

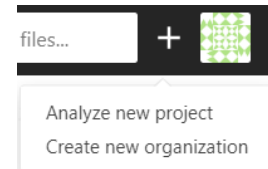
SonarQube Tutorial

How to setup a new project

First you need to decide whether you want to public(!) your results on the cloud or you need the additional freedom and host your own server.

Then you have to create your own organisation, where

- Create your own organisation
 - o Either import your GitHub account or create your own organisation
 - Analyse a new project
 - Choose your own unique Project-Key
 - You can limit the access by setting your project private, but you need a paid license to do so
 - Generate your token and store it somewhere safe. You need that for authentication.
 - Choose your primary language and your technology
 - Copy the command line instructions and run them from your projects root folder
- Hint: You need to remove the ‘\’ before you can run it



OR

- Create an sonar-project.properties file like the following

```
# must be unique in a given SonarQube instance
sonar.projectKey=SonarQube-Test

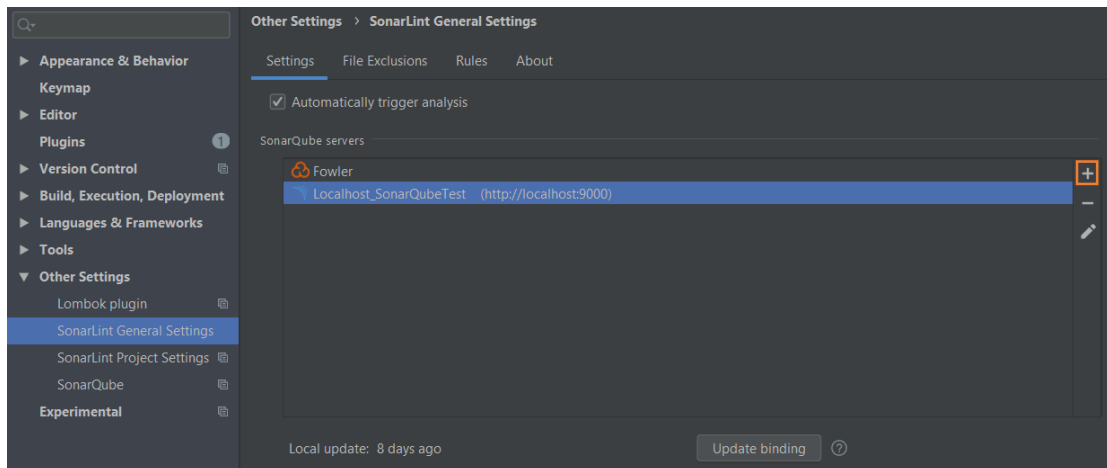
sonar.host.url=https://sonarcloud.io
sonar.organization=niforj-github

# this is the name and version displayed in the SonarQube UI. Was mandatory prior to SonarQube 6.1.
sonar.projectName=SonarQube-Test
sonar.projectVersion=1.0
# Path is relative to the sonar-project.properties file. Replace "\" by "/" on Windows.
# This property is optional if sonar.modules is set.
sonar.sources=src
sonar.java.binaries=target/classes
#TestCoverage
sonar.junit.reportPaths=target/surefire-reports
sonar.coverage.jacoco.xmlReportPaths=target/site/jacoco/jacoco.xml
# Encoding of the source code. Default is default system encoding
#sonar.sourceEncoding=UTF-8
```

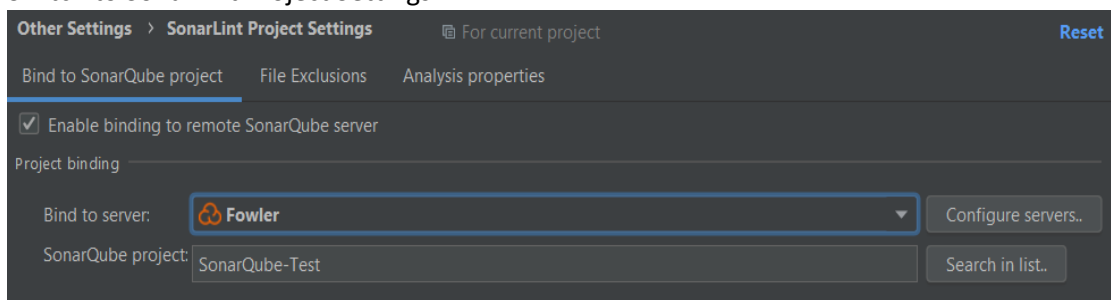
- Fill in all properties with values taken from the command-line-instructions or project specific paths
- Run the command line instruction “sonar-scanner” from the root folder of your project

