



builds world-class products for
Code Quality & Code Security

Vic • Linktech Inc • @ Live DEMO

OUTLINE

- Sonarsource Overview
- Sonarsource Advantage
- DevOps Intergration
- Sonarsource Plan
- Linktech' s service
- Q&A

Hi ! We are Linktech !

JIRA IT UP

我們專注於整體軟體工程解決方案!

www.linktech.com.tw

Linktech customer in Taiwan





Linktech x DevOps



Linktech 完整代理四大 DevOps 核心系統，專業顧問團隊為您串聯整體方案

不論是專案管理、需求管理、程式碼版本控制、開源工具與程式碼掃描至整合與佈署，Linktech 都可以針對您的需求給予最合適的工具與諮詢，或是由 Linktech 協助您實際整合您的 DevOps

Sonarsource Overview



Vision and focus

Where we focus, what our expertise is

- Developer First
- Code Quality and Security
- Open-Source
- Product Centric
- Strong belief in **continuous** inspection, **shift left**
- Actionable: A tool and a methodology:

Sonarsource Advantage



Clean As you Code

Clean as You Code means focusing on New Code for maximum Code Quality impact with minimum investment.

Focus on New Code to maintain project health

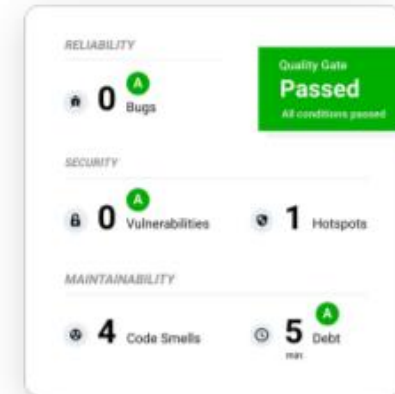
The SonarQube project homepage highlights the Code Quality and Code Security of your New Code (changed or added) so you can focus on what's important: making sure the code you write today is solid.

Developers own quality in New Code

As a developer your priority is making sure the code you write today is clean and safe.

Personal responsibility, not heroics

With the Clean as You Code methodology, no one is responsible for cleaning up someone else's code. You only have to do an okay job on the code you're writing today.





SAST - Code Security, for Developers

Early security feedback, empowered developers

Code Security is no longer the realm of security teams. The true opportunity lies in developers writing more secure code with SonarQube detecting Vulnerabilities and Security Hotspots, explaining them, and giving appropriate next steps.

Clear security issues, clear actions

Tackle security issues with a sensible pattern led by the development team



Security

Hotspots >

Code review

Security Hotspots are uses of security-sensitive code. They might be okay, but human review is required to know for sure.

As developers code and interact with Security Hotspots, they learn to evaluate security risks while learning more about secure coding practices.



Security

Vulnerabilities >

Code change/fix

Security Vulnerabilities require immediate action. SonarQube provides detailed issue descriptions and code highlights that explain why your code is at risk.

Just follow the guidance, check in a fix and secure your application.



Coding scanning at any time

When Coding

Fix issues before they exist.

The best way to not have to deal with quality issues is to not inject them in the first place. This is [SonarLint](#)'s primary mission. Available as an extension to IDEs, it provides on-the-fly feedback to developers on new bugs and quality issues.

```
public String getAge(Connection con, String name) throws SQLException {
    try {
        PreparedStatement ps = con.prepareStatement(
            "SELECT age FROM people p WHERE name = ?");
        ps.execute();
        ResultSet rs = ps.getResultSet();
        if (rs.next()) {
            return rs.getString(1);
        }
        return null;
    }
}
```

“name” is provided externally to the method and not sanitized before use.

When Pushing

Combine automatic and manual code reviews on pull requests to enable an educated merge.

