

Multi-Platform Software-based Content Protection Provided by Arxan for Mobile DRM Robustness

Global DRM platform provider offers robust content protection with its proprietary DRM agent. The DRM agent software is a multi-DRM (PlayReady, OMA, Windows Media, etc.), multi-device (iOS, Android, Windows, etc.) software development kit (SDK). The SDK is used by their customers to build secure media players on multiple desktop and consumer electronic (CE) devices.



Challenge: Mobile platforms are driving tremendous levels of online content consumption. In parallel, new challenges to secure content on a wide array of connected platforms have arisen. For instance, online service providers receive rights to stream content based on license agreements that ensure their content clients are adequately robust against hacking and tampering.

The provider's responsibility is extended ensuring their customers are also in compliance with robust DRM security measures. The challenge is to protect their proprietary DRM SDK against reverse engineering and tampering, such that professional pirates and hackers are unable to successfully circumvent or tamper with the rights management policies and thereby enable un-authorized use of the protected content.

At the same time, the required run-time performance of a DRM client must be maintained as today's marketplace demands high-definition (HD) media in real time on resource-constrained devices.

Security breaches are expensive to manage and fundamental content distribution business models are at risk as these result in loss of privilege to carry premium content – which would in turn severely impact a content streaming service.



Solution: An already highly security-savvy company chose Arxan's integrated application protection for its breadth of platform support and comprehensive security capabilities.

As a first layer, Arxan Cryptographic Key/Data Protection is used to hide secret keys such as the content decryption keys during program execution. As a second layer, Arxan Code Protection is used to harden the DRM SDK against reverse engineering and tampering. The ability to integrate Arxan's Code Protection solution to protect static libraries was key since the DRM agent is packaged as an SDK. Arxan Code Protection is also used as a layered defense to protect the key-hiding Cryptographic Key/Data Protection modules.

Arxan's ability to protect static libraries was key, since the DRM agent is packaged as an SDK and globally distributed on iOS and Android platforms.



Results: Both the provider and its customers are fully satisfied with the tunable levels of protection that Arxan offers to their secure content players. Arxan's ability to protect static libraries, cryptographic keys and run-time application code – with minimal impact to product development both by the provider and its customers – resulted in a very viable security solution that offers both effectiveness and transparency.

Most importantly, Arxan enables the provider and their customers to be fully compliant with robustness requirements for premium content, thus securing their revenue and their brands.



Benefit: Provider can leverage the innovation of mobile content consumption while mitigating risk and preserving its business model for secure content distribution.

About Arxan Technologies

Arxan is the trusted global leader of Application Attack Prevention and Self-Protection products for Internet of Things (IoT), Mobile, Desktop, and other applications. We help protect our customers against financial loss, brand damage, fraud, IP theft, stolen credentials, fraudulent transactions, unauthorized access, non-compliance with regulatory and industry standards, and more. Our unique patented guarding technology **1. Defends** applications against attacks, **2. Detects** at run-time when an attack is being attempted, and **3. Deters** attacks to stop hackers, send alerts, or repair making customers' applications truly resilient. We are currently protecting applications running on more than 500 million devices across a range of industries, including: financial services, automotive (connected automobiles), healthcare (connected medical devices), digital media, gaming, high tech/independent software vendors (ISVs), and others. The company's headquarters and engineering operations are based in the United States with global offices in EMEA and APAC. **Learn more at www.arxan.com.**