

지속적인 코드 품질 관리를 위한

# SonarSource SonarQube

Version	Version 2.1
Date	2018.05
Author	curvc
Type	Customer Presentation

Community Edition	Developer Edition	Enterprise Edition	Datacenter Edition
85,000 회사에서 사용중	개발자를 위한 빌드	엔터프라이즈를 위한 설계	고가용성을 위한 버전
<ul style="list-style-type: none"> <li>• SonarQube</li> <li>• 60+ 플러그인</li> <li>• SonarLint</li> <li>• 9 Languages 지원</li> <li>• Java, Javascript, C#, TypeScript, Flex, Python, PHP, Web &amp; XML</li> </ul>	<ul style="list-style-type: none"> <li>• SonarQube</li> <li>• <b>브랜치 분석 지원</b></li> <li>• 60+ 플러그인</li> <li>• SonarLint</li> <li>• <b>SonarLint 알람</b></li> <li>• <b>16 Languages 지원</b></li> <li>• Java, Javascript, C#, TypeScript, Flex, Python, PHP, Web &amp; XML, <b>C/C++, Objective-C, PL/SQL. ABAP, VB.NET, TSQL &amp; Swift</b></li> </ul>	<ul style="list-style-type: none"> <li>• SonarQube</li> <li>• 브랜치 분석 지원</li> <li>• <b>포트폴리오 관리</b></li> <li>• <b>관리자 리포트</b></li> <li>• 60+ 플러그인</li> <li>• SonarLint</li> <li>• SonarLint 알람</li> <li>• <b>20 Languages 지원</b></li> <li>• Java, Javascript, C#, TypeScript, Flex, Python, PHP, Web &amp; XML, C/C++, Objective-C, PL/SQL. ABAP, VB.NET, TSQL &amp; Swift, <b>COBOL, PL/I, RPG &amp; VB6</b></li> </ul>	<ul style="list-style-type: none"> <li>• SonarQube</li> <li>• 브랜치 분석 지원</li> <li>• 포트폴리오 관리</li> <li>• 관리자 리포트</li> <li>• <b>컴포넌트 리더던시</b></li> <li>• <b>데이터 무결성</b></li> <li>• 60+ 플러그인</li> <li>• SonarLint</li> <li>• SonarLint 알람</li> <li>• 20 Languages 지원</li> <li>• Java, Javascript, C#, TypeScript, Flex, Python, PHP, Web &amp; XML, C/C++, Objective-C, PL/SQL. ABAP, VB.NET, TSQL &amp; Swift, COBOL, PL/I, RPG &amp; VB6</li> </ul>

전체 Code Line수로 SonarQube의 가격정책이 변경됩니다.

단위 (원)

Developer Edition		Enterprise Edition		Datacenter Edition	
100K	200,000	1M	<b>21,000,000</b>	20M	<b>135,000,000</b>
250K	1,220,000	5M	33,700,000	50M	202,500,000
500K	2,430,000	10M	50,650,000	75M	270,000,000
1M	4,010,000	20M	67,500,000	100M	337,500,000
2M	8,100,000	30M	101,500,000	250M	540,000,000
5M	23,650,000	50M	121,000,000	500M	810,000,000
10M	48,600,000	75M	168,700,000		
20M	67,500,000	100M	243,000,000		

환율에 따라 해당 가격은 차이가 날 수 있습니다. 현재 가격은 참고용 가격입니다.

전체 Code Line수로 SonarQube의 가격정책이 변경됩니다.

Project	Code Line	Description
ReactOS	6M	MS 윈도우와 호환되는 오픈소스 OS
JDK 9	3M	Java JDK9 소스코드
MySQL	2M	MySQL 데이터베이스 소스코드
PostgreSQL	961K	오픈 소스 데이터베이스 PostgreSQL 소스코드
Apache HBase	862K	Apache Hbase 소스코드
SonarQube	256K	소나큐브 메인 플랫폼 소스코드
SonarJava Plugin	66K	소나큐브 플러그인 소스코드
Apache Hadoop Main	517K	Apache Hadoop 소스코드
Prestashop	361K	오픈 소스 쇼핑몰 소스코드

SonarQube는 조직에서 개발된 코드의 지속적인 인스펙션을 통해 품질 목표를 달성하게 도와주는 오픈 소스 플랫폼입니다.

## 지속적인 코드 품질 관리

- 프로젝트의 홈에서 품질 게이트, 버그, 취약성, 중복코드, 단위 테스트 정보를 한눈에 보여주며 현재 코드의 품질 측면에서 위치를 확인합니다.
- 빌드와 통합을 통해 소스 코드 품질의 변화를 즉각적으로 확인할 수 있습니다.

## 조직 품질 요구사항 설정

- 품질 게이트(Quality Gate)를 통해 다양한 조직의 품질 요구사항을 설정할 수 있습니다.
- 복잡도, 커버리지, 중복, 보안성, 유지보수성, 사이즈, 신뢰성, 이슈 등 다양한 항목에 대한 품질 요구사항을 설정합니다.

## 다양한 Rulesets 공유

- 소나큐브는 프로젝트 분석 시 사용되는 규칙(Rulesets)을 정의할 수 있습니다.
- 이 룰셋은 품질 프로파일로 구성되고 조직의 모든 구성원은 프로젝트에 적용되는 규칙을 확인할 수 있습니다.