Pull requests are the best place to do code review because they are created when a feature is complete but not yet merged into the master branch. The [Pull Request Analyzer](#) will run an automated code analysis and provide the results directly in the pull request along with any other reviews that occurred, allowing the person in charge of merging to make the most educated decision.

| | |
|-----------------|--------|
| Quality Gate | Failed |
| Bugs | 2 |
| Vulnerabilities | 0 |
| Code Smells | 1 |

Help me fix it

When Promoting

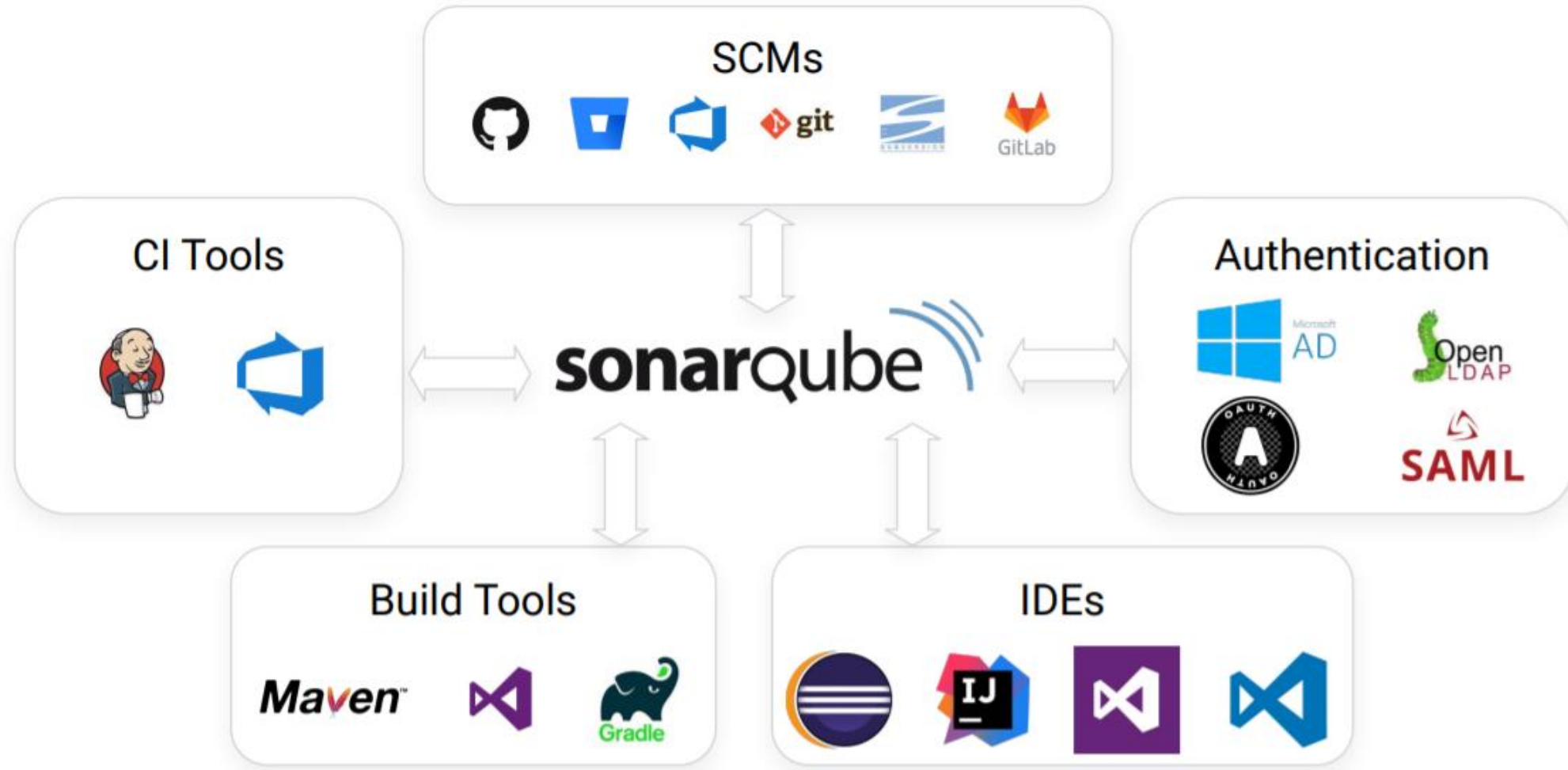
SonarQube is the toll-gate for code promotion to your Test and Production environments.

