FORTRA

The 4 Key Capabilities for Effective Static Application Security Testing

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It's a Mad, Mad, Digital World

This is the age of extreme digital – with the meteoric rise of cloud technologies, Internet of Things (IoT) devices, and software defined infrastructures, among others. Digital transformations abound and everything about our daily, professional, and personal lives is online and connected.

While the digital frontier is creating unprecedented opportunities for businesses across every vertical, it is also creating myriad new opportunities for cybercriminals to execute their craft for exploiting vulnerabilities in the digital domain.

And the cost of software vulnerabilities is high, going beyond monetary losses – as they can also jeopardize customer trust, operational health, and brand reputation.

$6
TRILLION
in cyber related losses by 2021 (CSO Online)

The Trillion Dollar Imperative

It is not surprising, that executives all over the world from the CEO to the CIO and CISO, are actively seeking robust solutions for preventing such exploitations, with spending for **fighting cybercrime expected to exceed $1 trillion** by 2021.

And, with **84% of software breaches at the application layer** (CSO), when planning to bolster the organization's security posture, one of the first places to start should be with the application layer.

> *"Attacking web applications has become a favorite tactic of hackers."*
>
> *- FORBES*

> *"The application layer is an exponentially expanding layer cake of cyber security vulnerabilities, with the number of layer attacks rising in recent years."*
>
> *- COMPUTER WEEKLY*

A Shot of AppSec, For the Cyberthreat that Ails You

This is where application security (AppSec) comes in. AppSec entails the sum of activities, programs, and software solutions that are implemented by organizations with the goal to reduce risk and protect their software assets against cyber threats.

The AppSec toolkit includes automated application security testing (AST) solutions that aim to simplify and accelerate the time consuming and labor intensive job of code review.

There are multiple AST tools available in the market, and each address different issues. They all, however, aim to increase the speed, efficiency, and coverage paths for testing applications.

"DevSecOps, modern web application design and high-profile breaches are affecting the growing application security testing market. Security and risk management leaders will need to meet tighter deadlines and test more-complex applications by integrating and automating application security testing in the software life cycle."
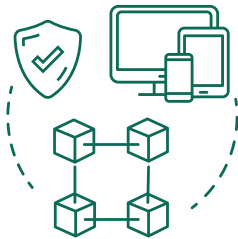
- GARTNER

The Different Types of AST Tools Available Today

Static Application Security Testing (SAST)

Dynamic Application Security Testing (DAST)

Interactive Application Security Testing (IAST)

Runtime Application Self-Protection (RASP)

Open Source Analysis/ Software Composition Analysis (OSA/SCA)

Mobile Application Security Testing (MAST)

Static Application Security Testing: A Brief Primer

Among the different AST tools, one of the most important is static application security testing (SAST).

The main reason is that this type of testing is performed during the early stages of software development life cycle (SDLC), thus exposing weaknesses before the software is built, packaged, and deployed.

SAST entails analyzing source code and/or compiled versions of the code to detect and report on weaknesses that can lead to security flaws. By preventing vulnerabilities in the code before it's launched, application security becomes significantly less costly.

"For the types of problems that can be detected during the software development phase itself, this is a powerful phase within the development life cycle to employ such tools, as it provides immediate feedback to the developer on issues they might be introducing into the code during code development itself. This immediate feedback is very useful, especially when compared to finding vulnerabilities much later in the development cycle."

- OWASP

The 4 Key Capabilities for Effective SAST

While there are multiple SAST solutions available in the market, they often lack at least one if not all of the key capabilities that are critical for effective static application security testing. Namely:

Continuous testing

Since new threats are repeatedly being introduced and discovered, the solution must enable continuous, ongoing application security testing.

Compiler-free testing

For prompt, simple, and easy scan preparation.

Standalone scanning

Enabling quick and easy decentralized testing, without the need to be connected to a network or the internet.