Integration in your IDE

- Install the SonarLint Plugin
- Open the Settings -> SonarLint General Settings



- Configure a new Server following the step by step instructions
- Switch to SonarLint Project Settings



- Select your new Server to bind your project to

Include SonarQube in your build process

- Include the addon sonarcloud in your .travis.yml step and choose the correct organization

```

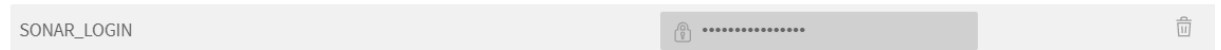
addons:
  sonarcloud:
    organization: "nifoxi-github" # the key of the org you chose at step #3
    token:
      secure: $SONAR_LOGIN # encrypted value of your token
script:
  - mvn package
  - sonar-scanner

```

- Store your token as environment variable within travis

Environment Variables

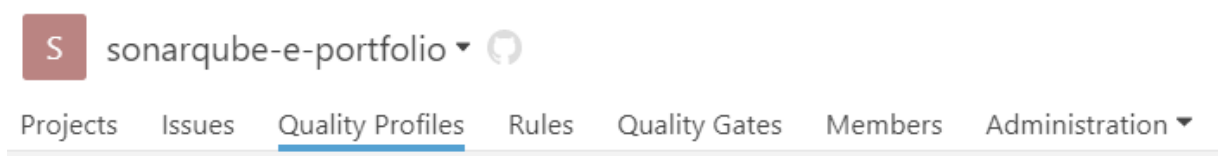
Customize your build using environment variables. For secure tips on generating private keys [read our documentation](#)



- Run “sonar-scanner” as script

Customize rules and quality gates

- A quality profile consists of a set of rules to be checked in each analysis
- To manage them Go to your organisation’s overview and select Quality Profiles



- There you can either edit your profiles or create new ones
- By creating a new one you can choose to inherit a ruleset from a parent
 - o But you will not be able to edit rules you inherited

Quality Profiles / Java

E-Portfolio

Updated: 7 days ago Used: Never Changelog Settings

Rules	Active	Inactive
Total	148	394
Bugs	10	110
Vulnerabilities	8	47
Code Smells	128	207
Security Hotspots	2	30

Activate More

Deprecated Rules 7

Sonar way rules not included 392

Permissions

Users with the global "Manage Quality Profile" permission can manage this quality profile.

Grant permissions to more users

Inheritance

E-Portfolio 148 active rules 0 overridden rules Change Parent

Projects

SonarQube 1 of 1 shown Change Projects

- When editing a profile, you can select the rules which should be applied or which project should use the profile
- A quality gate is used to keep your projects quality above a determined minimum
- When a new commit pushes the quality below that minimum, the quality gate will fail and stop your build
- Select the Quality Gates tab in your organisation overview to setup these gates

E-Portfolio Rename Copy Set as Default Delete

Conditions Add Condition

Only project measures are checked against thresholds. Directories and files are ignored.

Metric	Operator	Error
Coverage	is less than	20.0%

Projects

With Without All Search

☒ SonarQube

- You can choose from a list of metrics when to fail a quality gate and set which projects to use them

Useful Plugins

- To install plugins, you need to host your own SonarQube-Server

Administration

Configuration ▼ Security ▼ Projects ▼ System Marketplace

- Plugins can be found and installed by searching in the marketplace from the Administration tab

- Once you found the plugin you wish to install simply click on “install”

German Pack [Localization](#)
Language Pack for German

1.2 Supports SonarQube 5.0 ...

[Homepage](#) [Issue Tracker](#)
Licensed under GNU LGPL 3
Developed by [Philipp Nestler](#), [Christian Schulz](#)

Install

- Windows might interfere with the installation process by blocking the access
 - o Just restart the SonarQube-Server to load the just installed plugins