The Quality Gate is a major, out-of-the box feature of [SonarQube](#). It provides the ability to know at every analysis whether an application passes or fails the release criteria. In other words, it tells you at every analysis whether an application is ready for production “quality-wise”. This will therefore be used by devOps as the gate keeper before promoting artifacts.





DevOps integration

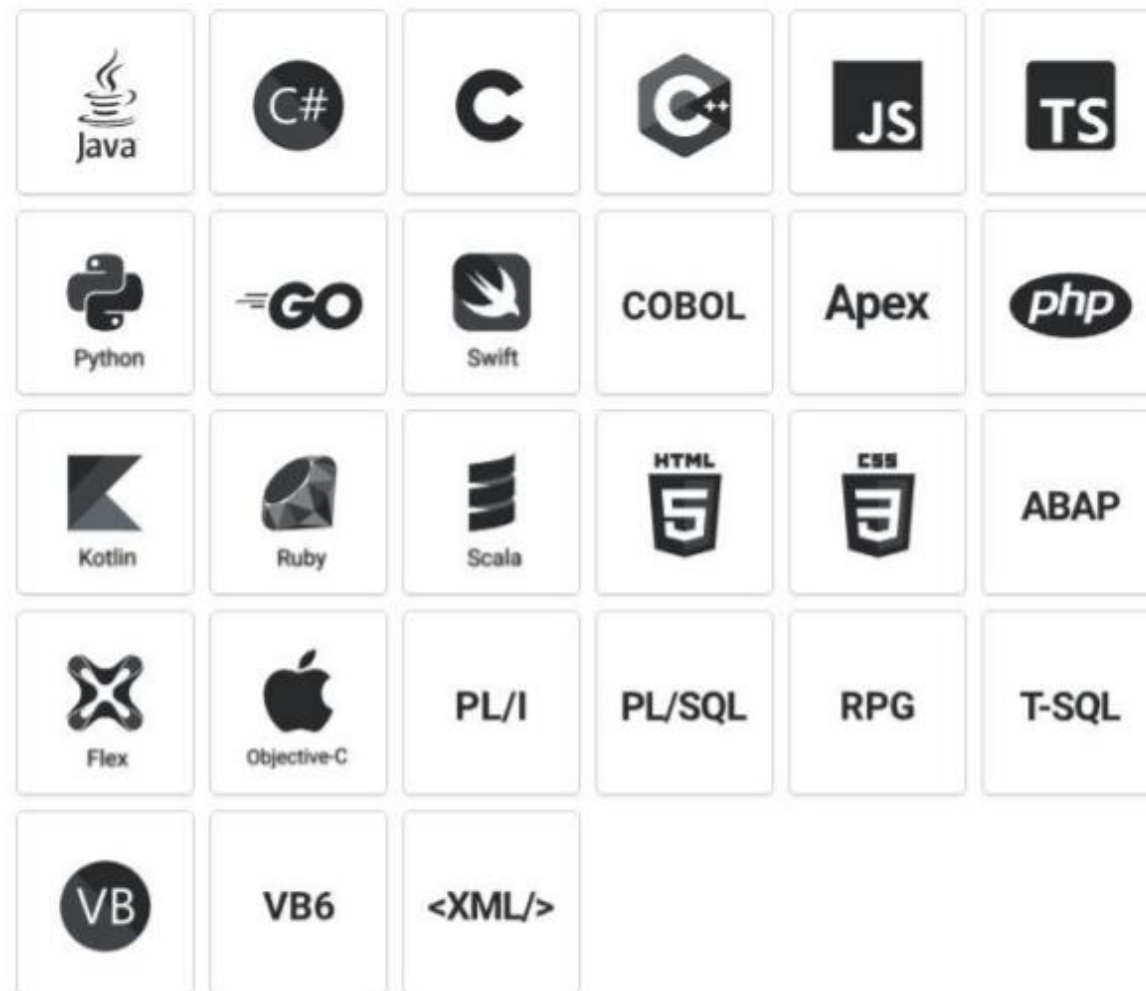




Multi-Language

Your projects are multi-language. So is
SonarQube analysis.

