Securing Your Enterprise Software: Fortify Static Code Analyzer

Fortify helps build processes to ensure the software that runs your business is secure. Incorporating an SSA program can help proactively secure your enterprise software by reducing security risks.

Key Benefits

- Reduces development cost by identifying vulnerabilities early in the SDLC, when they are least expensive to fix
- Reduces risk by identifying and prioritizing which vulnerabilities pose the greatest threat
- Enables secure coding practices by educating developers about static application security testing while they work

Fortify solutions help to reduce the costs of finding and remediating vulnerabilities, increase productivity of development teams, improve security review processes, and lay the foundation for secure coding best practices.

Zero In on Enterprise Software Vulnerabilities

Applications come from multiple sources—in-house, mobile, outsourced, commercial, and open source—and applications absorbed from acquisitions. The challenge is being able to implement an effective approach to make sure the applications that run the business, no matter where it originates from, are protected and secure. The method of securing software requires organizations to build a Software Security Assurance (SSA) program that incorporates static and dynamic application security testing solutions to identify and remediate exploitable vulnerabilities throughout the Software Development Lifecycle (SDLC). It’s also important to educate development and security teams about application security and bring awareness to the types of threats that can disrupt an organization.

Static and dynamic analysis identify critical security vulnerabilities in your applications, but at different stages of the SDLC. Static analysis is conducted early in the SDLC during development when they are the easiest and least expensive to fix, whereas dynamic analysis is conducted later on running applications. Organizations running their initial scans later in the SDLC will realize it is costly and resource-intensive to audit and remediate vulnerabilities right before an application goes into production.

Implementing a Software Security Assurance (SSA) program is a proactive approach to ensure that security is inherent throughout your SDLC starting with design, development, QA, and deployment. Part of an SSA program includes static code analysis, which is a comprehensive discovery identifying security vulnerabilities during development when they are least expensive to fix. It reduces security risks in applications by providing immediate feedback to developers on issues introduced into code during development. Static code analysis also helps educate developers about security while they work, enabling them to create more secure software.

Static Testing Helps Build Better Code

MicroFocus® Fortify Static Code Analyzer (SCA) uses multiple algorithms and an expansive knowledge base of secure coding rules to analyze an application’s source code for exploitable vulnerabilities. This technique analyzes every feasible path that execution and data can follow to identify and remediate vulnerabilities. Fortify SCA pinpoints the root cause of security vulnerabilities in the source code, prioritizes the most serious issues by risk ranking them, and provides detailed guidance on how to fix them so developers can resolve issues with less effort and in less time, all while educating and building secure coding knowledge. Fortify SCA detects more than 991 unique vulnerability categories, across 25 development languages, and, has over 1,007,000 component-level APIs*.

* Fortify Software Security Research Group
Reasons to Choose Fortify Static Code Analyzer

- One of the most accurate in the market and detects a breadth of issues unmatched by other static analysis testing technologies.
- Easily integrates into any environment through scripts, plug-ins, and GUI tools so developers can get up and running quickly and easily.
- Test and maintain the security of your applications regardless of development language or whether it's built in-house, outsourced, third-party, open source, or mobile.
- Supports a wide variety of development languages, platforms, and frameworks to enable security reviews in mixed environments.
- Identifies vulnerabilities in the source code, prioritizes them by severity, and offers remediation guidance.
- Brings development and security teams together to find, review, and fix security issues to reduce software risk, time, and costs.
- Available in multiple delivery models on-premise and on-demand.
- Scale with the growing number of applications in your enterprise.
- Proactively manage risk and compliance requirements.
- Supported by Micro Focus Fortify Software Security Research Group, a global team recognized as one of the top security organizations for monitoring emerging threats, and whose knowledge is funneled into Fortify SCA.

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Finding the Vulnerabilities

To process code, the Fortify SCA works much like a compiler—which reads source code files, or a collection of files, and converts them to an intermediate structure enhanced for security analysis.

This intermediate format is used to locate security vulnerabilities. The analysis engine, which consists of multiple specialized analyzers, uses secure coding rules to analyze the code base for violations of secure coding practices. Fortify SCA also provides a rules builder to extend and expand static analysis capabilities and be able to include custom rules. Results are viewed in a number of ways depending on the audience and task.

Managing Results

Fortify SCA's Web-based collaboration capabilities provide a shared workspace and repository for developers, application security professionals, and managers to work together on code reviews and remediation activities. They can work together using role-specific interfaces.

Developers can address issues in their preferred development environment while collaborating with the security team using plug-ins for Eclipse and Microsoft Visual Studio. With Fortify SCA, developers learn about secure coding while they fix vulnerabilities in the development cycle. For each vulnerability, Fortify SCA delivers reference information describing the problem and ways to fix it in the developer’s programming language.

It's Time to Transform Your Software Security Program

Fortify helps build processes to ensure the software that runs your business is secure. Incorporating an SSA program can help proactively secure your enterprise software by reducing security risks. Fortify solutions help to reduce the costs of finding and remediating vulnerabilities, increase productivity of development teams, improve security review processes, and lay the foundation for secure coding best practices.

About Micro Focus Security

Micro Focus is a leading provider of security and compliance solutions for the enterprise that wants to mitigate risk in their environment and defend against advanced threats. Micro Focus Security offers a full range of market-leading security solutions with Fortify, ArcSight, and Micro Focus Data Security. The Micro Focus Security Intelligence Platform uniquely delivers advanced correlation, application protection, and data security solutions to protect today's hybrid IT infrastructure from sophisticated cyber threats.

About Micro Focus Security Products Global Services

Micro Focus Security Products Global Services take a holistic approach to building and operating cyber security and response solutions, and capabilities that support the cyber threat management and regulatory compliance needs of some of the world’s largest enterprises. We use a combination of operational expertise and proven methodologies to deliver fast, effective results to demonstrate ROI. Our proven, use-case-driven solutions combine market-leading technology, with sustainable business and technical process.

Learn more at www.microfocus.com/appsecurity