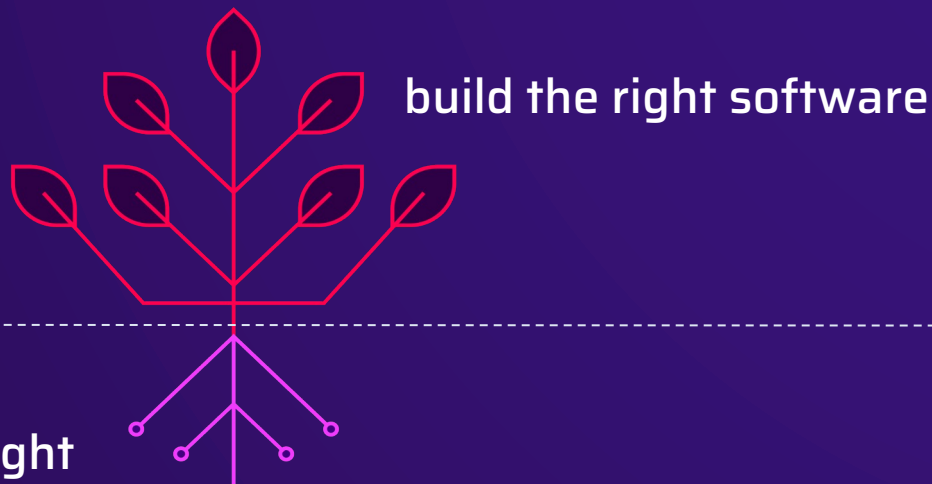
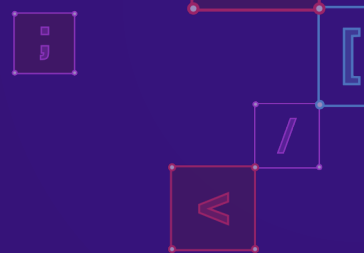


Shipping Software with Zero Issues Starts with Clean Code

Neil Stickels, Solutions Engineer

Linkedin: [@nstickels](#)

Code is the core asset of software



The problem is...



Humans write code.
And humans make
mistakes



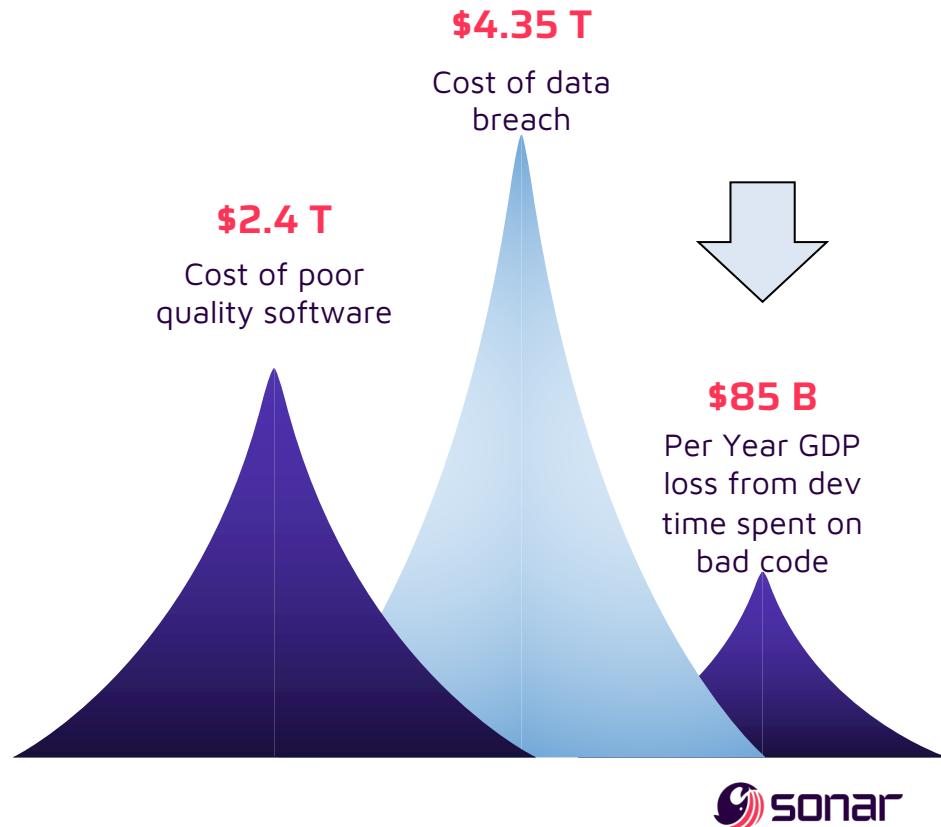
Companies struggle to
build and maintain a
Standard of Quality

