

# nodeable

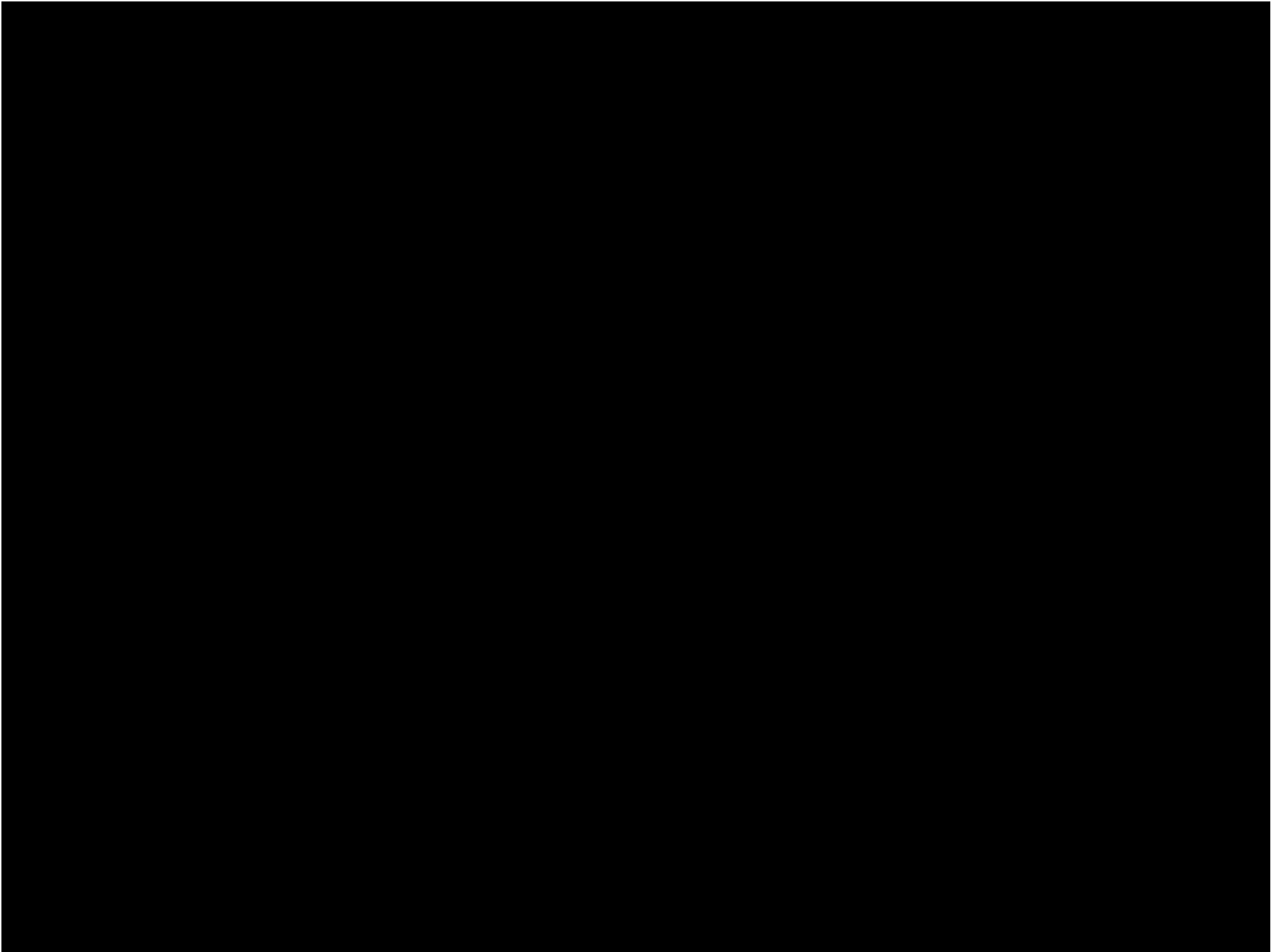
## OpenEdge Code Analysis

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# Introduction

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- Thomas Hansen - Director, nodeable
- Worked with OpenEdge since 1995
- Focus on Application Lifecycle Management, Application Architecture, CI/CD and DevOps
- Do everything we can in containers!
  - Worked with containers since 2015
  - Worked with OpenEdge and Docker since 2015

