SonarQube(9000)

SonarQube (previously called Sonar) is an open source software quality management tool.

- It will continuously analyse and measures quality of the source code.
- I will generate the report if any issues in html format/PDF format.
- It is a web based tool supports multiple languages (Java, C#, JS …)
- It will support multi OS platform (Windows. MAC, Linux…).
- It will support multiple databases (MySQL, Oracle, Microsoft SQL Server, PostgreSQL)
- Supports multiple browsers (IE, Microsoft Edge, FF, Chrome, Safari)
- It will identify the below category of issues.
    - Duplicated code
    - Coding standards
    - Unit tests
    - Complex code
    - Comments
    - Potential Bugs
    - Architecture & Design

- Initially it is developed only for Java projects.
- Today it is supporting over twenty languages.
- Commercial: ABAP, Cfamily(C, C++, and Objective-C), COBOL, PL/SQL, Visual
    - Basic, Natural, VB.Net, RPG, Swift ..
- Open source: Java, Java Script, C#, Web(HTML, JSP, JSF, ..) XML, Python, Groovy,
    - PHP, Puppet, Lua, Groovy, FxCop, Flex, Erlang …

Pre requisites :

1. We need to take t2.large ec2-instance in AWS.
2. First we need install java on ec2-instance
3. Install SonarQube on ec2-instance.

SonarQube Installation Steps:

Step1: Install java on ec2

yum install -y java-1.8.0-openjdk-devel.x86_64

Step2 : Install SonarQube on ec2

sudo wget -O /etc/yum.repos.d/sonar.repo http://downloads.sourceforge.net/project/sonar-pkg/rpm/sonar.repo

yum install -y sonar

Step 3: Start SonarQube service

service sonar start

Accesing From Browser :

Ec2-instance Public IP address:portnumber for ex: 30.40.5.0:9000

After that you need to give default Credentials of SonarQube

Default username is admin and password is admin.

After that generate TOKEN , just give any name and generate TOKEN like below

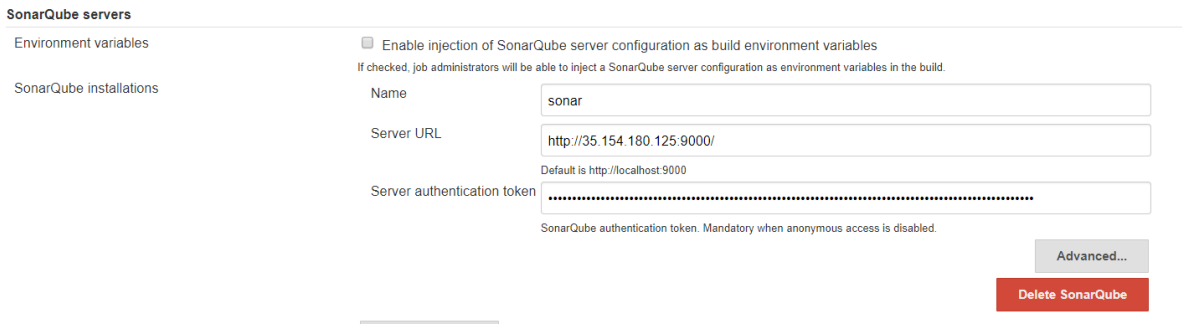
aruna: 34471a340e69401a5ad8990f7c64af9edf23d324

Now your Jenkins is ready for code quality for your project.

Jenkins Integrate with SonarQube:

1. First you need to install **SonarQube Scanner** plugin your Jenkins Server.
2. In Jenkins web browser go to manageJenkins and click Configure System and provide

   Name and SonarQube url , Generated Token like below



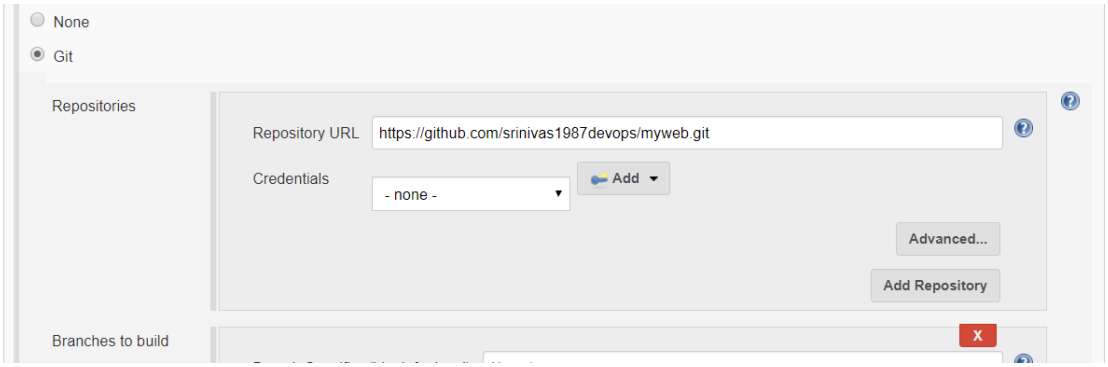
3.Update POM.xml under Properties tag provide SonarQube url like below

```
<url>http://maven.apache.org</url>

<properties>
        <docker.image.prefix>kammana</docker.image.prefix>
        <sonar.host.url>http://13.232.241.63:9000/</sonar.host.url>

</properties>
<dependencies>
```

4.Create Jenkins Job under Free-style Job Like below Screen Shots



Finally Build the job.

After That Check your SonarQube Browser will get Your Project is Analyzed by SonarQube.

SonarQube Scanner plugin Link below

https://updates.jenkins.io/download/plugins/sonar/

Download 2.81 version in your laptop and upload plugin in your Jenkins Browser.