Market Problem - Bad Code

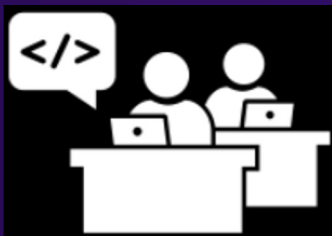
Clean Code is solving one of the most critical challenges facing the digital economy

**Source: Report from CISQ*

Cost of Bad Code is enormous



Developers – real heroes of orgs today



- They write code
- They innovate
- They preserve quality of codebase

But bad code slows productivity

17 hrs/wk on maintenance issues!

How would your
business change if
your developers had
33% more time?

What would you do
with an extra \$1.5m?

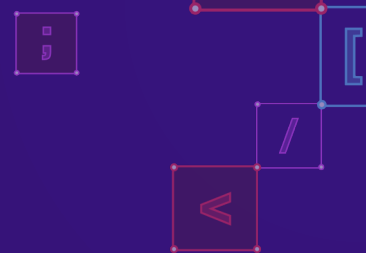
Clean as You Code

The essential approach for achieving a state of Clean Code

Guidance: Clean as You Code

Now we'll cover:

- What is Clean as You Code
- Benefits of this approach
- How to get started
- Implementation guidelines
- A real-world example



What is Clean Code?

Clean Code is code that is ...

Consistent

Written in a uniform and conventional way.

Intentional

Transparently communicates its functionality.

Adaptable

Structured to be easy to evolve with confidence.

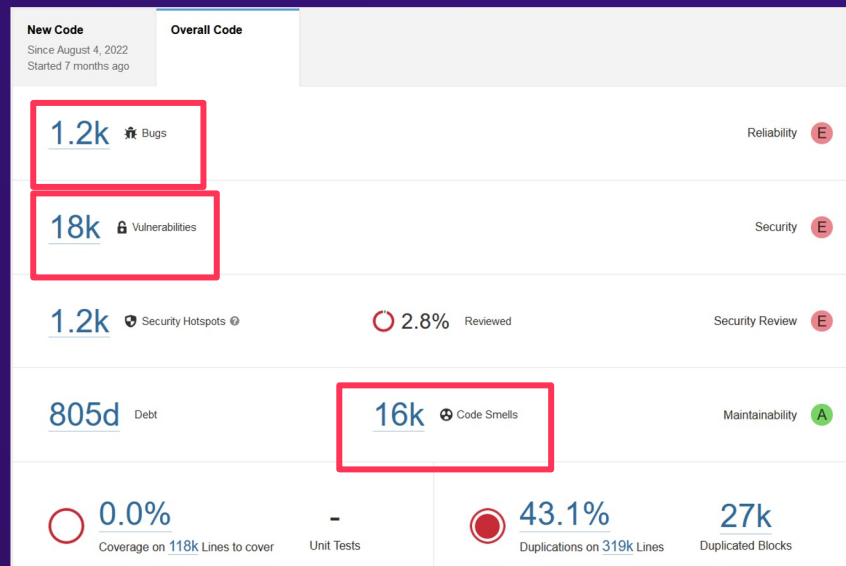
Responsible

Takes into account ethical and legal obligations.

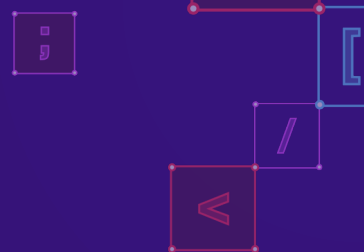
Code that exhibits these attributes results in software assets that are **secure, reliable, and maintainable**

Knowing code is dirty is not enough

- A static analysis report tells you things are wrong
- Most companies are not good at enacting a plan to make it right
- Quality will only get worse than it is right now



Clean As You Code



A simple, powerful approach

The only expectation of developers is to ensure that the New Code - added or changed - does not introduce new issues.