# Some of our services and products

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 **buildable**

roundtable  
tsms

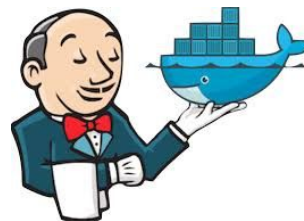


Progress®  
OpenEdge®

 **secureable**

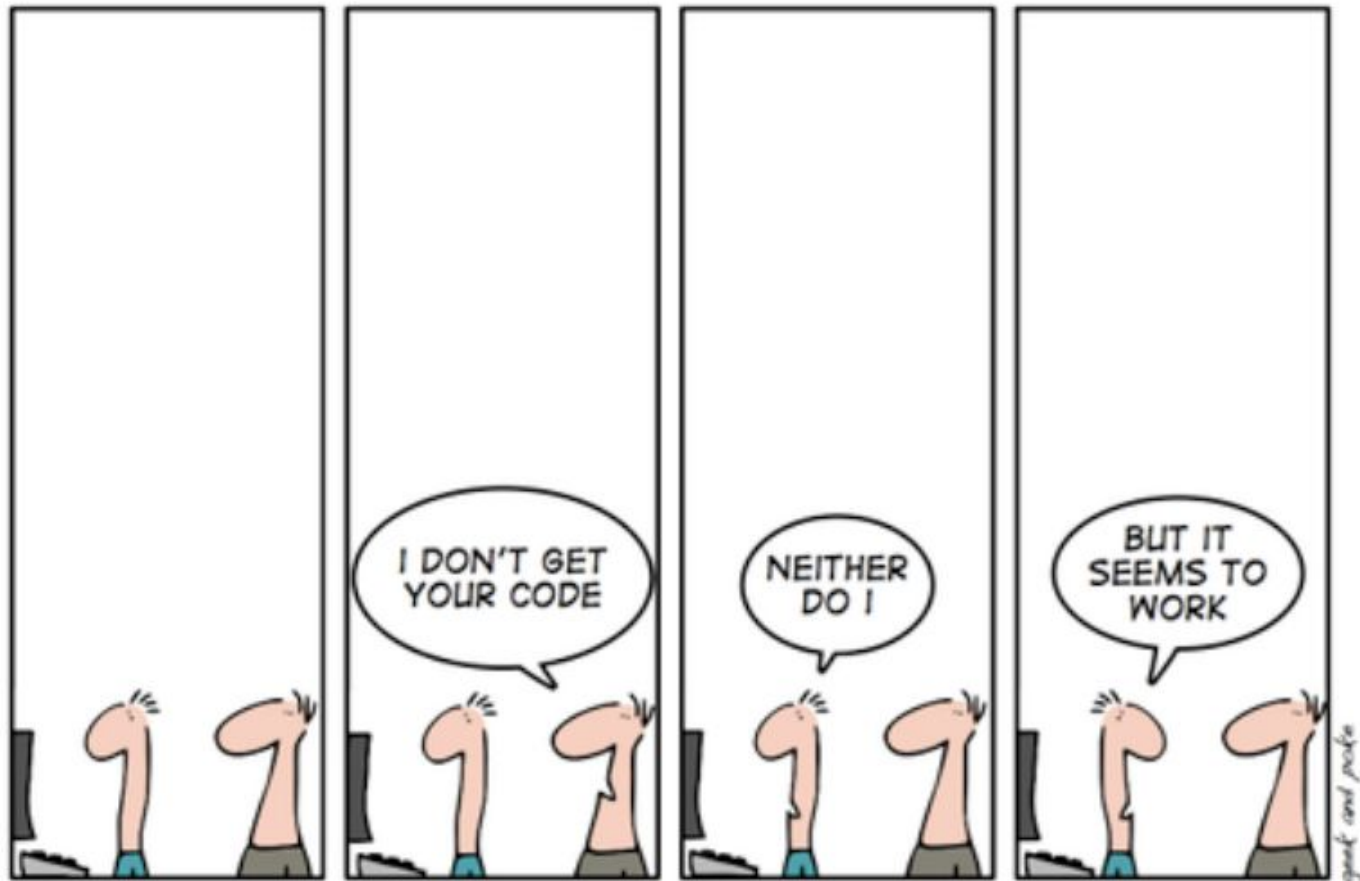
 **docker**

**sonarqube** 



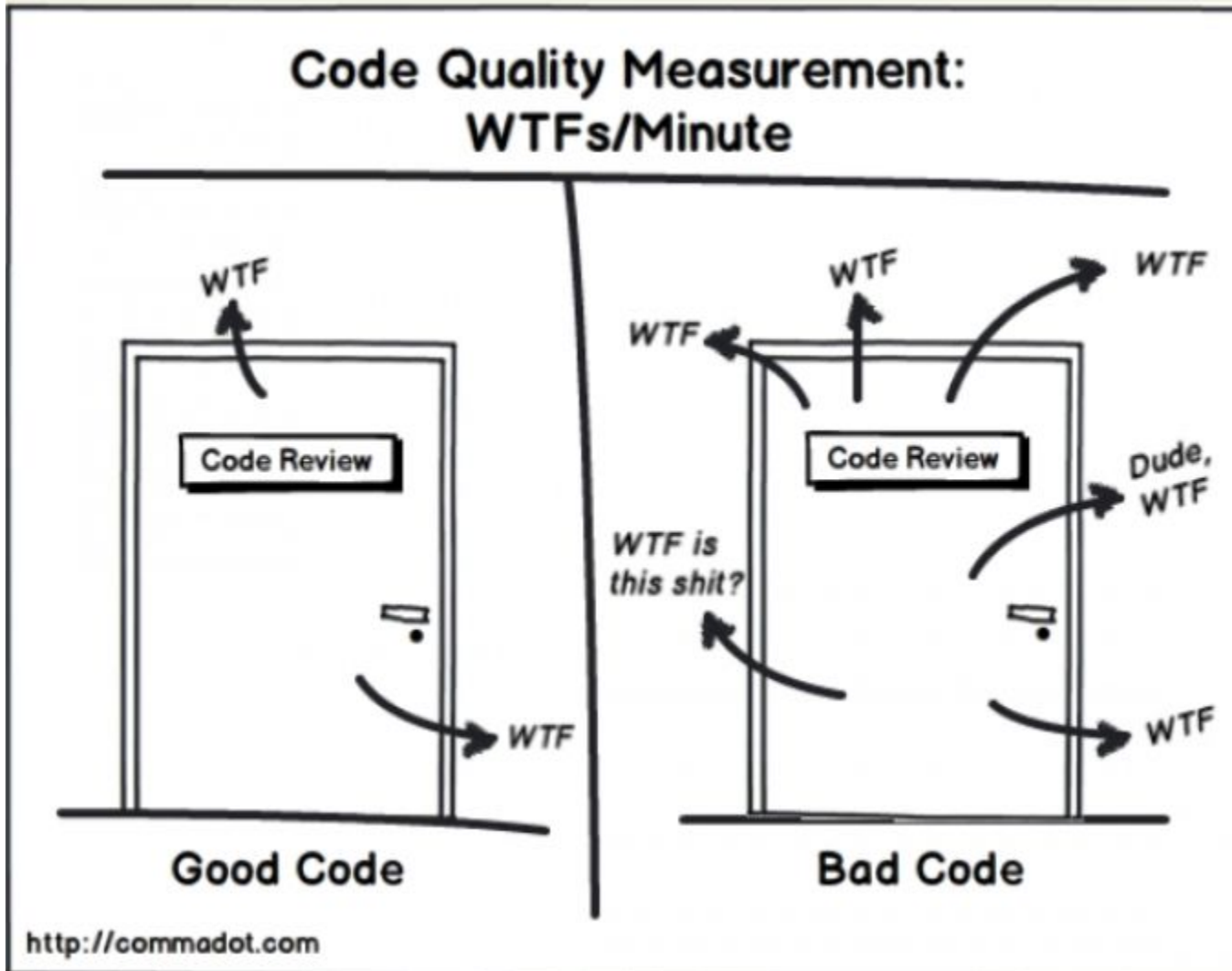
nodeable

# Code Quality



*THE ART OF PROGRAMING*

# Code Quality



# SonarLint

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Features

IDEs ▾



## Fix issues before they exist

SonarLint is an IDE extension that helps you detect and fix quality issues as you write code. Like a spell checker, SonarLint squiggles flaws so that they can be fixed before committing code.