With SonarQube static analysis you have one place to measure the Reliability, Security, and Maintainability of all the languages in your project, and all the projects in your sphere. We have made and continue to make serious investments in our analyzers to keep value up and false positives down.





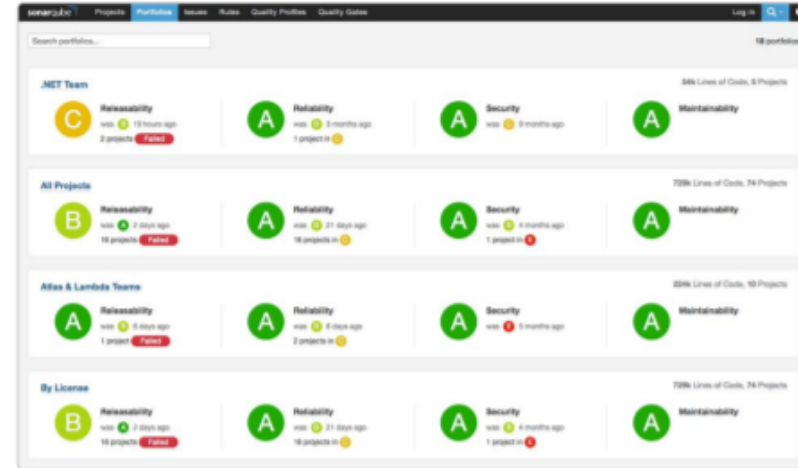
Visualize your team's success



Application & Portfolio Management

Organize a large portfolio of applications and projects the way you like. Create your own hierarchy and define category trees to the number and depth that works best for you

Get access to the detailed project metrics, trends and presentations you are already used to, now at any level of the defined hierarchies.



