**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)**

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yum install java-11-openjdk-devel -y

Amazon Linux :

sudo amazon-linux-extras install java-openjdk11

**#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

Create a SonarQube Service:

Create a systemd service file:

sudo nano /etc/systemd/system/sonar.service

Add the following content:

[Unit]

Description=SonarQube service

After=syslog.target network.target

[Service]

Type=simple

User=sonar

Group=sonar

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

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

Restart=always

LimitNOFILE=65536

[Install]

WantedBy=multi-user.target

Reload systemd daemon:

sudo systemctl daemon-reload

Enable and start the SonarQube service:

sudo systemctl enable sonar

sudo systemctl start sonar

sudo systemctl status sonar  
  
**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.