Setup the sonarqube server

Here are the steps to install SonarQube on Ubuntu:

1. Update the Ubuntu package index:

sudo apt update

1. Install OpenJDK 11:

sudo apt install openjdk-11-jdk

1. Download the SonarQube Community Edition binary file:

wget https://binaries.sonarsource.com/Distribution/sonarqube/sonarqube-10.0.0.68432.zip

1. Rename the SonarQube directory:

sudo mv /opt/sonarqube-<version> /opt/sonarqube

1. Create a new system user for SonarQube:

sudo adduser --system --no-create-home --group sonarqube

1. Set the ownership of the SonarQube directory to the new user:

sudo chown -R sonarqube:sonarqube /opt/sonarqube

1. Configure SonarQube to run as a service:

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

Paste the following contents into the file:

makefileCopy code

[Unit] Description=SonarQube service After=syslog.target network.target [Service] Type=simple User=sonarqube Group=sonarqube ExecStart=/opt/sonarqube/bin/linux-x86-64/sonar.sh start ExecStop=/opt/sonarqube/bin/linux-x86-64/sonar.sh stop Restart=always [Install] WantedBy=multi-user.target

1. Reload the systemd daemon:

sudo systemctl daemon-reload

1. Start the SonarQube service:

sudo systemctl start sonarqube

1. Enable the SonarQube service to start automatically on boot:

sudo systemctl enable sonarqube

After completing these steps, you should be able to access the SonarQube web interface by navigating to **http://<your-server-ip>:9000** in a web browser. Note that you may need to configure the firewall to allow access to port 9000 if it is not already open.

Jenkins integration with Sonarqube

Jenkins and SonarQube are two popular tools used in software development. Jenkins is a continuous integration and continuous delivery (CI/CD) tool, while SonarQube is a code quality and security analysis tool. Integrating Jenkins with SonarQube can help automate code quality checks as part of the build process.

Here are the steps to integrate Jenkins with SonarQube:

1. Install SonarQube on a server: You can download SonarQube from the official website and follow the installation instructions.
2. Install the SonarQube Scanner plugin on Jenkins: In Jenkins, go to Manage Jenkins > Manage Plugins > Available, and search for "SonarQube Scanner." Install the plugin and restart Jenkins.
3. Configure SonarQube in Jenkins: In Jenkins, go to Manage Jenkins > Configure System, and scroll down to the "SonarQube servers" section. Click on "Add SonarQube" and enter the necessary information, such as the name, URL, and authentication token.
4. Configure the Jenkins job: In the Jenkins job that you want to integrate with SonarQube, add a build step to execute the SonarQube scanner. In the build step, specify the location of the project's source code and the SonarQube server to use.
5. Run the Jenkins job: When you run the Jenkins job, the SonarQube scanner will analyze the code and send the results to the SonarQube server. You can then view the results in SonarQube.