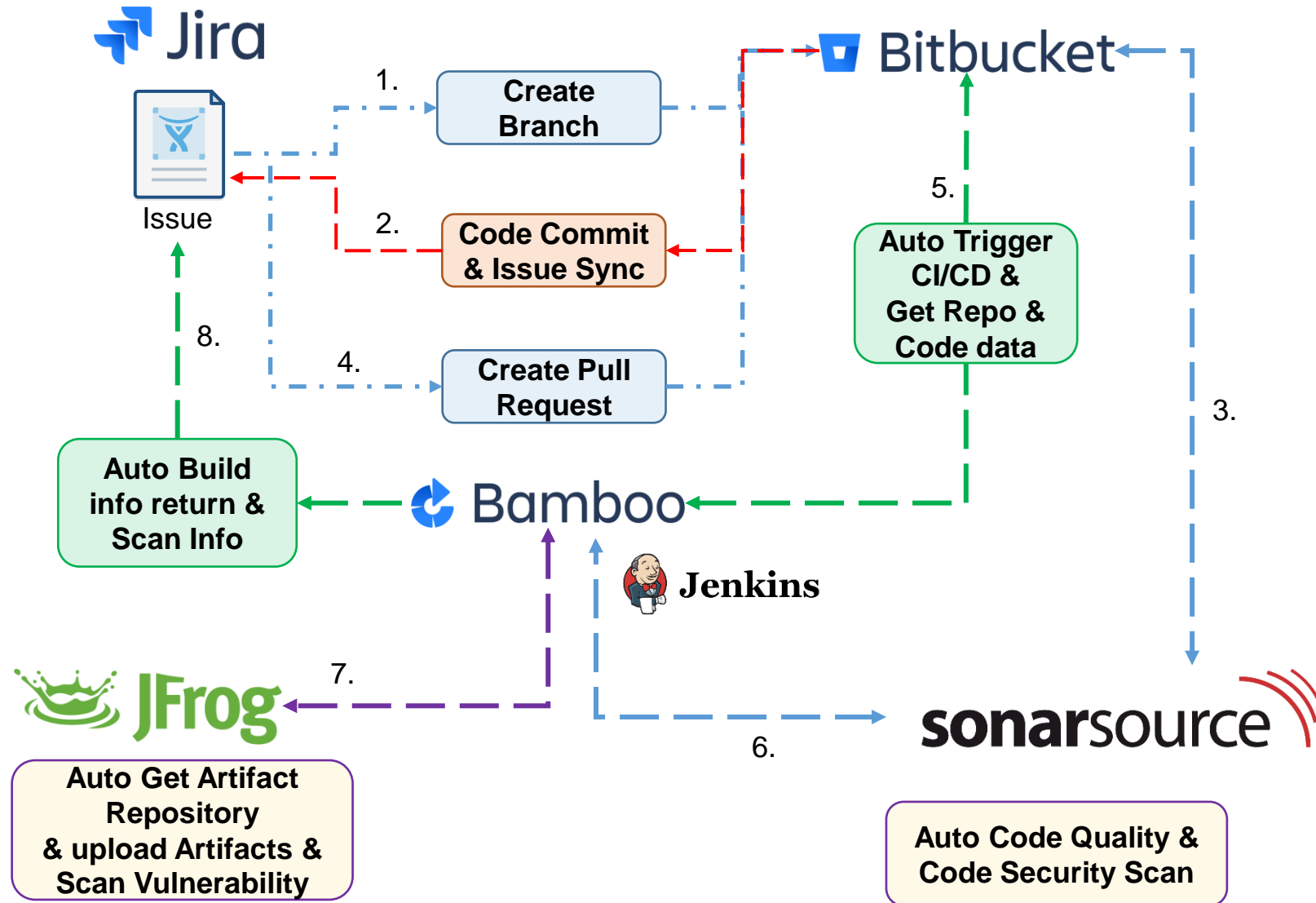
Executive Reporting

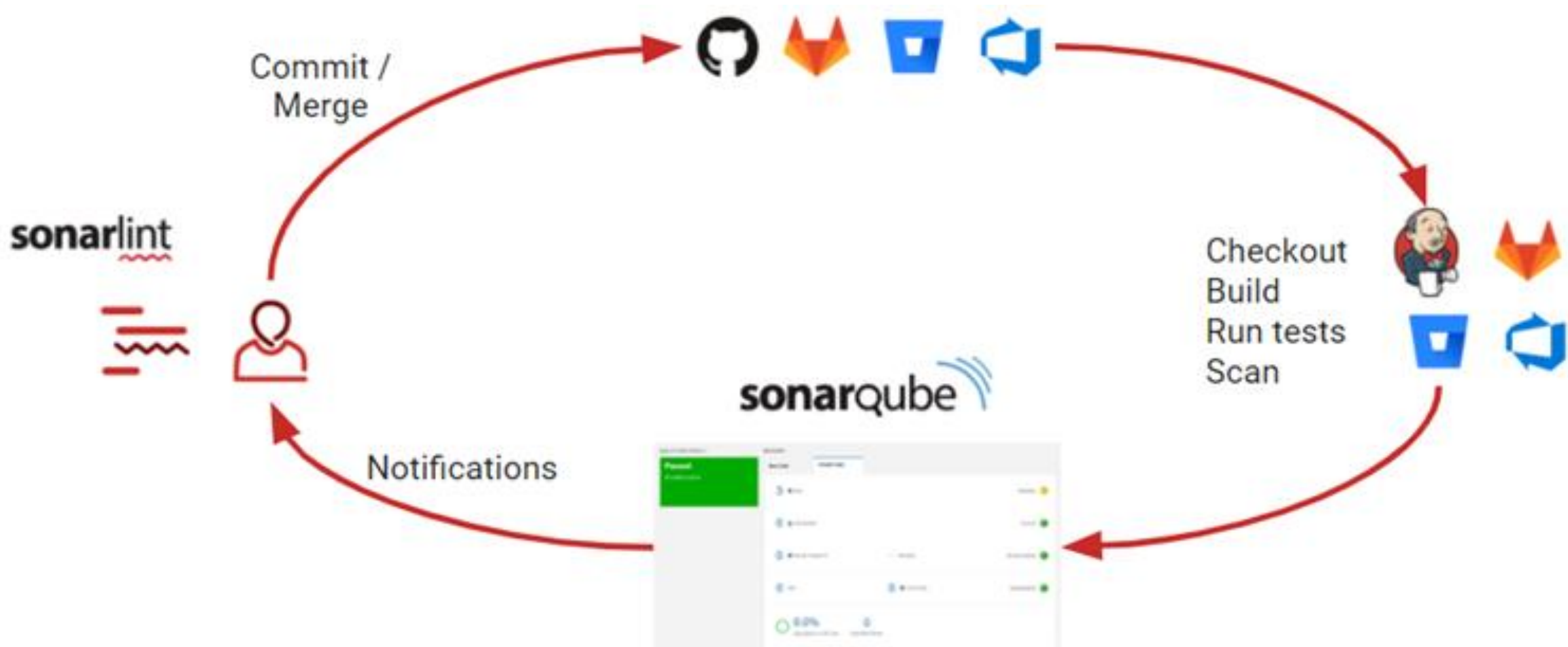
Gain visibility into health factors such as operational risks and security risks. Generate, export and schedule reports in PDF format to ensure visibility of key metrics to all stakeholders. Get fast reporting and up-to-date information, no matter the number of projects.



