

How Sonar powers reliable software development at a global financial institution

A global financial leader managing a massive technology estate with approximately 20,000 software engineers uses SonarQube to stay ahead while meeting the high standards of the banking industry.

The challenge: Scaling quality and security in a global bank

For an enterprise financial organization of this size, manual processes and ad-hoc tooling create significant bottlenecks. The bank previously relied on a legacy process that required manual project management and ticketing, which hindered broad adoption.

As the industry shifted toward AI-assisted coding, leadership recognized a critical need: a scalable, automated way to verify code without slowing down innovation. They needed to move away from a split-brain environment and establish a single, enterprise-wide standard for code quality and code security.

OVERVIEW

 **Company:** Global financial institution

 **Company size:** Enterprise

 **Industry** Banking and finance

Unified visibility for leadership

Replaced manual spreadsheet tracking with portfolio-level insight into code health trends across millions of lines of code, enabling data-driven governance

Institutionalized standards and compliance

Enforced a single global enterprise quality profile ("The Sonar Way") across 40+ languages, helping meet strict regulatory and audit requirements

Proven scalability

Onboarded 8,500 projects onto the new platform in just a few months

The solution: A centralized code verification layer

To achieve their vision of enterprise-wide code health, the organization implemented SonarQube as a core component for their new software developer platform. The team built a sophisticated control plane on top of SonarQube to provide verification for existing workflows seamlessly.

Key pillars of this SonarQube-powered solution include:

- **Automated onboarding at scale:** The team utilized SonarQube's robust APIs to create an effortless onboarding process. Projects and permissions are generated automatically and tied directly to the bank's configuration management database, ensuring every new repository is instantly visible and monitored within the bank's SonarQube ecosystem.
- **Secure, seamless integration:** To support the bank's security requirements, the organization developed a custom integration between SonarQube and their credential vaulting solution. This allows for the minting of short-lived scanning tokens, providing software developers with early, actionable code security insights without manual secret management.
- **Strategic visibility and reporting:** Using SonarQube portfolio management, they now provide CIOs and engineering leaders with consolidated visibility into code health trends across more than 8,500 projects and growing. This eliminates manual tracking and provides the actionable code intelligence required to prove compliance with regulatory standards.
- **A foundation for safe AI adoption:** As the organization scales its use of AI coding assistants, SonarQube provides the essential code verification layer. By applying a standardized enterprise quality profile to all code, the bank ensures that AI-generated contributions meet the same rigorous quality and security criteria as developer-written code.

Establishing the code verification layer for AI code

As the organization moves beyond pilots into the broader rollout of agentic AI tools, SonarQube serves as the non-negotiable verification layer.

A Principal Engineer at the organization, states that "with AI involved in both coding and reviewing, ongoing quality checks are vital. SonarQube allows them to maintain this at scale."

To manage this shift, they rely on a rigorous verification process:

- **Mandatory guardrails:** By default, pipelines fail if they do not meet the bank's quality gates as mandated by SonarQube. This ensures code remains maintainable as volume increases.
- **Safe transition:** During onboarding, the platform allows teams to bypass certain gates as they modernize legacy code, ensuring visibility into unknowns without stalling progress.
- **Standardization:** All teams must use the strategic toolchain which includes SonarQube before they are enabled to unlock the ability to use agentic AI tools.

Results: Scaling trust and transparency across the enterprise

By making SonarQube a core part of their journey, the organization has turned code quality from a manual task into a strategic strength.

Unified visibility for leadership

Previously, tracking code health required an army of people and manual spreadsheets. Today, SonarQube's portfolio management provides senior leaders with visibility into code health trends across millions of lines of code, enabling data-driven governance.

Institutionalized standards and compliance

The move to a standardized enterprise quality profile allows the organization to enforce "The Sonar Way" globally. SonarQube serves as the standard of code quality, helping the bank meet strict regulatory and audit requirements. This consistency spans over 40 languages.

Future-ready SDLC with AI verification

As the bank embraces agentic AI, SonarQube provides a safety net to ensure speed doesn't compromise quality. By requiring all AI-assisted teams to use the SonarQube pipeline, the organization ensures every line of machine-generated code is verified for security and maintainability.

Proven scalability

The results are clear: the organization brought 8,500 projects onto the new platform in just a few months. This shows that when code quality is part of the developer's journey, it doesn't just protect the bank—it helps everyone work better.

About Sonar

Sonar, the industry standard for code verification and automated code review, helps reduce outages, improve security, and lower risks associated with AI and agentic coding. As an independent verification platform, Sonar enables organizations to securely develop at the speed of AI. Sonar is the foundation for high-performance software engineering, analyzing over 750 billion lines of code daily to ensure applications are secure, reliable, and maintainable. Rooted in the open source community, Sonar is trusted by 7M+ developers globally, including teams at Nvidia, ServiceNow, Booking.com, Goldman Sachs, AstraZeneca, and Ford Motor Company.