Teams own their delivery quality

Clean as You Code sets a clear expectation that allows developers to take full ownership of their code and make sure their deliveries meet high-quality standards.

No extra effort, workflow disruption, or rework

In the course of touching old code to make new edits, quality gradually gets built into your application.

ACTIONABLE INSIGHTS

BUILT-IN-METHODOLOGY

THE RIGHT FOCUS

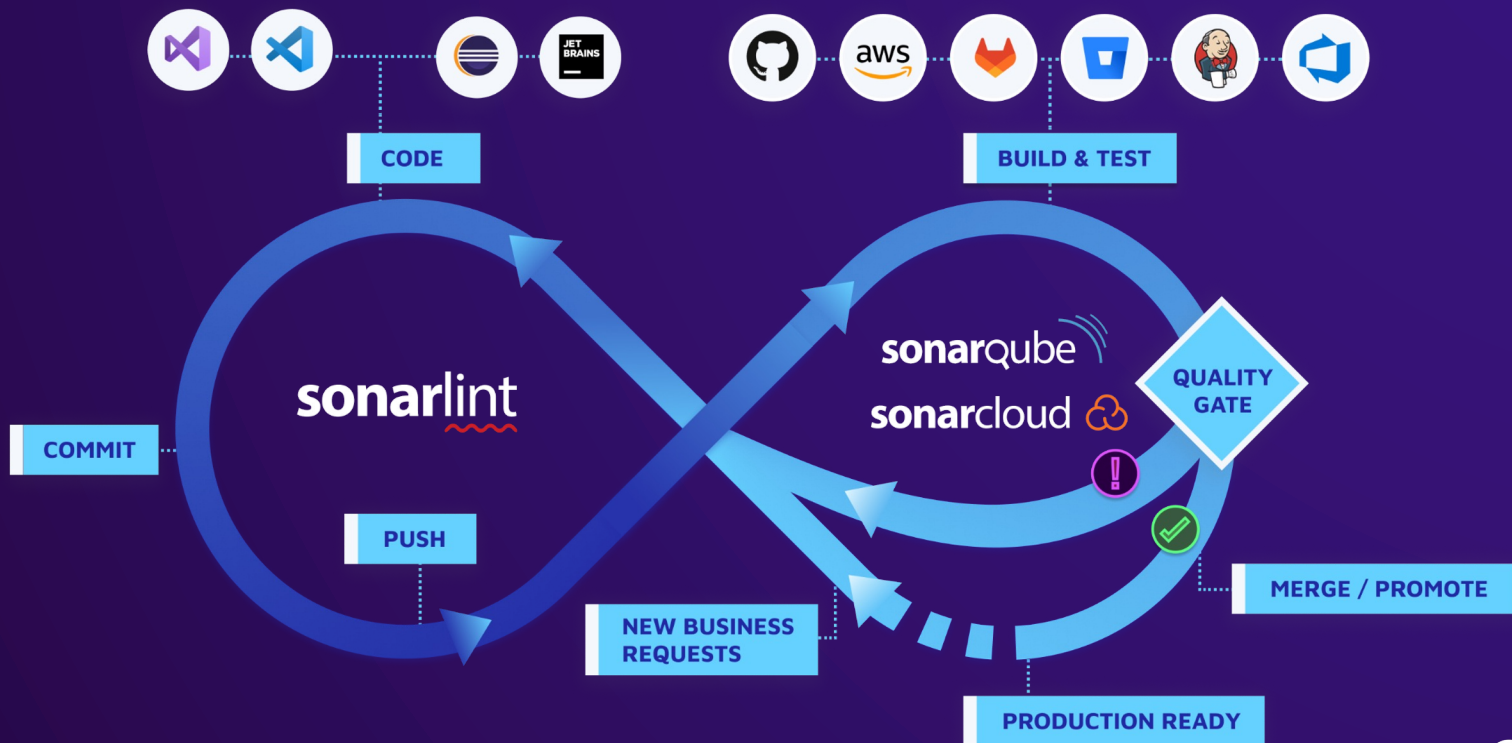
How to get started