DevOps Integration

Atlassian DevOps







SonarScanner.MSBuild - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Test Analyze Window Help

Debug Mixed Platforms SonarScanner.MSBuild.Tasks SonarScanner.MSBuild.Tasks

Server Explorer Toolbox

PropertiesFileGenerator.cs*

```
310
311     private void LogDuplicateGuidWarning(Guid projectGuid, string projectPath) =>
312         logger.LogWarning(Resources.WARN_DuplicateProjectGuid, projectGuid, projectPath);
313
314     private void AddAnalyzerOutputFilePath(ProjectInfo project, ProjectData projectData)
315     {
316         var property = project.AnalysisSettings.First(p => p.Id.EndsWith(".analyzer.projectOutPath"));
317         if (property.ToString().Length == 0)
318         {
319             logger.LogDebug("Invalid empty report path");
320         }
321         else if (property != null)
322         {
323             projectData.AnalyzerOutPaths.Add(new FileInfo(property.Value));
324         }
325     }
326
```

Solution Explorer

Search Solution Explorer (Ctrl+S)

- Solution 'SonarScanner.MSBuild' (21 projects)
- Legacy
- Packaging
- SonarQube
- Tests
 - SonarScanner.MSBuild.Common.UnitTests
 - Properties
 - References
 - AnalysisConfig
 - AnalysisProperties
 - CommandLine
 - Infrastructure
 - ProjectInfo

Solution Explorer Team Explorer

Properties

Error List - Current Document (PropertiesFileGenerator.cs)


Current Document 0 Errors 2 of 25 Warnings 0 of 2 Messages Build + IntelliSense Search Error List


| Code | Description | Project | File | Line | Suppression St... |
|-------|--|-----------------------------|----------------------------|------|-------------------|
| S2589 | Change this condition so that it does not always evaluate to 'true'. If a boolean expression always evaluates to 'true' or 'false', the condition, then it is entirely unnecessary, and can be removed. If it is gratuitous because it does not | SonarScanner.MSBuild.Shi... | PropertiesFileGenerator.cs | 321 | Active |
| S2589 | Change this condition so that it does not always evaluate to 'true'. If a boolean expression always evaluates to 'true' or 'false', the condition, then it is entirely unnecessary, and can be removed. If it is gratuitous because it does not | SonarScanner.MSBuild.Shi... | PropertiesFileGenerator.cs | 321 | Active |










Get help for 'S2589'
<https://rules.sonarsource.com/csharp/RSPEC-2589>

Ready 0 23 sonar-scanner-msbuild master




 **maven**

 Source












-  Commits
-  Branches
-  Pull requests
-  Pipelines
-  Deployments
-  Jira issues
-  Security
-  Downloads
-  Repository settings

