

Static Application Security Testing

CodeSonar is a static application security testing solution (SAST) that helps you find and understand security and quality defects in your source code or binaries.

Security: CodeSonar checks for the use of tainted data, buffer issues, dangerous memory access, integer and floating-point overflow, and other common security coding errors.

Code Quality: CodeSonar detects memory leaks, dangerous memory access, and other common causes of low-quality code.

Code Performance: CodeSonar detects code that negatively affects performance, such as unnecessary tests for nullness, the creation of redundant objects, or superfluous memory writes.

Reporting: CodeSonar provides built-in reports for standards, such as MISRA, OWASP, and CWE. CodeSonar also includes a custom report builder your organization can use to develop a better understanding of the quality and security of your software projects. Export in CSV, PDF, HTML, or XML so you can work the way you want to.

Safety and Security Standards

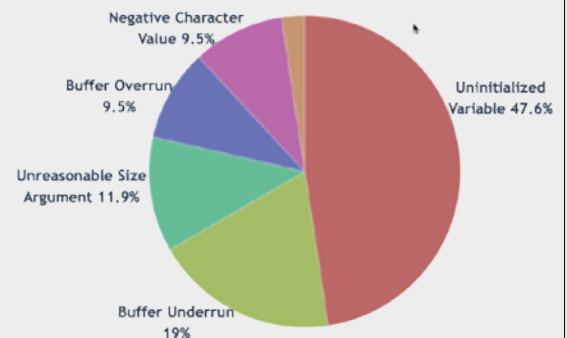
- **Safety Critical:** MISRA C 2023, MISRA C++, AUTOSAR C++ 14, JSF++
- **Security:** CERT, DISA STIG, OWASP, CWE

Functional Safety

- Pre-qualified for the highest levels of safety for the IEC 61508, ISO 26262, and CENELEC EN 50128 standards.
- Artifacts for qualification according to DO-178C/DO-330 are also available.

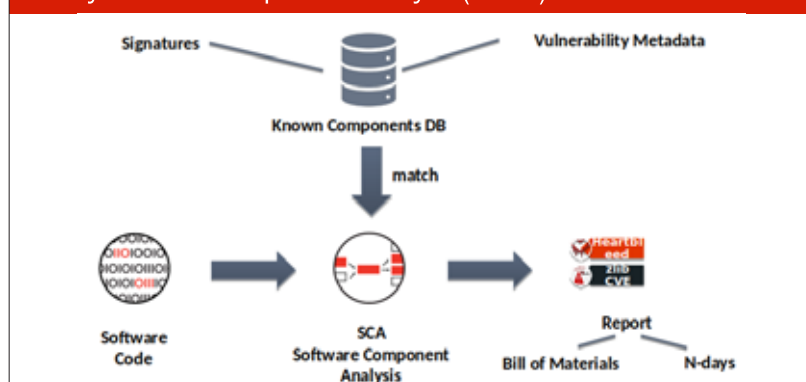
Deep Insights

Buffer over-and under-runs
Copy-paste error
Memory leak
Dangerous function
Cast and conversion
Concurrency problems
Unused parameter
Tainted data value
Command injection
Ignored return value
Null pointer dereference
And hundreds more



Enhancing Automotive Cybersecurity Through Software Transparency

Binary Software Composition Analysis (BSCA)



Binary Composition Analysis (BCA)

Identify Vulnerable Open-Source Software (OSS) in Third-Party Components | Create SBOMS

Software Bill of Materials (SBOM) without Source Code

- Identifies open-source components and shared library dependencies in binaries, including firmware and containers
- Generates component inventory in SBOM with Annotation support
- SBOM mapped to VulnDB, the industry's most complete database of software vulnerabilities.
- Vulnerability Analysis and Software Supply Chain Security (SSCS) Risk Mitigation