PT APPLICATION INSPECTOR™: A REVOLUTION IN APPLICATION SECURITY ANALYSIS

Dynamic businesses depend on state-of-the-art software. But as the number of applications grows, so does the number of vulnerabilities. Research in 2016 by Positive Technologies showed that all applications contain at least medium-severity vulnerabilities. 70% of them have one or more critical vulnerability. By imitating the tactics used by external intruders, our experts were often able to exploit these vulnerabilities to obtain control over internal corporate infrastructure.

What causes applications to be so weak? The Positive Technologies study revealed the majority of vulnerabilities in web applications are caused by errors in source code. Just 31% of weaknesses were the result of misconfiguration. The good news is that most vulnerabilities can be detected long before an attack happens. High quality source code analysis can reveal 10 times as many critical vulnerabilities as testing without code analysis (the black-box method).

PT Application Inspector™ (PT AI™) is a comprehensive source code analysis tool that offers protection for web applications of any scale. Its holistic approach combines the advantages of static, dynamic, and interactive analysis to maintain application security throughout every stage of development—from the very first line of code to the go-live.

PT APPLICATION INSPECTOR™ works

PT Application Inspector™ analyzes source code or compiled applications with a combination of static, dynamic, and interactive methods (SAST, DAST, and IAST). When analysis is complete, PT Application Inspector™ shows the weaknesses detected by line numbers and vulnerability type. It also goes one step further and generates exploits. These are safe, effective test queries that help to demonstrate the presence and implications of the vulnerability. Thanks to the dynamic analysis module, these queries can be launched from any testbed, reducing the time it takes to verify code flaws.

Fixing vulnerabilities during early development is 10 times cheaper than fixing them later. But PT Application Inspector™ also offers code analysis and protection for applications that are already running. Uniquely, it can automatically export the results of its analysis to PT Application Firewall™, which applies rules or “virtual patches” to block any related attacks on the vulnerable live application while the code is being fixed.

KEY FEATURES

- **Protect applications of any scale.** PT Application Inspector™ detects all key types of vulnerabilities in web applications (including SQLi, XSS, and XXE). It can be used to protect any application: from landing pages to corporate portals, cloud services, and e-government systems.

- **Assess vulnerabilities automatically.** PT Application Inspector™ automatically generates exploits. These test queries, which are entirely safe, demonstrate exactly how hackers could take advantage of vulnerabilities. Exploits help to confirm the existence of a vulnerability, start the repair process, and monitor resolution status.

- **Save time.** By combining static, dynamic, and interactive code analysis technologies (SAST, DAST, and IAST), PT Application Inspector™ detects only real vulnerabilities. This allows developers to focus on the important threats and avoid labor-intensive manual analysis.

- **Minimize risks and possible damage.** Detecting and fixing vulnerabilities at every stage of development minimizes the likelihood of errors in the final product, while also reducing the costs associated with fixing them. The extent of possible damage is limited—and user loyalty increases.

- **Stay compliant.** For systems that will handle online payments, it is essential to demonstrate that industry best practice has been followed during development. PT Application Inspector™ helps to ensure PCI compliance (PA-DSS/PCI DSS).

HOW PT APPLICATION INSPECTOR™ WORKS

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ADDITIONAL FEATURES

- **Ease of use.** PT Application Inspector™ does not require a deep-dive into source code or the development process. Crystal-clear results and visualization of vulnerabilities are available without additional setup.

- **Wide and deep analysis.** PT Application Inspector™ has a built-in database of software vulnerabilities and third-party libraries. Verification mechanisms also ensure that the servers behind an application are configured securely.

- **Continuous protection.** The results of PT Application Inspector™ analysis can be automatically exported to PT Application Firewall™, which uses them to block attacks based on the detected vulnerabilities. This mechanism, called virtual patching, mitigates risk and buys time for the code repair process.

BENEFITS FOR DEVELOPERS

- **Effortless and safe testing.** No access to a test environment is necessary. There is no need to install or configure an application to perform source code analysis with PT Application Inspector™. Simply point PT Application Inspector™ at the folder containing the complete or partial app code to begin.

- **Detecting undocumented features and business logic vulnerabilities.** PT Application Inspector™ can easily be taught to understand the business logic behind your applications via the creation of search templates. By integrating business logic into the system, PT Application Inspector™ is able to detect weaknesses in the operation of an application, as well as backdoors inserted by developers or hackers.

- **Built-in intellectual property protection capabilities.** Reduce the risk of IP violations due to inappropriate use of third-party software (whether accidental or deliberate). PT Application Inspector™ examines third-party code, including open-source software (OSS), that is used by your applications and highlights known vulnerabilities.

- **Detecting hidden threats.** PT Application Inspector™ can search for both vulnerabilities and symptoms of vulnerabilities, helping you to prevent hidden threats before they strike.

- **Support for SSDL.** PT Application Inspector™ is available in two different versions. PT Application Inspector™ Desktop Edition is ideal for the needs of information security specialists. PT Application Inspector™ SSDL Edition intelligently addresses the needs of large development teams or R&D departments by integrating seamlessly into the secure software development lifecycle. Both versions help organizations to reduce costs and streamline the process of safe development and testing.

About Positive Technologies

Positive Technologies is a leading global provider of enterprise security solutions for vulnerability and compliance management, incident and threat analysis, and application protection. Commitment to clients and research has earned Positive Technologies a reputation as one of the foremost authorities on Industrial Control System, Banking, Telecom, Web Application, and ERP security, supported by recognition from the analyst community. Learn more about Positive Technologies at ptsecurity.com.

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