## 다양한 소프트웨어 통합

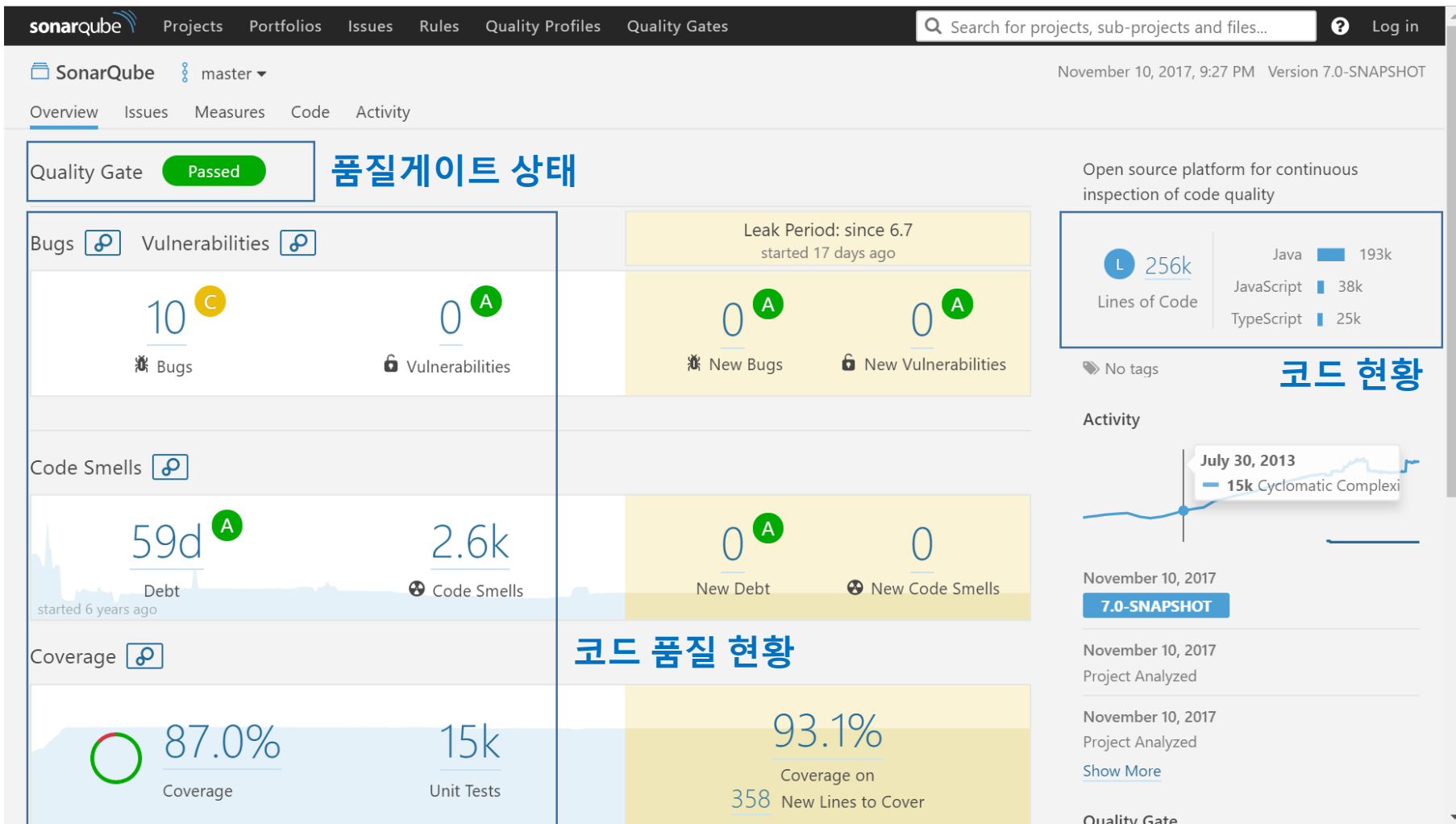
- 소나큐브는 다양한 프로그래밍 언어의 빌드와 다양한 CI 엔진과의 통합을 지원합니다.
- 플러그인을 통해 다른 정적분석도구, 룰셋, 이슈 트래커 연동 등을 지원하고 있습니다.

SonarQube는 전체 프로젝트의 현황을 확인할 수 있게 해줍니다. 조직의 전체 프로젝트의 품질 게이트를 확인하고 주요 품질 지표를 확인할 수 있습니다.

