

# Static Analysis (Coverity)

Detect and remediate defects while you build

Data proves that catching software defects early and often in the Software Development Lifecycle (SDLC) not only saves organizations time and money, but also reduces risk and stress. With over a decade of proven industry leadership and analysis on over 10 billion lines of code, our Static Analysis tool accurately detects defects to help organizations improve software security, quality, and stability.

## Accelerate time to market and reduce cost and risk

No matter how large and complex your code base is, our Static Analysis tool not only accurately uncovers quality defects and hundreds of known code vulnerabilities, but also offers actionable remediation guidance to help developers troubleshoot quickly and efficiently.

### 1. Test without disrupting development

Our Static Analysis tool rapidly integrates with tools and systems commonly used to support the development process, including source control management, build and continuous integration, bug tracking, integrated development environment (IDE), and application lifecycle management. Synopsys Static Analysis also supports agile, DevOps, and Continuous Integration and Continuous Development (CI/CD) environments.

Our engine for detecting defects is highly accurate, preventing wasted time and effort on managing large volumes of false-positive results and increasing time to market. Organizations can further minimize false-positives by adopting rule sets to your proprietary code.

### 2. Arm developers with remediation guidance

Synopsys Static Analysis provides more specific, actionable remediation advice than other Static Application Security Testing (SAST) tools and aims to identify single points that fixes multiple vulnerabilities at once. Our Static Analysis tool's issue management feature identifies the exact path to the defect, provides the best place and way for troubleshooting, and flags every occurrence of the defect across shared code. Easily view outstanding security issues and automatically assign defects to developers for efficient issue management.

### 3. Gain breadth, depth, speed, and scale

Our flexible solution offers breadth and depth at the speed and scale you need:

- **Breadth:** With the capability to run up to sixteen cores simultaneously, our Static Analysis tool delivers up to 10x performance improvement over serial analysis, allowing you to gain SAST coverage across your entire portfolio.

Reduce the risk of costly and brand-damaging software failures

- **Depth:** Every line of code and every potential execution path are tested, ensuring full path coverage. Utilizing patented techniques, Synopsys Static Analysis ensures deep, accurate analysis.
- **Speed:** Instead of re-analyzing the entire code base each time, only re-analyze changed or impacted code to provide accelerated analysis.
- **Scale:** Our Static Analysis tool scales to accommodate thousands of developers in geographically distributed environments and is built to analyze projects with more than 100 million lines of code with ease.

#### 4. Customize analysis for corporate requirements and industry standards

Our Static Analysis tool's policy manager and Software Development Kit (SDK) enable you to define and enforce code quality and security across development teams, write program analyzers and custom checkers for unique defects, and remain compliant with corporate requirements, industry standards, or guidelines. You also can run reports to gain visibility into compliance against predefined testing criteria, overall organizational risk, and trending defects.

#### 5. Implement a solution customized to your organization

Synopsys provides onboarding, configuration, integration, and deployment services to ensure that customers are getting the most out of their investment. Our team of experts seamlessly integrates the Synopsys Static Analysis tool to enhance, not break, your existing processes.

## We have the expertise, tools, and services you need

Synopsys offers the most comprehensive solution for building security and quality into your SDLC and supply chain. Consider our other services and products that may be a fit for you:

- **SAST Managed Services:** Get the level of testing your web application needs, when you need it with Static Application Security Testing (SAST) services.
- **SecureAssist:** SecureAssist teaches secure coding practices and improves developer productivity by identifying design flaws or vulnerabilities, providing explanations, and offering contextual guidance.
- **Secure Coding Guidelines:** Work off "bug piles" by supplementing the typical generic coding rules with customized actionable framework, library, and language-specific remediation advice.

## The Synopsys Difference

Synopsys offers the most comprehensive solution for integrating security and quality into your SDLC and supply chain. Whether you're well-versed in software security or just starting out, we provide the tools you need to ensure the integrity of the applications that power your business. Our holistic approach to software security combines best-in-breed products, industry-leading experts, and a broad portfolio of managed and professional services that work together to improve the accuracy of findings, speed up the delivery of results, and provide solutions for addressing unique application security challenges. We don't stop when the test is over. Our experts also provide remediation guidance, program design services, and training that empower you to build and maintain secure software.

For more information go to [www.synopsys.com/software](http://www.synopsys.com/software).

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