SYNOPSYS®

# Cryptsoft

## Improving scan speeds while maintaining CI development velocity

CRYPTSOFT

**Company overview**

Australian security firm Cryptsoft offers software development tools for security system design, deployment, validation, and interoperability. Its products include the OASIS Key Management Interoperability Protocol (KMIP), OASIS Public Key Cryptography Standard #11 (PKCS#11), and smartcard solutions.

To learn more about Cryptsoft, click here.

## The challenge: Increase and improve security scans at the speed of DevOps

As organizations rapidly evolve their development practices into streamlined and agile DevOps methodologies, tools capable of adapting and keeping pace with development speeds and complexities are critical. Specifically, tools must seamlessly integrate into existing pipelines without "breaking the build" or decreasing development velocity.

Cryptsoft depends on accurate and efficient security scanning for the successful production of its industry-leading software products. So any security solutions that are incorporated into its software development life cycle (SDLC) pipelines must be capable of adequately maintaining development velocity.

Tim Hudson, CTO and company founder, said, "Our customers are some of the most well-known companies in the technology industry, and their combined expectations, and the critical nature of the software that we provide for key management systems and hardware security modules, means that we must use every possible tool that is available to improve code quality, security, and stability." This high-stakes demand—along with ever-increasing development speeds—drove Cryptsoft to look for a static application security testing (SAST) solution that could keep up and scale to its DevOps needs.

Hudson said that it was his intent "to get in front of our customers who are performing intermittent scans of releases, and catch items before our customers see them." This requirement necessitated a robust SAST tool capable of catching bugs sooner and without slowing down CI processes.

## The solution: Synopsys application security testing tools

Cryptsoft adopted Synopsys' Coverity® SAST solution to support development speeds and increase security and software quality.

Coverity is a fast, accurate, and highly scalable static analysis solution that helps development and security teams address security and quality defects early in the software development life cycle, track and manage risks across the application portfolio, and ensure compliance with security and coding standards.

"Coverity helps [us] see bugs in advance and address them, and also enables a much faster support response when a customer queries whether an item raised is an issue or a false positive," Hudson said.

"Coverity continues to remain the most useful of the static code analysis tools, with its broad coverage and scanners. The false positive rate remains consistent despite the ever-increasing range of code checks that have been added. It is simply the best tool of its type in the market—still clearly ahead of its competitors," he continued.

*"Developing large systems without tools like Coverity is like playing Russian roulette—it just isn't something you should contemplate. Coverity gives you confidence that you haven't missed something in your manual review processes, and that equates to an easy decision to make on a simple value-for-money basis."*

—Tim Hudson, Cryptsoft, CTO

## The results: Rapid accurate feedback, seamless integration

Cryptsoft expected that introducing the latest release into its build process would be relatively straightforward. Hudson said those expectations were exceeded. "When we integrated it into our build processes, [we] were classifying issues the same day we received the software," he said. This ease of integration is a critical component of DevOps-compatible tools. Failure to seamlessly integrate into existing pipelines can derail development activities. With Coverity, Cryptsoft's efforts were uninterrupted—it was up and running the same day.

In addition to its seamless integration, Coverity enabled Cryptsoft to get reliable results fast and early. "The ability for our developers to get immediate feedback from our continuous integration environment means that Coverity is simply part of the overall development process, rather than something that happens at the end of a development cycle. This enables us to determine and adjust any potentially problematic constructs during development, which reduces false positives even further. Static code analysis within all possible code paths helps significantly when detecting potential issues in harder-to-test contexts. And that does lead to overall more robust software that we can deliver to our customers," Hudson said.

With the help of Coverity SAST, Cryptsoft's security posture now matches the fortitude and reliability of its industry-leading security product offerings, solidifying its reputation as a proven and trusted security software leader.

## The Synopsys difference

Synopsys helps development teams build secure, high-quality software, minimizing risks while maximizing speed and productivity. Synopsys, a recognized leader in application security, provides static analysis, software composition analysis, and dynamic analysis solutions that enable teams to quickly find and fix vulnerabilities and defects in proprietary code, open source components, and application behavior.

For more information about the Synopsys Software Integrity Group, visit us online at www.synopsys.com/software.

**Synopsys, Inc.**
185 Berry Street, Suite 6500
San Francisco, CA 94107 USA

U.S. Sales: 800.873.8193
International Sales: +1 415.321.5237
Email: sig-info@synopsys.com