**SonarQube Server Installation**

**#Hardware Requirements for SonarQube  
#----------------------------------------------------**  
#The SonarQube server requires at least 2GB of RAM to run efficiently and 1GB of free RAM for the OS.  
  
**#Login as a root user.**  
sudo su -

**Install Java ( Java is the Pre Requisite Software)**

**--------------------------------------------------------------**  
yum install java-11-openjdk-devel -y

**#Download the SonarqQube Server software.**  
cd /opt  
yum install wget unzip -y  
wget https://binaries.sonarsource.com/Distribution/sonarqube/sonarqube-9.6.1.59531.zip  
  
unzip sonarqube-9.6.1.59531.zip

mv sonarqube-9.6.1.59531 sonarqube  
  
  
**#As a good security practice, SonarQuber Server is not advised to run sonar service as a root user, so create a new user called sonar user  and grant sudo access to manage sonar services as follows.**  
useradd sonar  
  
**Give the sudo access to sonar user**  
visudo  
  
sonar   ALL=(ALL)       NOPASSWD: ALL  
  
**Change the owner and group permissions to /opt/sonarqube/ directory.**  
chown -R sonar:sonar /opt/sonarqube/  
chmod -R 775 /opt/sonarqube/  
su - sonar  
cd /opt/sonarqube/bin/linux-x86-64/  
  
./sonar.sh start  
  
**Troubleshooting**  
**--------------------**  
  
sonar service is not starting?  
  
a)make sure you need to change the ownership and group to /opt/sonarqube/ directory for sonar user.  
b)make sure you are trying to start sonar service with sonar user.  
c)check java is installed or not using java -version command.  
  
Unable to access SonarQube server URL in browser?  
  
a)make sure port 9000 is opened in security groups - AWS ec2 instance.  
  
**Create SonarQube server as a sonar service**  
**--------------------------------------------------------**  
  
ln /opt/sonarqube/bin/linux-x86-64/sonar.sh /etc/init.d/sonar  
  
vi /etc/init.d/sonar  
  
**#add below lines in /etc/init.d/sonar**  
  
SONAR\_HOME=/opt/sonarqube  
PLATFORM=linux-x86-64  
  
WRAPPER\_CMD="${SONAR\_HOME}/bin/${PLATFORM}/wrapper"  
WRAPPER\_CONF="${SONAR\_HOME}/conf/wrapper.conf"  
PIDDIR="/opt/sonarqube/"  
  
**#Enable the sonar service**  
sudo systemctl enable sonar  
  
**#Start the sonar service**  
sudo systemctl start sonar  
 **#Check the status of the  sonar service**  
sudo systemctl status sonar