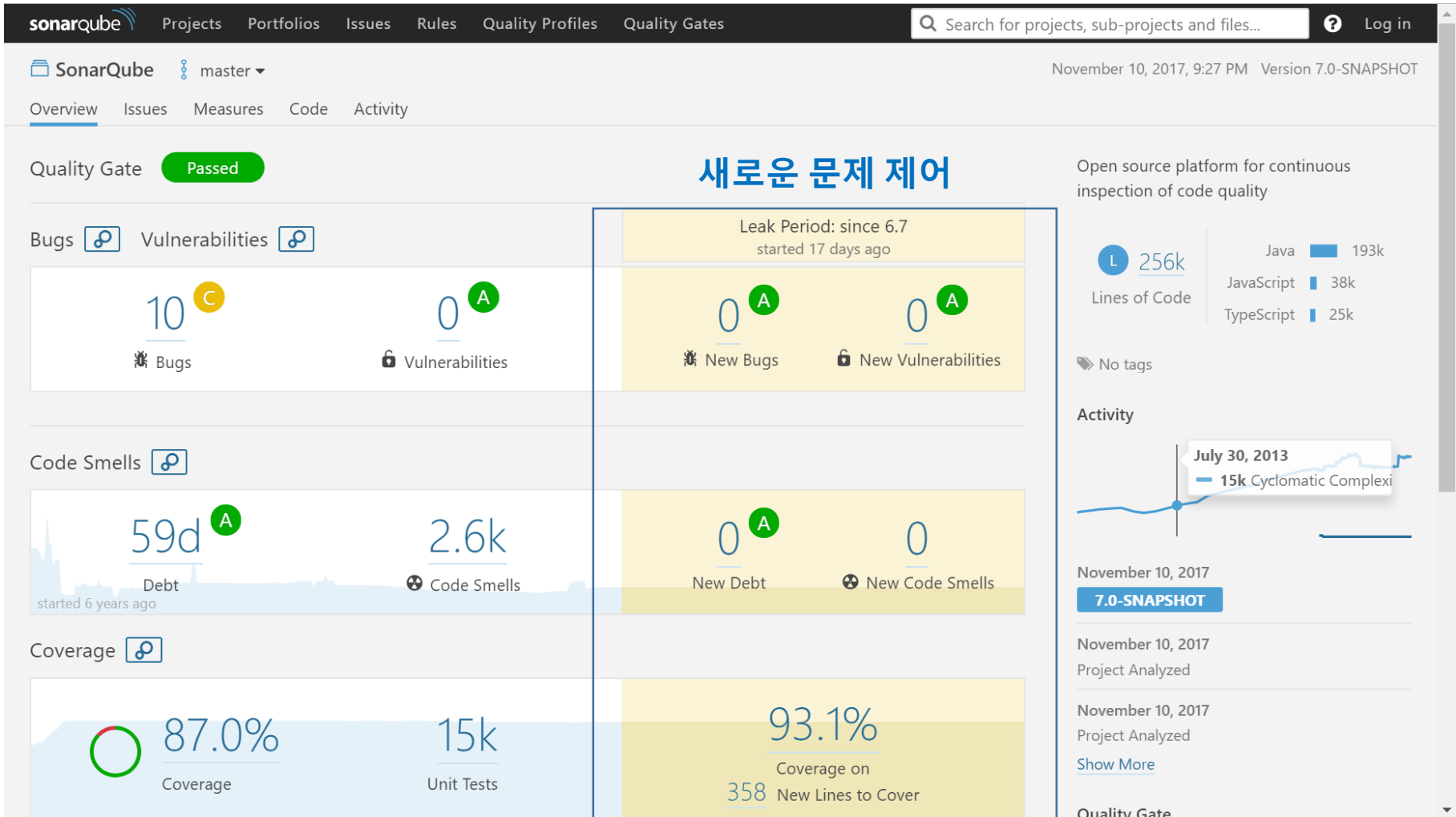
The screenshot shows the SonarQube dashboard with the following details:

- Navigation:** sonarqube, Projects, Portfolios, Issues, Rules, Quality Profiles, Quality Gates. Search bar: Search for projects, sub-projects and files... Log in
- Filters:** Perspective: Overall Status, Sort by: Size, Search by project name or k, 42 projects
- Quality Gate Summary:** Passed (40), Warning (0), Failed (2)
- Reliability (Bugs):** A (36), B and worse (6), C and worse (6), D and worse (1), E (0)
- Security (Vulnerabilities):** A (42), B and worse (0), C and worse (0), D and worse (0), E (0)
- Maintainability (Code Smells):** A (42), B and worse (0)
- Project 1: SonarQube**
  - Status: Passed
  - Last analysis: November 10, 2017, 9:27 PM
  - 10 Bugs (C), 0 Vulnerabilities (A), 2.6k Code Smells (A), 87.0% Coverage, 1.8% Duplications, 256k files (L)
- Project 2: SonarJava**
  - Status: Passed
  - Last analysis: November 12, 2017, 9:11 PM
  - 0 Bugs (A), 0 Vulnerabilities (A), 185 Code Smells (A), 96.9% Coverage, 1.4% Duplications, 66k files (M)
- Project 3: SonarAnalyzer for C#**
  - Status: Passed
  - Last analysis: November 10, 2017, 9:28 AM
  - 1 Bugs (C), 0 Vulnerabilities (A), 43 Code Smells (A), 93.1% Coverage, 0.6% Duplications, 47k files (M)
- Project 4: sonar-persistit**
  - Status: Passed

프로젝트의 홈에서 품질 게이트, 버그, 취약성, 코드 스멜, 중복 코드 정보를 한눈에 보여주며 프로젝트 코드가 품질 측면에서 어떤 위치에 있는지를 표시할 수 있습니다.



워터 릭 패러다임은 코드 품질 관리를 위한 강력한 방법입니다. SonarQube는 코드가 개발되고 새로 발견된 문제들을 제어하여 코드 품질을 기계적으로 향상 시킬 수 있습니다.





Developer Edition 이상의 버전에서는 단일 프로젝트에서 마스터 브랜치 외 존재하는 모든 브랜치의 품질 현황을 분류하여 보여줍니다.

The screenshot displays the SonarQube interface for a project named 'master'. A search dropdown menu is open, listing various branches. The selected branch, 'feature/greg/react-16', is highlighted with a tooltip showing a quality gate score of 6.7, which is 'Passed'. The main dashboard shows a 'Quality Gate' status of 'Passed' for the 'Main Branch'. Other metrics include 'Bugs' (10), 'Code Smells' (59), 'Coverage' (87.0%), and 'Unit Tests' (15k). The right sidebar provides a summary of the project's code quality, including 'Lines of Code' (256k) and 'New Bugs' (0). The 'Activity' section shows a line graph of project analysis over time, with the latest snapshot being '7.0-SNAPSHOT' on November 10, 2017.

<https://next.sonarqube.com/sonarqube/project/issues?branch=feature%2Fgreg%2Freact-16&id=org.sonarsource.sonarqube%3Asonarqube&resolved=false>

현재 프로젝트에 존재하는 전체 품질 이슈 리스트에서 각 이슈의 상태 확인, 담당자 할당, 수정 노력을 확인할 수 있습니다.

