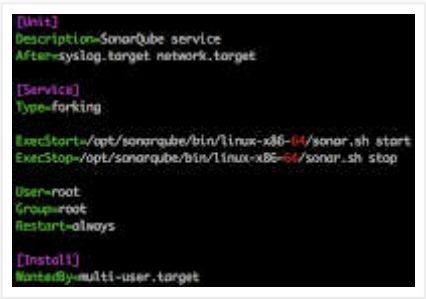
sudo vi /opt/sonarqube/conf/sonar.properties
uncomment the below lines by removing # and add values highlighted yellow
sonar.jdbc.username=sonar
sonar.jdbc.password=password

Next, uncomment the below line, removing #
sonar.jdbc.url=jdbc:postgresql://localhost/sonar

Press escape, and enter :wq! to come out of the above screen.

Create Sonar as a service

Execute the below command:
sudo vi /etc/systemd/system/sonar.service



add the below code in green color:
[Unit]
Description=SonarQube service
After=syslog.target network.target

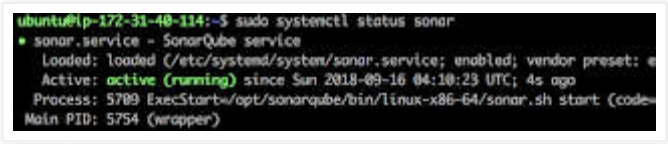
[Service]
Type=forking

ExecStart=/opt/sonarqube/bin/linux-x86-64/sonar.sh start
ExecStop=/opt/sonarqube/bin/linux-x86-64/sonar.sh stop

User=root
Group=root
Restart=always

[Install]
WantedBy=multi-user.target

sudo systemctl enable sonar
sudo systemctl start sonar
sudo systemctl status sonar



type q now to come out of this mode.
Now execute the below command to see if Sonarqube is up and running. This may take a few minutes.

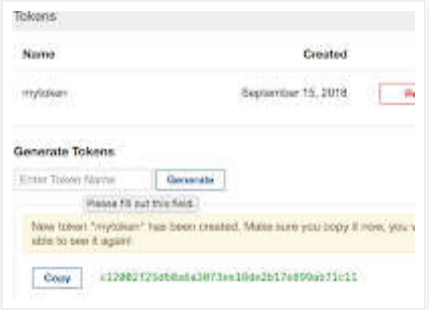
tail -f /opt/sonarqube/logs/sonar.log

Make sure you get the below message that says sonarqube is up..

Now access sonarQube UI by going to browser and enter public dns name with port 9000
Now to go to browser –> http://your_SonarQube_publicdns_name:9000/

<u>Here below are the steps for integrating SonarQube with Jenkins:</u>
Pre-requisites: Make sure SonarQube is up and running and do the below steps:
Make sure Sonarqube plug-in installed in Jenkins

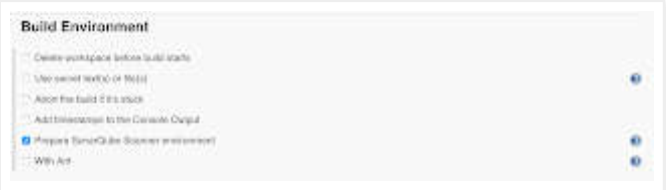
1. You need to login to SonarQube using admin/admin and click on administration, security, users, click on Tokens, under generate token.
Give some value for token name and click on generate. Copy the token.



2. After installing SonarQube successfully, login to Jenkins. Manage Jenkins --> Configure

System --> SonarQube installation

Enter name, URL as http://localhost:9000, paste the token you copied from step #1
3. Click on Enable injection of Sonarqube server configuration.
4. Save.
5. Click on your existing free style job, click on configure. click on prepare Sonarqube scanner environment.



6. enter maven goal as **clean install sonar:sonar**

7. click on save and build the job.

You will see that Jenkins will integrate with Sonarqube which does code analysis of your project. Login to SonarQube, click on Projects to see the project dash board.