SonarQube

SonarQube is an open source tool suite to measure and analyse to quality of source code.
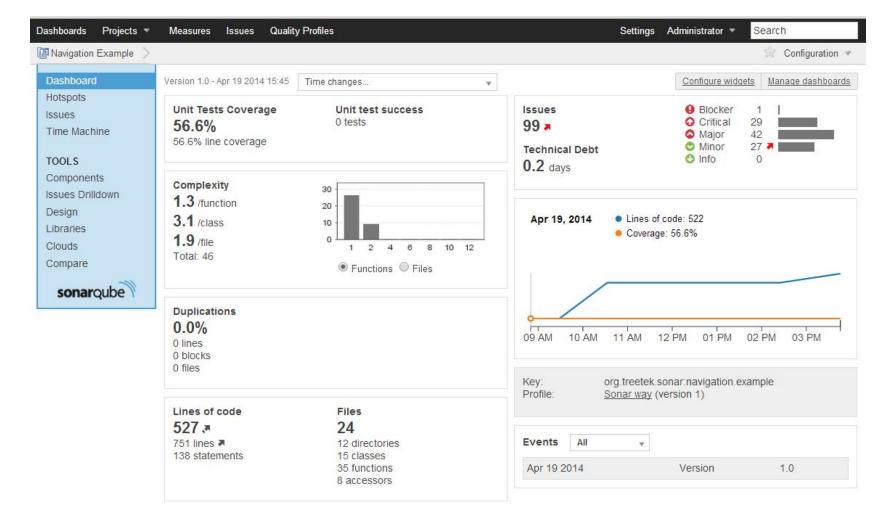
It is written in Java but is able to analyse code in about 20 different programming languages.

Code analysis may be started manually by executing a so-called sonar runner

but SonarQube's full is potential is especially revealed when <u>used in combination with continuous integration</u> such as a Jenkins server.

The results of an analysis are shown in a fancy web frontend with 'green' and 'red lights', nice charts, issue lists and an ability to drill down from project level to a single class.

SONAR

📑 Navigation Example ›   ☆ Configuration ▼

Dashboard

Hotspots

Issues

Time Machine

TOOLS

Components

Issues Drilldown

Design

Libraries

Clouds

Compare

sonarqube

Version 1.0 - Apr 19 2014 15:45 | Time changes...   ▼ | Configure widgets | Manage dashboards

Unit Tests Coverage   **Unit test success**
56.6%   0 tests
56.6% line coverage

Issues   ❗ Blocker   1 |
99 ↗   ⬆ Critical   29 ▅▅▅▅▅
                                     ⬆ Major   42 ▅▅▅▅▅▅▅
Technical Debt   ⬇ Minor   27 ↗ ▅▅▅▅
0.2 days   ⬇ Info   0

Complexity
1.3 /function
3.1 /class
1.9 /file
Total: 46

◉ Functions ○ Files

Apr 19, 2014   ● Lines of code: 522
                    ● Coverage: 56.6%

Duplications
0.0%
0 lines
0 blocks
0 files

Key: org.treetek.sonar:navigation.example
Profile: Sonar way (version 1)

Lines of code   **Files**
527 ↗   **24**
751 lines ↗   12 directories
138 statements   15 classes
                           35 functions
                           8 accessors

Events | All   ▼ |

Apr 19 2014   Version   1.0

Sonar Prerequisites

1. Java 8
2. DBMS (Mysql)
3. Create the sonar database and user
4. Download the sonarqube war file
5. Edit the sonar.properties file
6. Start the sonar.

https://docs.sonarqube.org/display/SONAR/Requirements

Installation of JAVA 8

Java:

#add-apt-repository ppa:webupd8team/java

#apt-get update

#apt-get install oracle-java8-installer

#update-alternatives --config java

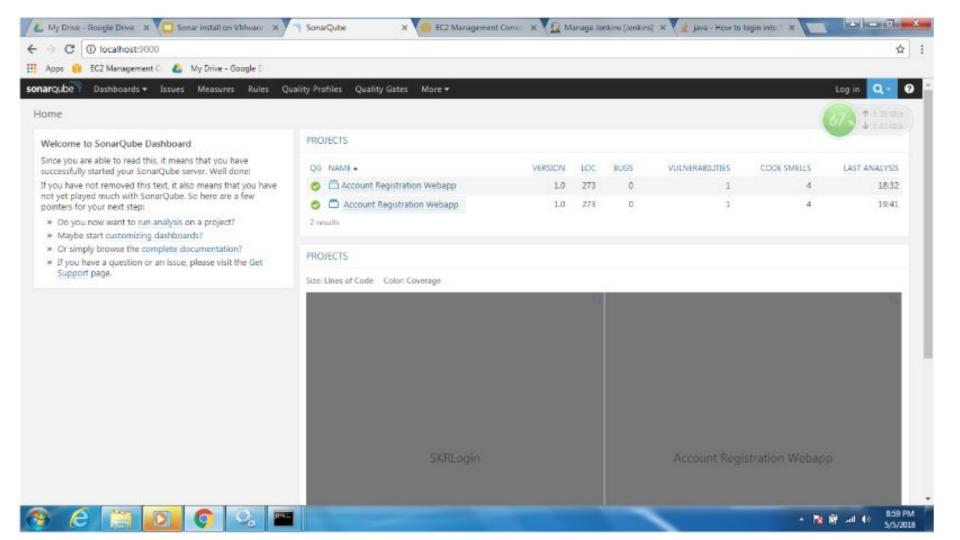# Installation of MYSql

DB Mysql Installation:

wget
https://dev.mysql.com/get/maysql/mysql-apt-config_0.8.0-1_all.deb

dpkg -i mysql-apt-config_0.8.0-1_all.deb

apt-get update

apt-get install mysql-server -y

#mysql --version

#mysql -u root -p

➢CREATE DATABASE sonar CHARACTER SET utf8 COLLATE utf8_general_ci;