Make a simple yet powerful commitment

- **No new dirty code ships to production**

Sonar provides the How

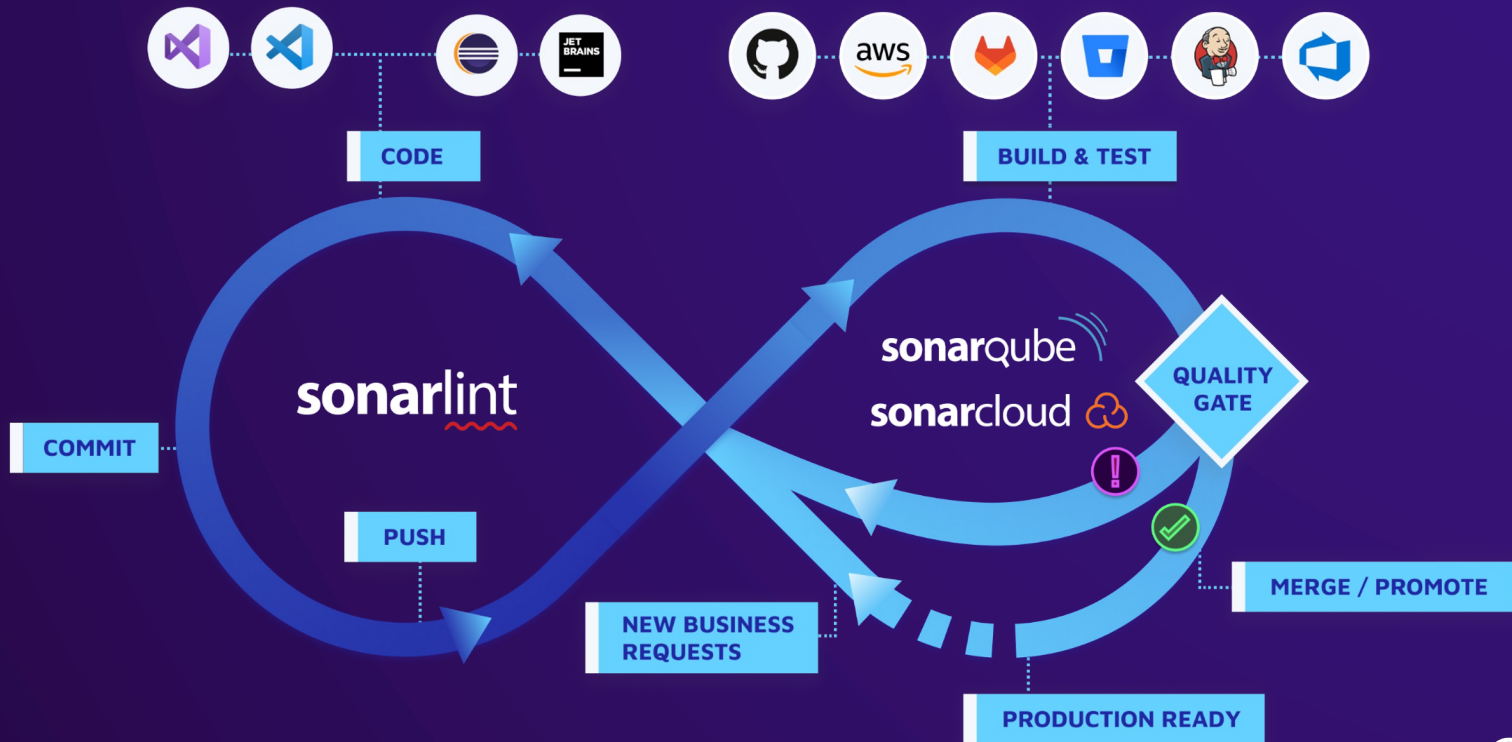
You need a solution that plugs into your workflow

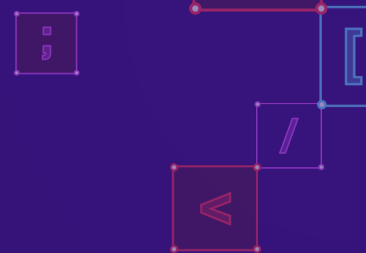


What you achieve with Clean as You Code

- Non-disruptive approach to improve codebase quality
- Systematic, simple, low effort: easily adopted by developers
- Progressively helps organizations achieve the state of Clean Code while controlling technical debt

