

Arxan Application Protection for IBM Solutions



Expand your mobile application security with application hardening and run-time protection

Highlights

- Extend security across the complete mobile application lifecycle
 - Help make mobile applications self-defending against hacking attacks and malware
 - Build application hardening and runtime protection into your software, without changing source code
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The global adoption of mobile technology has completely transformed the way organizations do business. Today, customers and employees expect the convenience and productivity of anytime, anywhere connectivity to devices of their choice. But mobility doesn't just create new business opportunities. It also introduces a whole new range of pervasive security threats that specifically target mobile devices and applications.

Not long ago, mobile technology was thought to be immune to malware, but those days are over. In a single year ending in March 2013, the growth of malware aimed at mobile platforms grew 614 percent—nearly 450 percent faster than the year before.¹ Of particular concern are mobile applications, which have become increasingly attractive targets for criminals looking for personal and enterprise data to exploit. For example, of the top 100 paid mobile applications, 100 percent on the Google Android platform and 56 percent on Apple iOS have been hacked. Among popular free applications, 73 percent on Android and 53 percent on iOS have been hacked.²

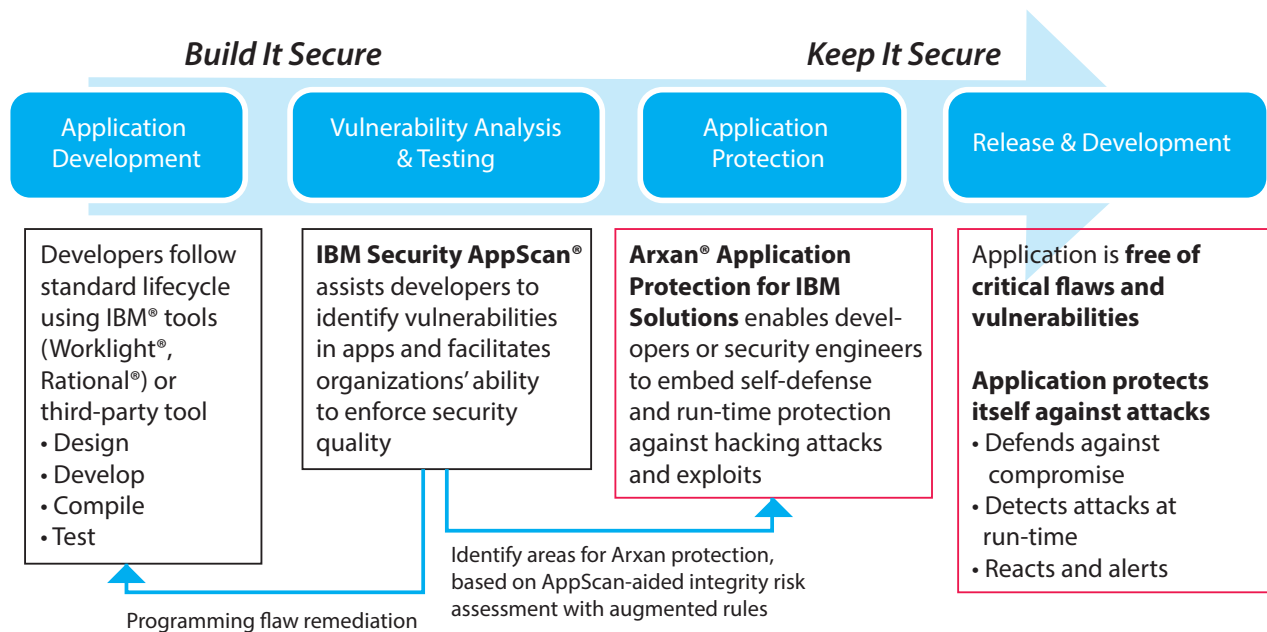
Today's mobile applications are subject to attacks such as reverse-engineering and tampering that can compromise critical components of application integrity or confidentiality. Once an application is breached, hackers can disable security controls, alter critical functionality, expose sensitive information, insert malware, steal intellectual capital, or create rogue versions. Arxan Application Protection for IBM Solutions can help block these attacks by making mobile applications self-defending, tamper-resistant and hardened against hacking attempts and malware exploits.



Delivering end-to-end mobile application protection

Although most IT organizations are well aware of mobile security threats, strategies for defending against them are not as clear. Mobile applications have different risks than web applications, so organizations may require specialized tools to address them. Not only does mobile security require a detailed understanding of specific application vulnerabilities, it also requires a proactive, holistic view of security across the entire mobile application lifecycle. Traditional app security practices such as safe coding alone cannot prevent attacks as even "flawless" code can be cracked and modified. Hence, applications must be proactively protected.