> Caution: this is highly addictive!



# SonarLint

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Use it in your favorite IDE



Eclipse >



IntelliJ IDEA >



Visual Studio >



VS Code >

**sonarlint**  


**sonarsource** 



# SonarQube

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- Code quality management platform
- Open source
- Extensible
- Over 20 languages (from COBOL to Javascript through C++)



# First Analysis

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☆ [Secret project](#)

Failed

Last analysis: April 30, 2019, 8:51 AM

10k **D**  
🐛 Bugs

2 **D**  
🔒 Vulnerabilities

99k **C**  
🚫 Code Smells

—  
Coverage

4.6%  
Duplications

2m **XL**  
OpenEdge, XML

# Fix the code

## Bugs & Vulnerabilities

12 <sup>C</sup>  
Bugs

5 <sup>D</sup>  
Vulnerabilities

Leak Period: last 30 days  
started a month ago

0  
New Bugs

0  
New Vulnerabilities

## Code Smells

8d <sup>A</sup>  
Debt

started a year ago

410  
Code Smells

2h  
New Debt

9  
New Code Smells

## Coverage

96.4%  
Coverage

1.7k  
Unit Tests

97.6%  
Coverage on  
733 New Lines to Cover

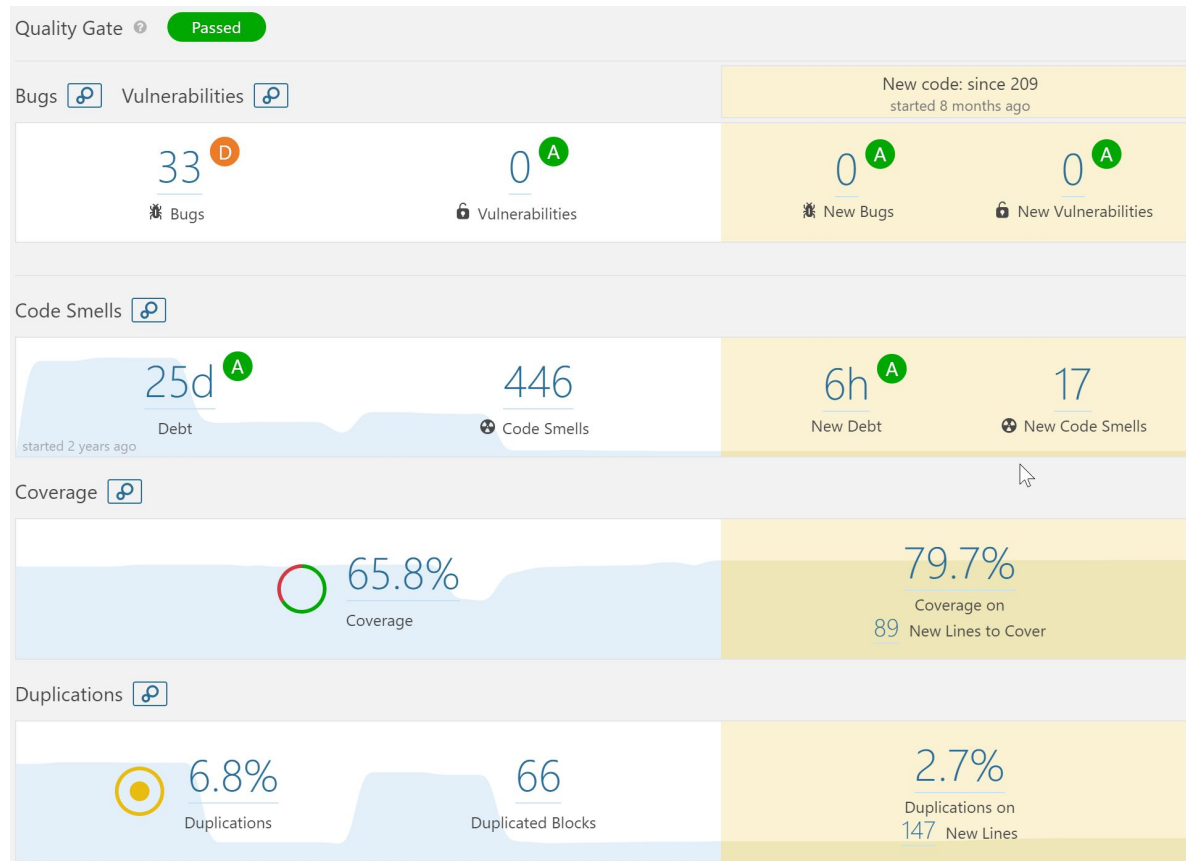
# CABL - Code Analyzer for ABL in SonarQube