Clean as you Code in your workflow





4 Steps to Implement Clean as You Code

1. Commit to Clean Code as an organization

2. Leverage Sonar

- a. Integrate SonarQube (self-managed) or SonarCloud (SaaS) into your pipelines

3. Set up your projects and pipelines for Clean as you Code

- a. Define your New Code Period
- b. Establish Clean as You Code-compliant Quality Gates focused on new code - added or changed - on all projects

4. Follow Best Practices and Respect the Quality Gates

- a. Run analysis on every build and don't pass unless the Quality Gate is green
- b. Ensure every developer uses Sonar's free IDE extension, SonarLint, in connected mode

Focus on new code

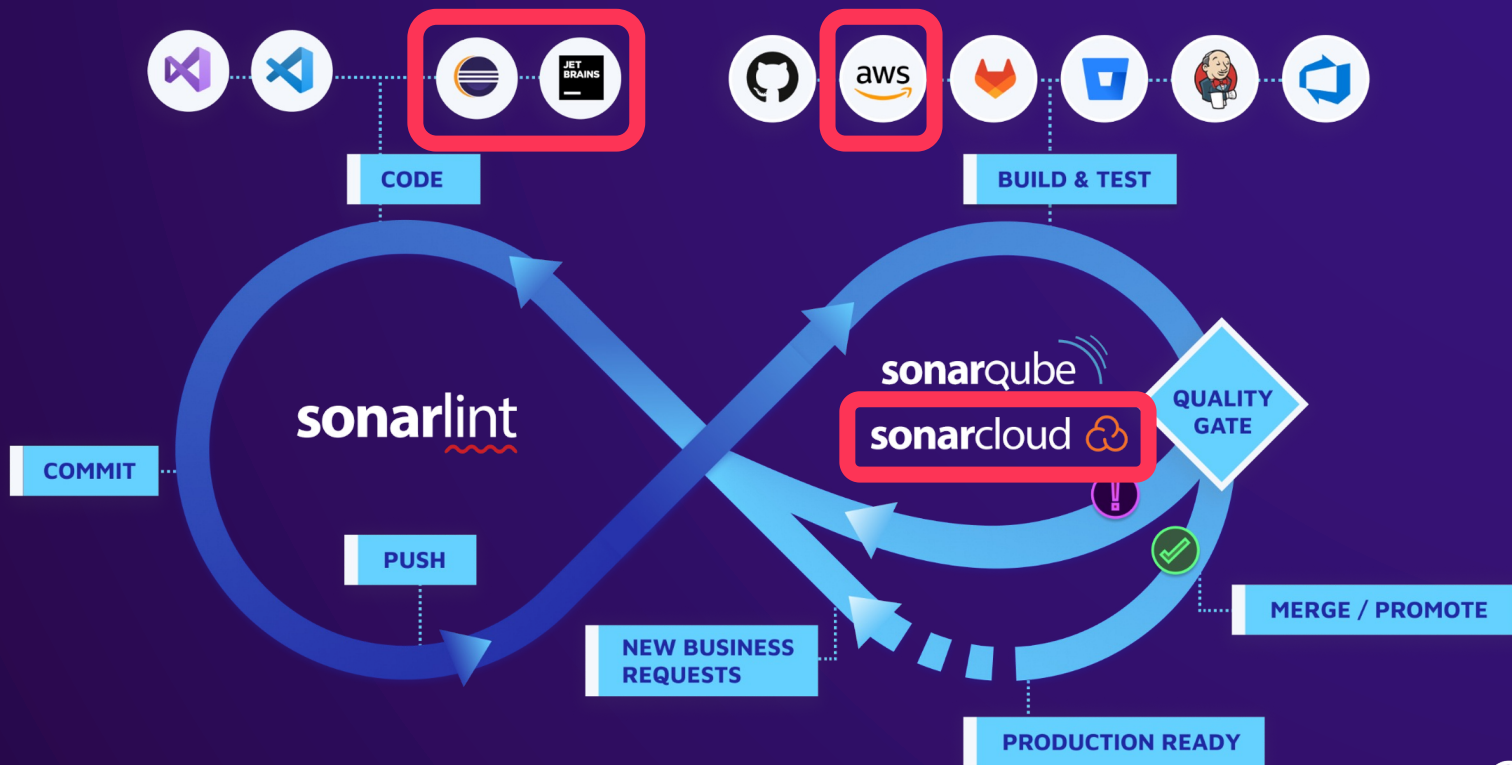
- **Setup New Code period**

- New Code = Changes from a previous version, a reference branch, or within a specific time period