➢CREATE USER 'sonar' IDENTIFIED BY 'sonar' ;

➢GRANT ALL ON sonar.* TO 'sonar'@'%' IDENTIFIED BY 'sonar';

➢GRANT ALL ON sonar.* TO 'sonar'@'localhost' IDENTIFIED BY 'sonar';

➢FLUSH PRIVILEGES;

vi /etc/mysql/mysql.conf.d/mysqld.cnf

   Change ip into private ip

Wq!

← → C ① localhost:9000

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Home   67

Welcome to SonarQube Dashboard

Since you are able to read this, it means that you have
successfully started your SonarQube server. Well done!

If you have not removed this text, it also means that you have
not yet played much with SonarQube. So here are a few
pointers for your next step:

» Do you now want to run analysis on a project?
» Maybe start customizing dashboards?
» Or simply browse the complete documentation?
» If you have a question or an issue, please visit the Get
  Support page.

PROJECTS

QG	NAME ▲	VERSION	LOC	BUGS	VULNERABILITIES	CODE SMELLS	LAST ANALYSIS
✅	🗀 Account Registration Webapp	1.0	273	0	1	4	18:32
✅	🗀 Account Registration Webapp	1.0	273	0	1	4	19:41

2 results

PROJECTS

Size: Lines of Code   Color: Coverage

SKRLogin   Account Registration Webapp

8:59 PM
5/5/2018

Installation of SonarQube on Ubuntu 14

\# https://sonarsource.bintray.com/Distribution/sonarqube/sonarqube-6.1.zip

\# unzip sonar..

\#mv sonar.. /opt/sonar

\# cd /opt/sonar

\#cd /conf

\#vi sonar.properties

Soner.properties file on ubuntu 14

sonar.jdbc.username=sonar

sonar.jdbc.password=sonar

sonar.jdbc.url=jdbc:mysql://172.31.19.253:3306/sonar?useUnicode=true&characterEncoding=utf8&rewriteBatchedStatements=true&useConfigs=maxPerformance

sonar.web.host=54.255.243.196

sonar.web.context=/sonar

sonar.web.port=9000

wq!

Start the sonar services on Ubuntu14

service mysql restart

bin/linux-x86-64/sonar.sh start

bin/linux-x86-64/sonar.sh status

#netstat -tulnp

Install on windows

1) Download Sonarqube 5.6.7 zip file and Extract into C:\Program Files

https://binaries.sonarsource.com/Distribution/sonarqube/sonarqube-5.6.7.zip

2) set the classpath SONAR_HOME

3) cd C:\ Program Files\sonarqube-5.6.7\bin\windows-x86-64 with CMD

installMTservice.bat

startMTservice.bat

4) http://localhost:9000

Integration of sonar two ways

1) with maven
2) with jenkins

Sonar with maven

```
<settings>

<profiles>

   <profile>

      <id>sonar</id>

    <actitivation>

     <actitivationByDfault>true</actitivationByDfault>

     </actitivation>

   <properties>

   <!-- SERVER ON A REMOTE HOST -->
```

run sonar from maven

```
mvn compile

mvn package

mvn sonar:sonar
```

Sonar Integrate with jenkins

1) http://repo1.maven.org/maven2/org/codehaus/sonar/runner/sonar-runner-dist/2.4/sonar-runner-dist-2.4.zip
2) set the classpath SONAR_RUNNER_HOME
3) Install SonarQube scanner plugin in jenkins server
4) Set the path "Sonarqube server" in configure system
5) Set the path "Sonarqube runner" in global tool configuration
6) Create a sonar job

Configure the JOB for Sonar

sonar.login=admin

sonar.password=admin

sonar.projectKey=mysonarjob02

sonar.projectName=mysonarjob02

sonar.projectVersion=1.0

sonar.sources=.

sonarqube build breaker

1) **sonarqube build breaker plugin download**

https://github.com/adnovum/sonar-build-breaker

2) **C:\Program Files\sonarqube-5.6.6\extensions\plugins.**
3) **From the Services window, look for a service named SonarQube. Right-click on it and select Restart.**
4) **Creating quality gates**

← → C ① localhost:9000/quality_gates/show/3 ☆ :

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sonarqube Dashboards ▾ Issues Measures Rules Quality Profiles **Quality Gates** Administration More ▾   Administrator ▾ Q ▾ ❓

Quality Gates	Create

test2   Rename Copy Se 72% ↑ 396 B/s ↓ 64 B/s

Conditions

SonarQube way	Default
TEST	
test2	

Only project measures are checked against thresholds. Sub-projects, directories and files are ignored. More

METRIC	OVER LEAK PERIOD	OPERATOR	WARNING	ERROR		
Complexity	☐	is less than ▾	1	2	Add	Cancel

Add Condition ▾

Projects

[**With**] [Without] [All] Q Search

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