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- Open-source plugin for SonarQube
  - Preprocessor + parser, metrics, code duplication, ABL warnings, XREF, code highlighting, extensible rules engine, sample rules
  - Commercial rules package available from Riverside Software
    - Over 100 rules
    - Code coverage functionality
  - Easy integration in a continuous integration environment
  - SonarLint, on-the-fly code analysis in PDSOE

<https://github.com/Riverside-Software/sonar-openedge>

# CABL - Code Analyzer for ABL in SonarQube



# SonarLint and SonarQube with PDSOE

The screenshot shows the 'Preferences' dialog box in SonarLint, specifically the 'Rules Configuration' tab. The left sidebar contains a tree view of preference categories, with 'Rules Configuration' selected. The main area displays a table of rules for the 'java' language. The table has columns for 'Rule name' and 'Rule key'. The 'oe' rule set is expanded, showing several rules with checkboxes. The 'oedb' rule set is also expanded, showing the 'No indexes' rule. At the bottom of the dialog, there are buttons for 'Restore Defaults', 'Apply', 'Apply and Close', and 'Cancel'.

type filter text

- > General
- > Ant
- > Help
- > Install/Update
- > Java
- > JavaScript
- > JSON
- > Log Viewer
- > Plug-in Development
- > Progress Customer Support
- > Progress Databases
- > Progress OpenEdge
- > Run/Debug
- > Server
- > SonarLint
  - Analyzer Properties
  - File Exclusions
  - Miscellaneous
  - Rules Configuration**
- > Team
- Validation
- > Web
- > Web Services
- > XML

### Rules Configuration

Configure rules used for SonarLint analysis. When a project is connected to a SonarQube/SonarCloud server, configuration from the server applies.

All rules

| Rule name  | Rule key   |
|--|--|
| > <input type="checkbox"/> java  |  |
| ✓ <input checked="" type="checkbox"/> oe                               |  |
| <input checked="" type="checkbox"/> Backslash in string                | progress-rules:com.progress.rules.BackslashInString  |
| <input checked="" type="checkbox"/> Outdated digest algorithm          | progress-rules:com.progress.rules.OutdatedDigest     |
| <input checked="" type="checkbox"/> Unused variables should be removed | progress-rules:com.progress.rules.UnusedVariable     |
| <input checked="" type="checkbox"/> CAN-DO in WHERE clause             | progress-rules:com.progress.rules.WhereCanDo         |
| <input checked="" type="checkbox"/> Whole index                        | progress-rules:com.progress.rules.WholeIndexAnalyzer |
| ✓ <input checked="" type="checkbox"/> oedb                             |  |
| <input checked="" type="checkbox"/> No indexes                         | progress-db-rules:com.progress.rules.NoIndexes       |
| > <input type="checkbox"/> py  |  |
| > <input type="checkbox"/> php   |  |
| > <input type="checkbox"/> js  |  |

(No rule selected)

Restore Defaults    Apply

Apply and Close    Cancel

# Demo

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# More reading

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- <https://www.sonarqube.org/>
- <https://www.sonarlint.org/>
- [https://hub.docker.com/\\_/sonarqube](https://hub.docker.com/_/sonarqube)
- <https://github.com/Riverside-Software/sonar-openedge>
- <https://sonar.riverside-software.fr>
- <https://github.com/Riverside-Software/sonar-openedge/releases/tag/V2.6.0>





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