Arxan Application Protection for IBM Solutions provides a comprehensive, integrated solution for mobile application protection that can combine patented Arxan "guard" technology with IBM® Security AppScan® vulnerability analysis. Whether developing mobile applications with IBM Worklight® or other third-party tools, Arxan Application Protection for IBM Solutions enables developers to insert application protection features into your software, without changing source code. As a result, organizations can effortlessly analyze, build and deploy secure mobile applications across IT environments.



Integrating security across the application development lifecycle

Together, the Arxan-based solution and AppScan enable organizations to extend their security posture across the mobile application lifecycle—from analysis and remediation during development, to application hardening and runtime protection. Organizations can also shield their individual applications from a wide range of risks, from programming flaws that expose security vulnerabilities to advanced hacking attacks and malware exploits.

AppScan vulnerability analysis capabilities

AppScan provides vulnerability analysis capabilities that help pinpoint and remediate security gaps in web and mobile applications. It provides dynamic, static, hybrid, runtime and client-side analysis capabilities that can help organizations uncover security flaws throughout the development lifecycle. AppScan also helps strengthen overall application security and compliance management by generating detailed reports with intelligent fix recommendations to simplify remediation.

In addition, organizations can easily add AppScan into their continuous integration frameworks to help automate application security analysis—and keep pace with rapid mobile application development.

Arxan Application Protection for IBM Solutions Capabilities

Arxan Application Protection for IBM Solutions provides application-level integrity-protection features that make mobile applications self-defending, tamper-resistant and hardened against potential exploits. By embedding security features directly into the application, the Arxan-based solution provides static and dynamic protection that defends against threats (advanced obfuscation, encryption, pre-damage, metadata removal), detects attacks at runtime (checksumming, resource verification, anti-debug, swizzling detection, jailbreak/root detection) and reacts to ward off attacks, (by shutting down the app, self-repairing, or alerting).

Guarding your application

Arxan Application Protection for IBM Solutions includes patented Arxan Guard network technology, which can be embedded directly into a mobile application, such as an Android app (APK) or iOS app (IPA), without requiring source code modifications. It empowers applications to maintain their integrity with customized defend, detect, alert and react security capabilities. Guards are inserted directly into the application prior to release, and they can provide both static and runtime protection.

Arxan Guard network technology provides:

- Multi-layered guards that are configurable by users
- An automated guard-injection engine, which can insert guards into binary code without source-code involvement
- Proven capabilities, including use in applications running on more than 300 million devices within leading Fortune 500 organizations, as well as multiple patents and awards

With Arxan Application Protection for IBM Solutions, organizations can proactively block exploits with embedded application hardening, runtime protection and self-defense tactics. It's an end-to-end strategy built to work from design to deployment.

Why Arxan?

Founded in 2001, Arxan Technologies, Inc. is the world's largest provider of application-protection technology. Arxan protects the "app economy" from attacks in distributed or untrusted environments with some of the world's strongest and most deployed application integrity-protection products. Arxan's self-defending and tamper-resistant applications are deployed on applications running on more than 300 million devices by leading Fortune 500 organizations in high-tech, financial services, digital media, gaming, healthcare and other industries.

Why IBM?

IBM mobile security solutions are part of the IBM MobileFirst strategy of providing end-to-end solutions for the mobile enterprise. Based on nearly 1,000 customer engagements, more than 10 mobile-related acquisitions in the last four years, a team of thousands of mobile experts and 270 patents in wireless and security innovations, IBM MobileFirst combines the key elements of an application and data platform with the management, security and analytics capabilities needed for the enterprise.

For more information

To learn more about Arxan Application Protection for IBM Solutions, please contact your IBM representative or IBM Business Partner, or visit:

ibm.com/software/products/en/appscan/

About IBM Security solutions

IBM Security offers one of the most advanced and integrated portfolios of enterprise security products and services. The portfolio, supported by world-renowned IBM X-Force® research and development, provides security intelligence to help organizations holistically protect their people, infrastructures, data and applications, offering solutions for identity and access management, database security, application development, risk management, endpoint management, network security and more. These solutions enable organizations to effectively manage risk and implement integrated security for mobile, cloud, social media and other enterprise business architectures. IBM operates one of the world's broadest security research, development and delivery organizations, monitors 15 billion security events per day in more than 130 countries, and holds more than 3,000 security patents.

¹Juniper Networks Mobile Threat Center, "Third Annual Mobile Threats Report: March 2012 through March 2013," *Juniper Networks*, 2013. <http://www.juniper.net/us/en/local/pdf/additional-resources/3rd-jnpr-mobile-threats-report-exec-summary.pdf>

²Arxan, "State of Security in the App Economy: 'Mobile Apps Under Attack,'" *Arxan Research Report*, Volume 2, 2013. https://www.arxan.com/assets/1/7/State_of_Security_in_the_App_Economy_Report_Vol._2.pdf



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