

Precision Wearable Biometrics Provider, Valencell, Selects Arxan to Protect Intellectual Property

Case Study

Category: ISV/IoT

Application(s): PerformTek® Sensor SDK/library

Product(s): EnsureIT® for iOS & Android

Valencell®, pioneering company in Precision Wearable Biometrics, develops performance biometric data sensors. The company licenses its technology to consumer electronics manufacturers, mobile device and accessory makers, sports and fitness brands and gaming companies for integration into their products. These powered sensors are the most accurate wearable biometric sensors in this market that continuously measure heart rate and other key metrics. The company aggressively protects its leadership and differentiation in this rapidly expanding and competitive market.

Challenge:

Years of research and development were invested by the company into their biometric sensor technology. They wanted to ensure that their unique, patented intellectual property (IP) was not compromised or cloned through application attacks, such as reverse-engineering or code tampering. This was particularly important given the increased competitive pressures in the wearables market and the customer's distribution model of working in partnership with consumer product manufacturers and potentially third party developers.

Although patented and protected under NDA, the company's code and IP could potentially be exposed during the sharing of their technology (in the form of an SDK/library) during integration as partners work to turn their wearable products into biometric wearables. The customer also required ease of use and flexibility such that their proprietary technology could first be easily protected and then be leveraged within another 3rd party application. As such, the solution needed to meet stringent resource consumption requirements of diverse mobile/IoT platforms.

Solution:

Valencell, sought an application security solution that met their protection requirements to prevent application attacks. Already familiar with Arxan's reputation as a leader in application security, they chose EnsureIT® for iOS and Android solutions to deliver best-of-breed application protection. The solution provides self-defending and tamper-resistant attributes against static or run-time reverse-engineering or code modification attacks. The process included a short evaluation period where success was measured around several key performance and strength of security metrics. EnsureIT was efficiently applied to their SDK/library with initial guidance on risk identification/mitigation techniques and application security best practices from Arxan's security team.

The Company utilized Arxan's EnsureIT to protect innovative IP from application attacks.

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The team also performed an expert protection review of the final protection scheme.

Results:

The Company's engineers worked closely with the Arxan team to ensure a successful evaluation on an initial platform. Meeting their success criteria, a second platform was immediately added to support their development timeline. Arxan provided thought-leadership around application security strategies and practices for the company, as well as their key partners throughout the process. As the product was deployed, joint marketing efforts were undertaken to support market place education on the value of application protection for a developer technology integrator, in the wearables industry, as it represents a growing market of the Internet of Things (IoT).

Benefit: Arxan's application protection is supporting the company's market leadership position in the biometric wearables market by preventing reverse-engineering and tampering with their unique IP.



About Arxan Technologies

Arxan provides the world's strongest application protection solutions. Our unique patented guarding technology 1) Defends applications against attacks, 2) Detects when an attack is being attempted, and 3) Responds to detected attacks with alerts and repairs. Arxan offers solutions for software running on mobile devices, desktops, servers, and embedded platforms – including those connected as part of the Internet of Things (IoT) -- and is currently protecting applications running on more than 300 million devices across a range of industries, including: financial services, high tech/independent software vendors (ISVs), manufacturing, healthcare, digital media, gaming, and others. The company's headquarters and engineering operations are based in the United States with global offices in EMEA and APAC. For more information, please visit www.arxan.com.