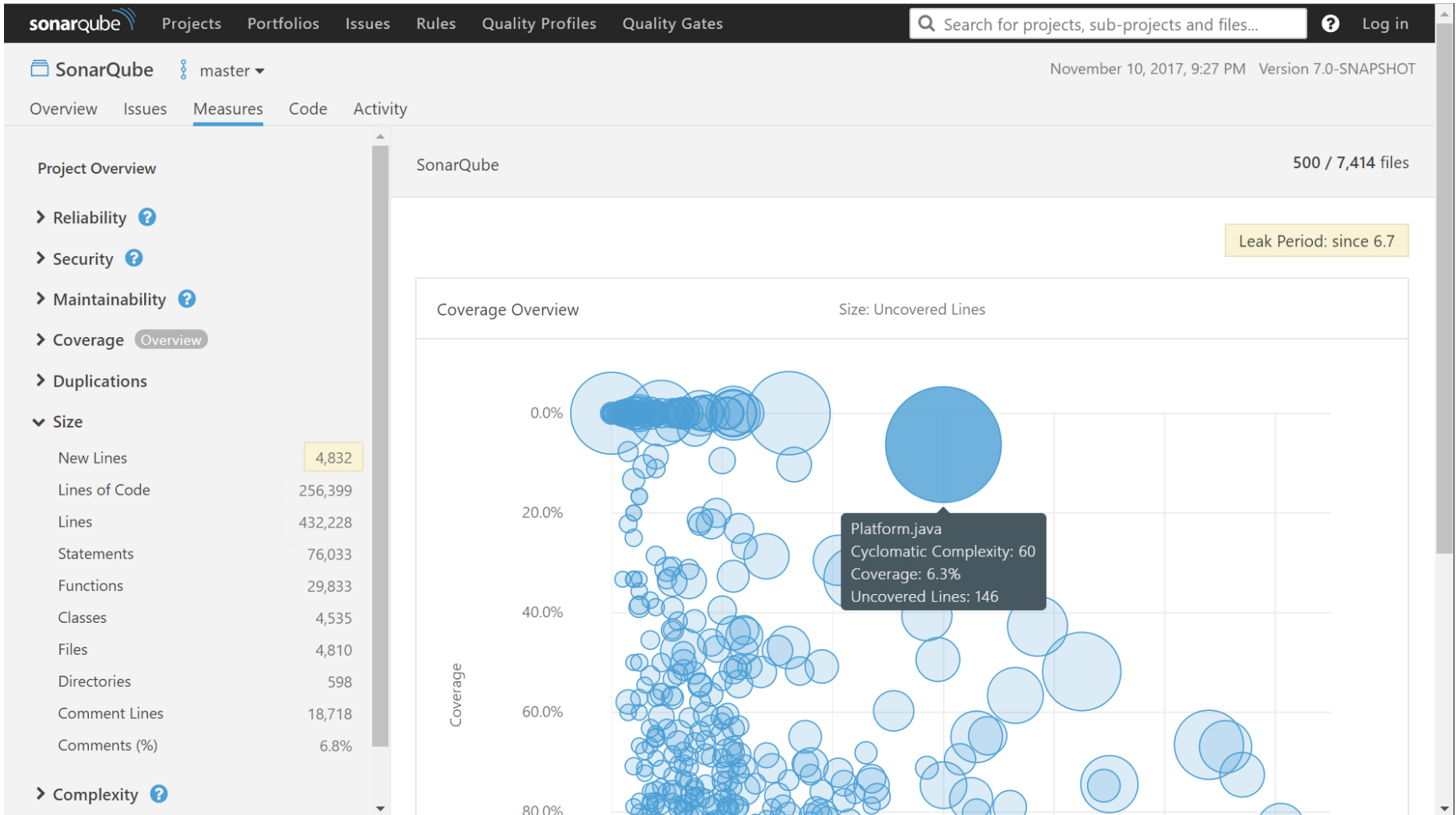
The screenshot displays the SonarQube interface for the 'master' project. The 'Issues' tab is active, showing a list of 86 out of 2,573 issues. The left sidebar provides filters for severity (Blocker, Critical, Major, Minor, Info) and resolution. The main content area shows a list of issues, with one issue highlighted in a red box:

- Issue 1:** SonarQube :: Plugin API / src/.../java/org/sonar/api/batch/debt/DebtRemediationFunction.java. Title: "Do not forget to remove this deprecated code someday." (Code Smell, Info, Confirmed, 10min effort). Created 4 months ago, L33 severity.
- Issue 2:** SonarQube :: Plugin API / src/.../sonar/api/batch/debt/internal/DefaultDebtModel.java. Title: "Remove this use of 'DebtModel'; it is deprecated." (Code Smell, Minor, Confirmed, 15min effort). Created 2 years ago, L28 severity.
- Issue 3:** SonarQube :: Plugin API / src/.../sonar/api/batch/debt/internal/DefaultDebtModel.java. Title: "Remove this use of 'DebtCharacteristic'; it is deprecated." (Code Smell, Minor, Confirmed, 15min effort). Created 2 years ago, L31 severity.
- Issue 4 (highlighted):** SonarQube :: Plugin API / src/.../sonar/api/batch/debt/internal/DefaultDebtModel.java. Title: "Remove this use of 'DebtCharacteristic'; it is deprecated." (Code Smell, Minor, Confirmed, 15min effort). Created 2 years ago, L36 severity.
- Issue 5:** SonarQube :: Plugin API / src/.../sonar/api/batch/debt/internal/DefaultDebtModel.java. Title: "Remove this use of 'DebtCharacteristic'; it is deprecated." (Code Smell, Minor, Confirmed, 15min effort). Created 2 years ago, L41 severity.

이슈 리스트에서 소스코드를 선택 시, 각 소스 코드에서 존재하는 이슈의 내용, 상태, 담당자, 수정 노력을 확인할 수 있습니다.