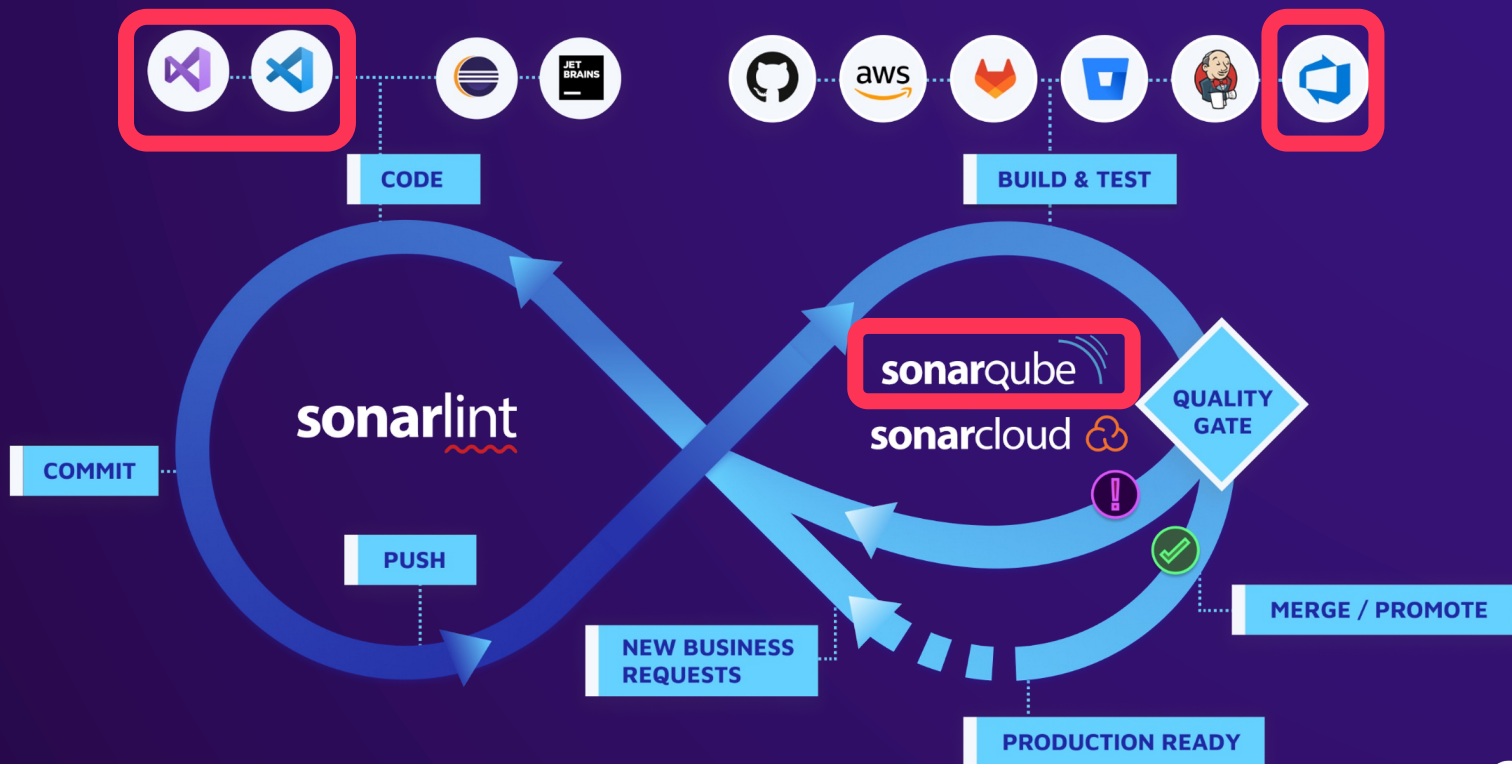
- **Define new code period to be**

- **Long enough** to fix issues before they fall into “legacy” period
- **Short enough** to enforce fixing them before they accumulate
- **Relevant** to your sprint/release cycle

