**Introduction:**

SonarQube (formerly Sonar) is an open source platform developed by SonarSource

for continuous inspection of code quality to perform automatic reviews with static analysis of code to detect bugs, code smells, and security vulnerabilities on 20+ programming languages. SonarQube offers reports on duplicated code, coding standards, unit tests, code coverage, code complexity, comments, bugs, and security vulnerabilities.

SonarQube can record metrics history and provides evolution graphs. SonarQube's provides fully automated analysis and integration with Maven, Ant, Gradle, MSBuild

and continuous integration tools (Atlassian Bamboo, Jenkins, Hudson, etc.

**Installation:**

1. **Setup Sonarqube MYSQL Database**
2. Install wget

**sudo yum install wget –y**

1. Add mysql repositor, install and update it.

**wget http://repo.mysql.com/mysql-community-release-el7-5.noarch.rpm**

**sudo rpm -ivh mysql-community-release-el7-5.noarch.rpm**

**sudo yum update –y**

1. Install MySQL server.

**sudo yum install mysql-server**

1. Start MySQL service.

**sudo systemctl start mysqld**

1. Set password for yout MYSQl instance using the following command. The command will prompt for current root password, you can hit enter as there is no default password. All the other prompts are self-explanatory.

**sudo mysql\_secure\_installation**

1. Login using MySQL client and check the MySQL engine using the following commands. The storage engine should be InnoDB

**mysql -u root -p**

**SHOW GLOBAL VARIABLES LIKE 'storage\_engine'**

1. Create a sonarqube user and a database from MySQL CLI.

**CREATE USER 'sonarqube'@'localhost' IDENTIFIED BY 'password';**

**CREATE DATABASE sonarqube;**

1. Grant all privileges on sonarqube database to the sonarqube user.

**GRANT ALL PRIVILEGES ON sonarqube.\* TO 'sonarqube'@'localhost';**

1. Open /etc/my.cnf file and under [mysqld] section add the query cache parameter. The minimum size should be 15 MB. You can increase the size based on your server type.

**query\_cache\_size = 15M**

**Setup Sonarcube Web Server**

1. Download the latest sonarqube installation file to /opt folder. You can get the latest download link from here. <http://www.sonarqube.org/downloads/>

**cd /opt**

**sudo wget https://sonarsource.bintray.com/Distribution/sonarqube/sonarqube-6.0.zip**

1. Install unzip and java.

**sudo yum install unzip -y**

**sudo yum install java-1.8.0-openjdk –y**

1. Unzip sonarqube source files and rename the folder.

**sudo unzip sonarqube-6.0.zip**

**mv sonarqube-6.0 sonarqube**

1. Open /opt/sonarqube/conf/sonar.properties, uncomment and edit the parameters as shown below. Change the password accordingly.

**sonar.jdbc.username=sonarqube**

**sonar.jdbc.password=password**

**sonar.jdbc.url=jdbc:mysql://localhost:3306/sonarqube?useUnicode=true&amp;characterEncodin**

1. By default, sonar will run on 9000. If you want on port 80 or any other port, change the following parameters for accessing the web console on that specific port.

**sonar.web.host=0.0.0.0**

**sonar.web.port=80**

1. If you want to access sonarqube some path like http://url:/sonar, change the following parameter.

**sonar.web.context=/sonar**

**sonar property file below:**

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**Properties reference file:**

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