The screenshot displays the SonarQube web interface. At the top, there is a navigation bar with 'sonarqube' logo, 'Projects', 'Portfolios', 'Issues', 'Rules', 'Quality Profiles', and 'Quality Gates'. A search bar and 'Log in' button are also present. Below the navigation bar, the current project is identified as 'SonarQube' with a 'master' branch selected. The date and time are 'November 10, 2017, 9:27 PM' and the version is 'Version 7.0-SNAPSHOT'. The main area is divided into 'Overview', 'Issues', 'Measures', 'Code', and 'Activity' tabs. The 'Issues' tab is active, showing a list of 84 out of 2,573 issues. On the left, several issue cards are visible, each with a title, severity, and status. One card is highlighted with a red border: 'Remove this use of "DebtModel"; it is deprecated.' with a 'Minor' severity. The right side of the interface shows a code editor for the file 'SonarQube :: Plugin API / src/.../sonar/api/batch/debt/internal/DefaultDebtModel.java'. The code includes imports for 'DebtCharacteristic' and 'DebtModel', and a class definition for 'DefaultDebtModel'. Annotations are placed over the code, pointing to uses of 'DebtModel' and 'DebtCharacteristic'. These annotations include the message 'Remove this use of "DebtModel"; it is deprecated.', severity 'Minor', and a comment from 'Simon Brandhof' stating 'Using our own deprecated code is not a vulnerability.' The annotations also show the issue ID (L28, L31, L36), the date '2 years ago', and associated tags like 'cwe, obsolete, owasp-a9'.

프로젝트의 Measure의 Reliability, Security, Maintainability, Coverage, Duplication, Size, Complexity의 각 페이지는 주의가 필요한 파일을 강조하는 버블 차트를 제공합니다.



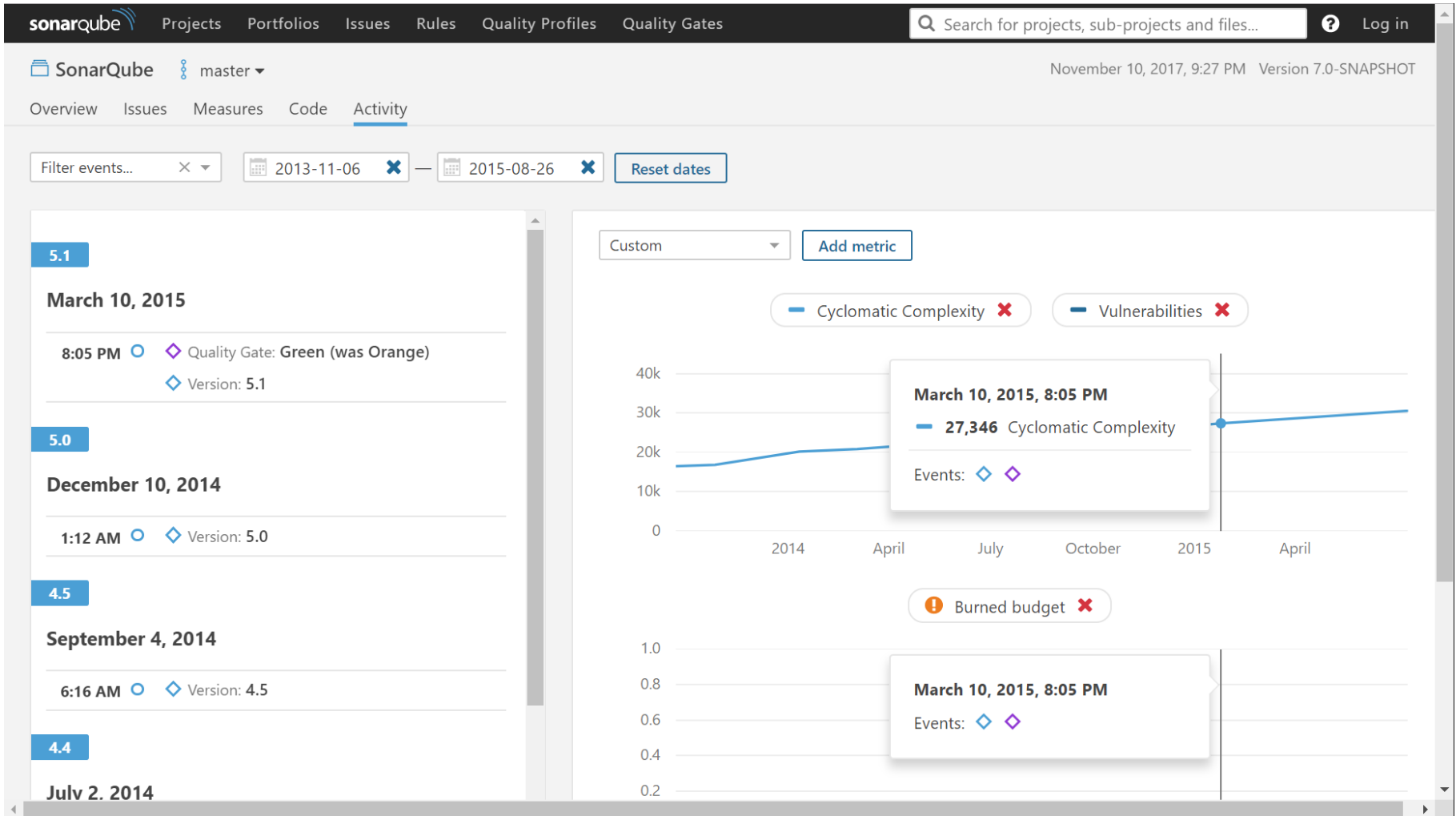
프로젝트의 Code 페이지에서는 프로젝트 각 폴더, 파일의 코드 라인, 버그, 취약점, 코드 악취, 커버리지, 중복성의 현황을 보여주고 있습니다.