Incremental scanning

With the option to perform partial (incremental) analysis, for quick security feedback on small sections of code, eliminating the need to rescan the whole project.
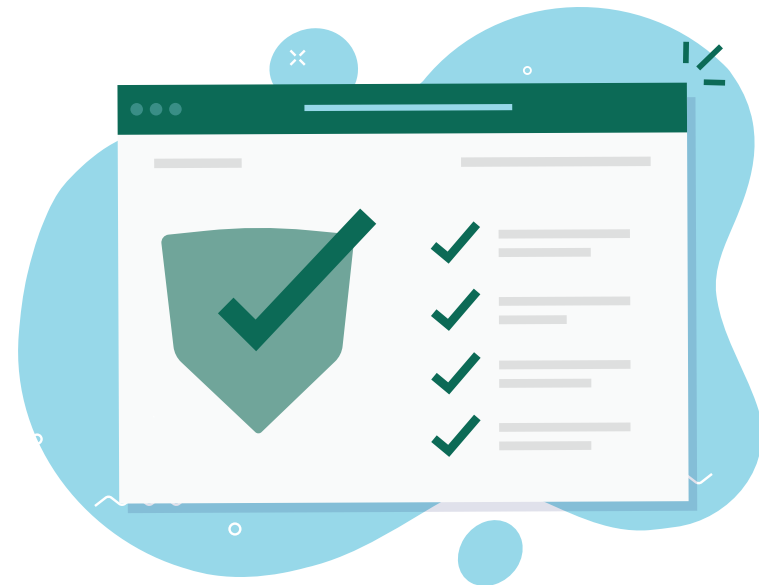
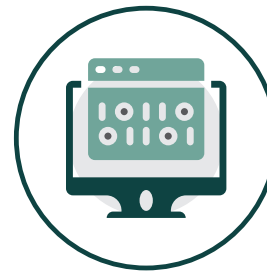# How beSOURCE Delivers the 4 Key Capabilities

beSOURCE from Beyond Security provides security professionals with the four key capabilities for effective static application security testing.
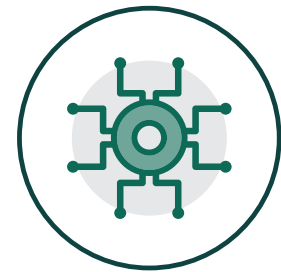
Continuous application testing
for early remediation

Incremental scanning
for accelerating time-to-findings

Compiler-free testing
for simple and painless scan preparation

Standalone scanning
for quick and easy decentralized testing

Delivering Innovation

beSOURCE is an innovative SAST solution that is focused on vulnerability detection.

It enables developers to implement non-functional security testing of application source code earlier than ever during the software development life cycle (SDLC), and to easily integrate security into DevOps across the organization.

The beSOURCE Path to AppSec
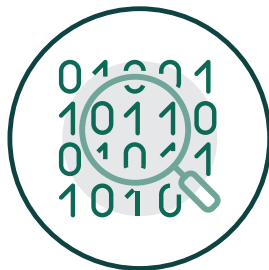
Scanning
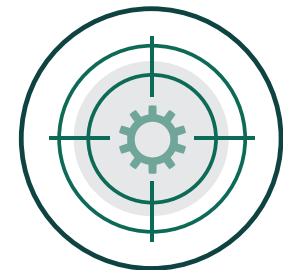the code without the need for
compilation or execution

Identifying
security and
quality flaws

Incremental Analysis
for new DevSecOps
code released continuously

Delivering
real-time findings
for immediate remediation

How beSOURCE Delivers the 4 Key Capabilities

Offering a Broad Set of Capabilities

Comprehensive & in-depth
scanning capabilities, for both
standalone and enterprise

Supporting a broad variety
of programming languages
and frameworks

Ongoing real-time reports
of discovered vulnerabilities, project
state, and historical trends

Extensive standards coverage
including SANS Top 25, CERT,
and OWASP Top 10 and others

Cloud-based, SaaS offering
geared towards on-demand scan
requests

Easy & fast
deployment, configuration,
and utilization

BeSOURCE: For Taking AppSec to the Next Level

beSOURCE enables you to take your application security testing program to the next level with accurate, fast, and ongoing application security testing, so you can easily and effectively:

- **Eliminate vulnerabilities** faster and earlier

- **Prevent exploits** and breaches

- Enhance **regulatory compliance**

- **Secure oversight** of security program management

- Ensure application **security awareness** across the organization

- **Integrate security and enable DevSecOps** from the ground-up

To learn how you too can innovate faster and safer, we invite you to reach out to us at: sales@beyondsecurity.com.

Visit us at www.beyondsecurity.com.

About Beyond Security

Beyond Security, by Fortra, is a leading worldwide security solutions provider. Our testing tools accurately assess and manage security weaknesses in networks, applications, industrial systems and networked software as well the source code underlying these applications. Beyond Security's product lines include, beSECURE® for network vulnerability management, beSTORM® for software security testing, which can help secure network and applications and comply with the security policy requirements that exceeds industry and government standards and beSOURCE®, which is a highly accurate and easy to use static application security testing (SAST) solution that provides tools for identifying, tracking, security flaws such as security vulnerabilities, compliance issues in the source code. Beyond Security delivers fast and cost-effective PCI ASV compliance scanning and PCI compliance testing is built into every beSECURE® VAM implementation.

Visit us at www.beyondsecurity.com

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About Fortra

Fortra is a cybersecurity company like no other. We're creating a simpler, stronger future for our customers.
Our trusted experts and portfolio of integrated, scalable solutions bring balance and control to organizations
around the world. We're the positive changemakers and your relentless ally to provide peace of mind
through every step of your cybersecurity journey. Learn more at fortra.com.