許維珽(Vic) / Untitled project

maven





Clone 

Quality Gate: NONE



| | | | |
|--|--|---|---|
|  RELIABILITY 3 Bugs  |  SECURITY 0 Vulnerabilities  |  MAINTAINABILITY 0 Code Smells  |  SECURITY REVIEW 0 Security Hotspots  |
| COVERAGE - % Coverage  | DUPLICATED LINES 0 % Duplicated Lines  | SIZE 57 Lines of Code  | |

Last analysis: 2021-11-26

Here's where you'll find this repository's source files. To give your users an idea of what they'll find here, add a [description to your repository](#).

 master  Files  Filter files 



| Name | Size | Last commit | Message |
|---|------|-------------|--|
|  .settings | | 2021-08-05 | update all |
|  src | | 2021-11-22 | DEV-2 update index.jsp |



develop → master **OPEN**

1 Merge

Successful quality gate and some issues with cov

There is **1 issue** preventing you from merging this pull request

Overview Diff Commits Builds

1 Sonar failed quality gate: Maintainability
Rating on New Code: E > A

Administrator created a pull request 10 Sep 2020
No description for this pull request. [Add one](#)

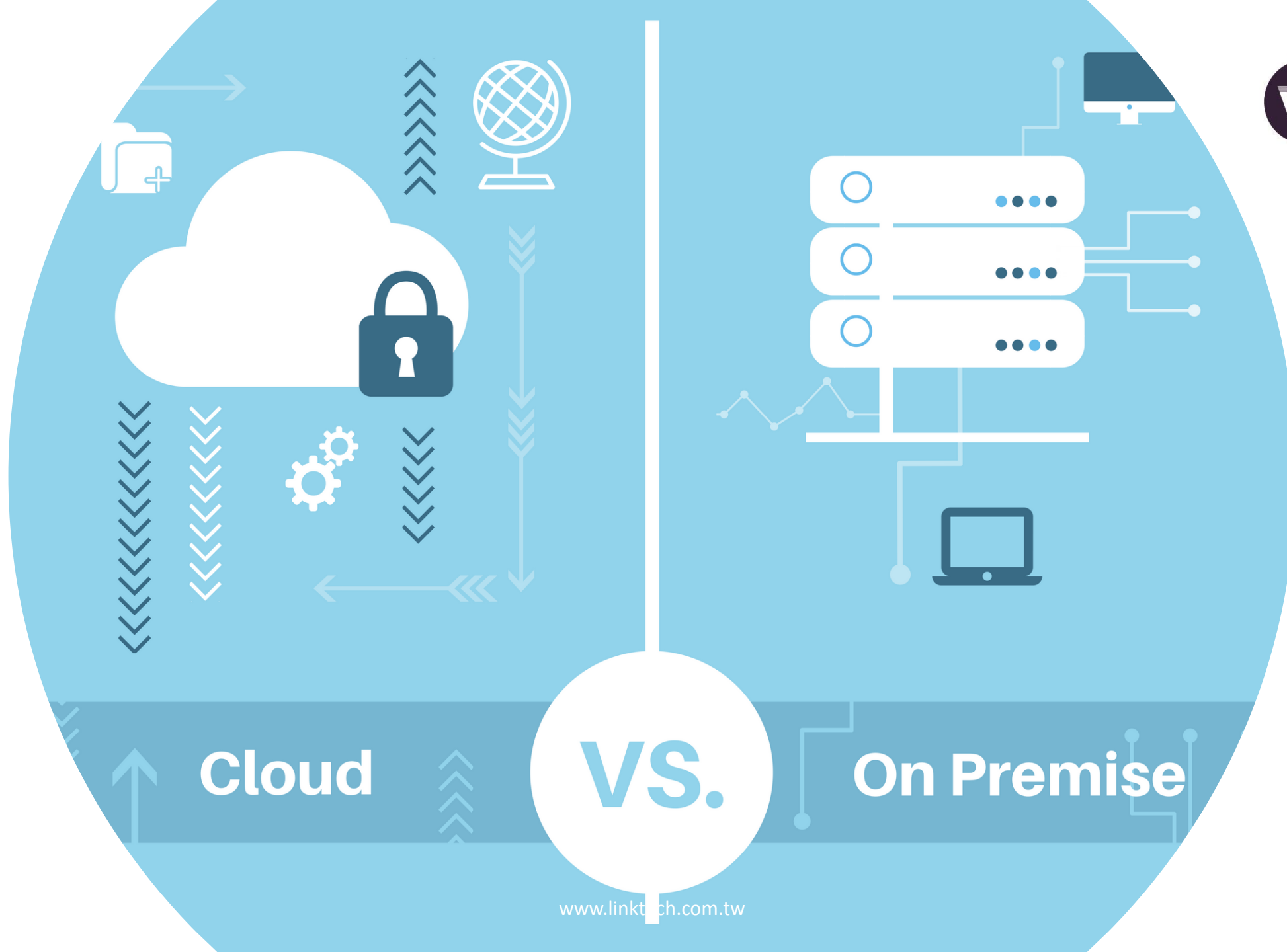
1 Sonar quality gate

Activity

What do you want to say?

Administrator **OPENED** the pull request 10 Sep 2020

Sonarsource Plan



Cloud

VS.

On Premise



Community

EDITION

Used and loved by 200,000+ companies

[Learn more](#)

FREE & OPEN SOURCE

All the following features:

- ✓ SonarQube & 60+ plugins
- ✓ SonarLint
- ✓ 15 languages
Java, JavaScript, C#, TypeScript, Kotlin, Ruby, Go, Scala, Flex, Python, PHP, HTML, CSS, XML and VB.NET

Developer

EDITION

Built for developers
by developers

[Learn more](#)

Starts at €120

Community Edition plus:

- ✓ Branch Analysis
- ✓ Pull Request Decoration