The screenshot shows the SonarQube interface with the 'Code' tab selected. A table displays quality metrics for ten different modules. The columns are: Lines of Code, Bugs, Vulnerabilities, Code Smells, Coverage, and Duplications. Each row includes a link icon and the module name.

	Lines of Code	Bugs	Vulnerabilities	Code Smells	Coverage	Duplications
SonarQube :: Server :: Parent	195k	0	0	1k	89.0%	1.1%
SonarQube :: Compute Engine	2.7k	0	0	5	85.2%	1.5%
SonarQube :: DAO	16k	0	0	37	83.7%	0.5%
SonarQube :: Database Core	1.4k	0	0	7	71.0%	0.0%
SonarQube :: Database Migration	12k	0	0	34	92.1%	1.3%
SonarQube :: DB testing		0	0	0		
SonarQube :: Main Process	3.3k	0	0	11	86.3%	2.5%
SonarQube :: Priviledged Plugin Bridge	20	0	0	0		0.0%
SonarQube :: Process	3k	0	0	11	89.4%	1.8%
SonarQube :: Server	93k	0	0	349	89.6%	0.8%
SonarQube :: Web	63k	0	0	554		1.5%

10 of 10 shown

프로젝트의 Activity 페이지는 특정 기간 동안에 발생한 이슈, 커버리지, 중복 등 SonarQube에서 제공하는 모든 데이터에 대한 트렌드를 확인할 수 있습니다.



SonarQube의 이슈 페이지에는 전체 프로젝트의 주요 문제의 위치, 코드 위치, 시점, 작업자 등을 자세하게 분석할 수 있으며, 새로운 이슈가 발생하면 이메일을 통해 알림을 받을 수 있습니다.

The screenshot shows the SonarQube interface with the 'Issues' tab selected. The left sidebar contains filters for 'Display Mode' (Issues, Effort), 'Type' (Bug, Vulnerability, Code Smell), and 'Severity' (Blocker, Critical, Major, Minor, Info). The main area displays a list of issues, including:

- Reorder the elements of this pom to match the recommended order. (Code Smell, Minor, Open, Not assigned, 10min effort)
- This method has 161 lines, which is greater than the 100 lines authorized. Split it into smaller methods. (Code Smell, Major, Confirmed, Not assigned, 20min effort)
- Drop this interface in favor of "java.util.function.Consumer<Charset>". (Code Smell, Major, Confirmed, 10min effort)

The detailed view of the 'Drop this interface in favor of "java.util.function.Consumer<Charset>".' issue is shown below, with the following text:

Standard functional interfaces should not be redefined

Code Smell Major java8 Available Since September 23, 2016 Constant/issue: 10min squid:S1711

Just as there is little justification for writing your own String class, there is no good reason to re-define one of the existing, standard functional interfaces.

Doing so may seem tempting, since it would allow you to specify a little extra context with the name. But in the long run, it will be a source of confusion, because maintenance programmers will wonder what is different between the custom functional interface and the standard one.

Noncompliant Code Example

```
@FunctionalInterface
public interface MyInterface f // Noncompliant
```

SonarQube의 코딩 규칙 페이지에서는 현재 SonarQube에 사용되는 전체 코딩 규칙을 확인할 수 있게 해줍니다. 코딩 규칙은 플러그인을 통해 추가할 수 있습니다.

The screenshot shows the SonarQube interface for the 'Rules' page. The top navigation bar includes 'sonarqube', 'Projects', 'Portfolios', 'Issues', 'Rules', 'Quality Profiles', and 'Quality Gates'. A search bar is present on the right. The main content area displays a list of rules, with a left sidebar for filtering. The sidebar has two main sections: 'Language' and 'Type'. Under 'Language', various languages are listed with their respective rule counts. Under 'Type', categories like Bug, Vulnerability, and Code Smell are listed with counts. The main list shows rules such as '"#import" should not be used' and '"#include" directives should be followed by either <filename> or "filename" sequences'. Each rule entry includes the rule name, the supported languages, the severity (e.g., Code Smell, Bug), and associated tags (e.g., misra, pitfall, confusing, lock-in, cert). A 'Track uses of "TODO" tags' tooltip is visible at the bottom right.

Language	Count
Java	450
Groovy	353
C++	326
C#	307
C	235
Objective-C	232
JavaScript	193
TypeScript	79
Visual Basic .NET	75

Type	Count
Bug	542
Vulnerability	60
Code Smell	1,648

Rule Name	Language	Severity	Tags
"#import" should not be used	C	Code Smell	
"#import" should not be used	C++	Code Smell	
"#include" directives should be followed by either <filename> or "filename" sequences	C++	Bug	misra
"#include" directives should be followed by either <filename> or "filename" sequences	C	Bug	misra
"#include" directives should be followed by either <filename> or "filename" sequences	Objective-C	Bug	misra
"#include" paths should be portable	C	Code Smell	pitfall
"#include" paths should be portable	Objective-C	Code Smell	pitfall
"#include" paths should be portable	C++	Code Smell	pitfall
"#include_next" should not be used	C++	Code Smell	confusing, lock-in
"#include_next" should not be used	Objective-C	Code Smell	confusing, lock-in
"#include_next" should not be used	C	Code Smell	confusing, lock-in
"#pragma warning (default: ...)" should not be used	Objective-C	Code Smell	cert
"#pragma warning (default: ...)" should not be used	C++	Code Smell	cert
"#pragma warning (default: ...)" should not be used	C	Code Smell	