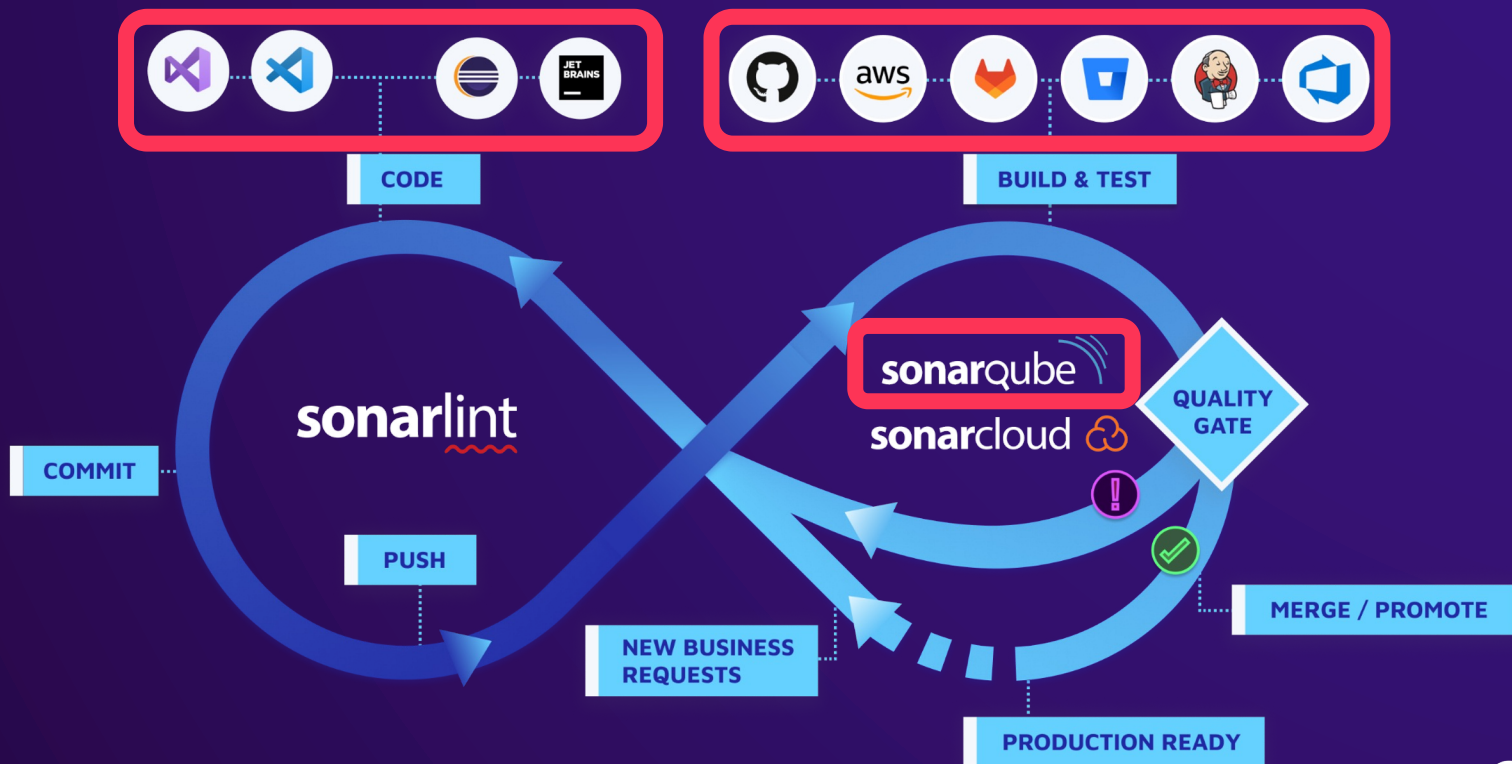
Usage Example: The Small Software Company



Usage Example: The Large .NET Company



Usage Example: The Very Large Enterprise



Clean as You Code Case Study - Datev

- Datev is a German IT service provider
- 8600 employees
- €1.3B Revenue in 2022
- 900 developers
- 250 products across 3 technical stacks
 - Legacy Mainframe solutions
 - On-prem solutions
 - Cloud solutions



Clean as You Code Case Study - Datev

- Sonar customer since 2016
- 38 Million lines of code
- Embraced the Clean as you Code methodology
- Progressively hardened Quality Gates
- “Clean Code” became a badge of honor
- Teams ship with **zero issues** every time



Questions?

Come see our team at Booth 205