- ✓ Detection of injection flaws
- ✓ SonarLint notifications
- ✓ 22 languages
C, C++, Obj-C, Swift, ABAP, T-SQL, PL/SQL
- GitHub
- Azure DevOps
- Bitbucket
- GitLab

Enterprise

EDITION

Designed to meet
Enterprise Requirements

[Learn more](#)

Starts at €15,000

Developer Edition plus:

- ✓ Portfolio Management & PDF Executive Reports
- ✓ Security Reports
- ✓ Project Transfer
- ✓ Parallel processing of analysis reports
- ✓ 27 languages
Apex, COBOL, PL/I, RPG, VB6

Data Center

EDITION

Designed for
High Availability

[Learn more](#)

Starts at €100,000

Enterprise Edition plus:

- ✓ Component redundancy
- ✓ Data resiliency
- ✓ Horizontal scalability



SonarCloud is the leading online service for Code Quality & Code Security

- ✓ Super-fast analysis, highly precise results
- ✓ Branch analysis & pull request decoration
- ✓ Clear remediation guidance for bugs, vulnerabilities, and code smells
- ✓ 24 programming languages: Java, C#, PHP, Python, JS, TS, ...
- ✓ No CI/CD configuration needed for interpreted languages
- ✓ Easy integration to GitHub.com, Bitbucket Cloud, GitLab.com, and Azure DevOps Services



FREE

Public project

Anyone can see your project and your source code

[Sign up for free](#)

Private project

[Start 14-days free trial](#)

Start at 10€/month. See the [price list](#)

Linktech Service



- ⚙️ 系統建置
- ⚙️ 管理
- ⚙️ 應用教學



界面功能與客
製化工程與教學
(AUI / SDK)



跨系統工程諮詢
與教學
(REST API / SDK)



IT方案諮詢與
工程



友環企業專業的顧問輔導

01

人 WHO?

負責維運單位/人員:IT
負責系統設定與管理:SA

02

事 WHAT?

第一階段導入的專案或單位

03

時 WHEN?

規劃各階段導入時間表與計畫大綱



各階段導入工作 – 顧問導入

1 需求訪談

- 需求分析
- 課程訓練
- 顧問導入

2 α Run 實驗單位導入

- 專案建置
- α Run 修正方案提供

4 結案 & 下 一期顧問案

- 使用 Template 對使用單位推廣
- 使用者教育訓練

3 β Run 後續推廣

- 產生後續推廣 Template
- SA 人員教育訓練



THANK YOU