SonarQube의 품질 프로파일은 코딩 규칙의 조합으로 구성됩니다. 프로젝트를 위한 프로파일을 생성하고 검증하기를 원하는 코딩 규칙을 추가하여 품질 프로파일을 생성할 수 있습니다.

sonarqube
Projects
Portfolios
Issues
Rules
Quality Profiles
Quality Gates

? Log in

C, 3 profile(s)	Projects	Rules	Updated	Used
<a href="#">Sonar way</a> <span style="border: 1px solid #ccc; padding: 2px;">Built-in</span>	0	<a href="#">131</a>	Never	2 hours ago <span style="float: right;">▼</span>
<a href="#">SonarSource</a>	<span style="background-color: #3498db; padding: 2px;">Default</span>	<a href="#">160</a>	5 months ago	2 hours ago <span style="float: right;">▼</span>
<a href="#">Sonar way (outdated copy)</a>	0	<a href="#">122</a>	6 months ago	5 months ago <span style="float: right;">▼</span>

C++, 3 profile(s)	Projects	Rules	Updated	Used
<a href="#">Sonar way</a> <span style="border: 1px solid #ccc; padding: 2px;">Built-in</span>	0	<a href="#">201</a>	Never	2 hours ago <span style="float: right;">▼</span>
<a href="#">SonarSource</a>	<span style="background-color: #3498db; padding: 2px;">Default</span>	<a href="#">240</a>	5 months ago	2 hours ago <span style="float: right;">▼</span>
<a href="#">Sonar way (outdated copy)</a>	0	<a href="#">191</a>	6 months ago	5 months ago <span style="float: right;">▼</span>

C#, 3 profile(s)	Projects	Rules	Updated	Used
<a href="#">Sonar way</a> <span style="border: 1px solid #ccc; padding: 2px;">Built-in</span>	0	<a href="#">186</a>	Never	4 hours ago <span style="float: right;">▼</span>
<a href="#">C# QP for SonarSource</a>	<span style="background-color: #3498db; padding: 2px;">Default</span>	<a href="#">189</a>	5 months ago	4 hours ago <span style="float: right;">▼</span>
<a href="#">Sonar way (outdated copy)</a>	0	<a href="#">127</a>	11 months ago	5 months ago <span style="float: right;">▼</span>

### Recently Added Rules

- [Assignments should not be redundant](#)  
JavaScript, activated on 3 profile(s)
- [Conditionals should start on new lines](#)  
JavaScript, activated on 3 profile(s)
- [Collection and array contents should be...](#)  
JavaScript, activated on 3 profile(s)
- [Conditionals should start on new lines](#)  
TypeScript, activated on 4 profile(s)
- [Functions should not have identical imp...](#)  
TypeScript, activated on 4 profile(s)
- [Multiline blocks should be enclosed in c...](#)  
TypeScript, activated on 4 profile(s)
- [Errors should not be created without be...](#)  
TypeScript, activated on 4 profile(s)
- [Array contents should be used](#)  
TypeScript, activated on 4 profile(s)
- [Getters and setters should access the ex...](#)  
TypeScript, activated on 4 profile(s)
- [Method parameters should follow a na...](#)  
Visual Basic .NET, activated on 1 profile(s)

[See All 426](#)

SonarQube에서 개발자는 자신의 코드 품질에 대한 소유권을 가질 수 있습니다. 모든 팀에서 코드 품질 관리를 수행하기 위해 조직이 원하는 품질 게이트를 설정할 수 있습니다.

The screenshot shows the SonarQube interface for configuring a Quality Gate. The navigation bar includes 'sonarqube', 'Projects', 'Portfolios', 'Issues', 'Rules', 'Quality Profiles', and 'Quality Gates'. A search bar is present on the right. The left sidebar lists various Quality Gate configurations, with 'SonarSource way - Champions League' selected. The main content area displays the configuration for this gate, including a description, a table of conditions, and a list of projects.

**Quality Gates**

- Quality Gate w/o Coverage and Dups
- SonarQube way
- SonarSource way Default
- SonarSource way - Champions League**
- SonarSource way - Without Coverage

**SonarSource way - Champions League**

**Conditions**

Only project measures are checked against thresholds. Sub-projects, directories and files are ignored. [More](#)

Metric	Over Leak Period	Operator	Warning	Error
Coverage on New Code	Always	is less than		90.0%
Duplicated Lines on New Code (%)	Always	is greater than		3.0%
Maintainability Rating on New Code	Always	is worse than		A
Reliability Rating	Never	is worse than		D
Reliability Rating on New Code	Always	is worse than		A
Security Rating	Never	is worse than		D
Security Rating on New Code	Always	is worse than		A
Skipped Unit Tests	Yes	is greater than	0	

**Projects**

- GitHub Authentication for SonarQube
- SonarJava
- SonarJS
- Sonar LITS

거버넌스 기능은 Releasability, Maintainability, Reliability, Security의 4가지 핵심 지표를 기반으로 품질 모델을 사용하여 대규모 프로젝트 포트폴리오를 구성하고 관리할 수 있게 해줍니다.

The screenshot shows the SonarQube Portfolios interface. At the top, there is a navigation bar with 'sonarqube' logo, 'Projects', 'Portfolios' (selected), 'Issues', 'Rules', 'Quality Profiles', and 'Quality Gates'. A search bar is on the right with the text 'Search for projects, sub-projects and files...'. Below the navigation bar, there is a search input for portfolios and a count of '22 portfolios'. The main content area displays three portfolio cards:

- .NET Team**: 69k Lines of Code, 5 Projects. Metrics: Releasability (A, was B 13 days ago), Reliability (A, was B 4 months ago, 1 project in C), Security (A, was B 3 months ago), Maintainability (A).
- All Projects**: 843k Lines of Code, 79 Projects. Metrics: Releasability (A, was B 2 months ago, 5 project(s) failed), Reliability (A, was B 2 months ago, 2 projects in D), Security (A, was B last year, 1 project in B), Maintainability (A, 1 project in B).
- Atlas & Lambda Teams**: 280k Lines of Code, 11 Projects. Metrics: Releasability (A, was B 24 days ago), Reliability (A, was B last month, 1 project in D), Security (A, was E last year), Maintainability (A).

