**Target:** Installing sonarqube 7.9

**Dependencies**

* JDK 11+
* Database (Currently sonar stopped supporting mysql, so we will be using postgresql )

**Installing Openjdk 12.0.1:**

Download the gzip file from openjdk downloads

*curl -O https://download.java.net/java/GA/jdk12.0.1/69cfe15208a647278a19ef0990eea691/12/GPL/openjdk-12.0.1\_linux-x64\_bin.tar.gz*

**extract the folder**

*tar xvf openjdk-12.0.1\_linux-x64\_bin.tar.gz*

*sudo mv jdk-12.0.1 /opt/*

**open bash profile and update environment variables.**

*vi ~/.bash\_profile*

**add below two statements**

*export JAVA\_HOME=/opt/jdk-12.0.1*

*export PATH=$PATH:/$JAVA\_HOME/bin*

**Test your java installation using** *java - -version*

**Instaling postgresql 9.6:**

*Adding postgresql to yum repository :*

*sudo curl -O* [*https://download.postgresql.org/pub/repos/yum/reporpms/EL-7-x86\_64/pgdg-redhat-repo-latest.noarch.rpm*](https://download.postgresql.org/pub/repos/yum/reporpms/EL-7-x86_64/pgdg-redhat-repo-latest.noarch.rpm)

*sudo rpm -ivh pgdg-redhat-repo-latest.noarch.rpm*

*sudo yum update –y*

*checking if repository updated with postgresql*

*sudo yum list postgresql\**

*installing postgresql server.*

*sudo yum install postgresql96-server*

*Initializing postgresql Db: sudo /usr/pgsql-9.6/bin/postgresql96-setup initdb*

*Adding services to systectl:*

*sudo systemctl start postgresql-9.6.service*

*sudo systemctl enable postgresql-9.6.service*

*su - postgres -c "psql"*

*Now we have installed postgresql successfully.*

*Installing sonarqube 7.9 :*

*curl -O* [*https://binaries.sonarsource.com/Distribution/sonarqube/sonarqube-7.9.1.zip*](https://binaries.sonarsource.com/Distribution/sonarqube/sonarqube-7.9.1.zip)

*unzip sonarqube-7.9.1.zip*

*sudo mv sonarqube-7.9.1 /opt*

*run sonarqube using below command.*

*$* */opt/sonarqube-7.9.1/bin/linux-x86-64/* *./sonar.sh start*

*To check status*

*$* */opt/sonarqube-7.9.1/bin/linux-x86-64/* *./sonar.sh start*

*General errors occur during elastic search component start up .*

*[1]: max file descriptors [4096] for elasticsearch process is too low, increase to at least [65535]*

*[2]: max virtual memory areas vm.max\_map\_count [65530] is too low, increase to at least [262144]*

*To fix both above issues execute following steps:*

*sudo vi /etc/security/limits.conf*

*add below two statements to increase max file descriptor.*

*Username soft nofile 65536*

*Username hard nofile 65536*

*Add DefaultLimitNOFILE=65536*

*To below two files*

1. /etc/systemd/user.conf
2. /etc/systemd/system.conf

Add vm.max\_map\_count=262144 to /etc/sysctl.conf to resolve 2nd issue.

*Adding DB details to sonar.properties file .*

passwd postgres

su - postgres

createuser sonar

psql

ALTER USER sonar WITH ENCRYPTED password 'sonar';

CREATE DATABASE sonar WITH ENCODING 'UTF8' OWNER sonar TEMPLATE=template0;

\q

vi conf/sonar.properties

sonar.jdbc.username=postgres

sonar.jdbc.password=postgres

sonar.jdbc.url=jdbc:postgresql://localhost:5432/postgres