At the bottom, there is a 'By License' section showing 843k Lines of Code, 79 Projects.

거버넌스 기능은 Releasability, Maintainability, Reliability, Security의 4가지 핵심 지표를 기반으로 품질 모델을 사용하여 대규모 프로젝트 포트폴리오를 구성하고 관리할 수 있게 해줍니다.

Projects Portfolios Issues Rules Quality Profiles Quality Gates

? Log in

☰
Productivity Team

November 12, 2017, 5:31 AM

Overview Issues Measures Projects Activity

Releasability

B

was C 20 days ago

1 project Failed

Reliability 🔗 📈

B

was A 8 months ago

2 project(s) in C

Security 🔗 📈

A

was B 5 months ago

1 project(s) in B

Maintainability 🔗 📈

A

5 Projects
10k Lines of Code

Java  9.1k

Groovy  1k

Activity

January 8, 2017

- 4.5k Cyclomatic Complex
- 1 Vulnerabilities

**Executive Report**

You can print the main information from this page into a PDF file.

Print as PDF

	Releasability	Reliability	Security	Maintainability	Lines of Code
<span style="font-size: 18px;">☰</span> Milestoner	<span style="background-color: #27ae60; color: white; border-radius: 10px; padding: 2px 10px;">Passed</span>	<span style="color: #76b82a; border-radius: 50%; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;">B</span>	<span style="color: #27ae60; border-radius: 50%; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;">A</span>	<span style="color: #27ae60; border-radius: 50%; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;">A</span>	259 <span style="font-size: 12px;">↓</span>
<span style="font-size: 18px;">☰</span> Orchestrator :: Parent	<span style="background-color: #27ae60; color: white; border-radius: 10px; padding: 2px 10px;">Passed</span>	<span style="color: #ffc000; border-radius: 50%; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;">C</span>	<span style="color: #27ae60; border-radius: 50%; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;">A</span>	<span style="color: #27ae60; border-radius: 50%; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;">A</span>	5.9k <span style="font-size: 12px;">▬</span>
<span style="font-size: 18px;">☰</span> quipu	<span style="background-color: #d9534f; color: white; border-radius: 10px; padding: 2px 10px;">Failed</span>	<span style="color: #ffc000; border-radius: 50%; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;">C</span>	<span style="color: #76b82a; border-radius: 50%; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;">B</span>	<span style="color: #27ae60; border-radius: 50%; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;">A</span>	1.6k <span style="font-size: 12px;">▬</span>
<span style="font-size: 18px;">☰</span> Releasability	<span style="background-color: #27ae60; color: white; border-radius: 10px; padding: 2px 10px;">Passed</span>	<span style="color: #27ae60; border-radius: 50%; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;">A</span>	<span style="color: #27ae60; border-radius: 50%; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;">A</span>	<span style="color: #27ae60; border-radius: 50%; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;">A</span>	781 <span style="font-size: 12px;">▬</span>

코드 품질 정보를 위해 Java, C#, C/C++, Objective-C와 같은 언어에 대한 빌드 통합을 지원하며, Bamboo, Jenkins, TeamCity와 같은 다양한 CI 엔진과의 통합을 제공합니다.

**maven**



**Gradle**

Makefile

MSBuild

**Bamboo**



Travis CI



**Jenkins**

**AppVeyor**

**Visual Studio**  
Team Foundation Server

**TC TeamCity**

# Thank you!

**Contact**

***curvc@curvc.com***

***02-6245-5478***

C++		C	
Rules	316	Rules	226
Bugs	69	Bugs	56
Code Smells	245	Code Smells	168
Vulnerabilities	2	Vulnerabilities	2
CWE	27	CWE	26
SANS Top 25	2	SANS Top 25	2
MISRA	119	MISRA	111
CERT	89	CERT	69
<ul style="list-style-type: none"> <li>• Memory Leak</li> <li>• Dead Code</li> <li>• Logic Flow Error</li> <li>• Dereference of Null Pointers</li> <li>• Coding Conventions</li> <li>• Error Handling</li> </ul>		<ul style="list-style-type: none"> <li>• Memory Leak</li> <li>• Dead Code</li> <li>• Logic Flow Error</li> <li>• Dereference of Null Pointers</li> <li>• Coding Conventions</li> <li>• Error Handling</li> </ul>	

- Supported Compilers, Language Standards and Operating Systems
  - Any version of Clang, GCC and Microsoft C/C++ compilers
  - Any version of Intel compiler for Linux and OS X
  - ARM5 and ARM6 compilers
  - Compilers based wholly on GCC including for instance Linaro GCC and WindRiver GCC are also supported
  - C89, C99, C11, C++03, C++11 and C++14 standards
  - Microsoft Component Extensions for runtime platforms : C++/CLI and C++/CX
  - GNU extensions
  - Microsoft Windows, Linux and Mac OS X for runtime environment
- Metrics
  - Code coverage by tests: SonarCFamily for C/C++ support the import of MS visual studio and GCOV coverage reports along with the import of CPP unit report.
- Custom Rules
  - SonarCFamily for C/C++ doesn't yet provide the ability to write custom rules.
- CWE compatibility
  - SonarCFamily for C/C++ is officially registered as CWE compatible.