HUMAN

BotGuard for Applications for Streaming Services Case Study

Let Product Teams Stay Focused on Delighting Customers

1. The engineering and product teams at a leading music and podcast streaming service suspected that sophisticated bots were evading their defenses to create fake accounts that bombarded real users with spam messages. The streaming service user interface is a single page application (SPA) and SPAs can be difficult to protect accurately from automated API attacks.

2. By deploying the HUMAN SPA tag, a single line of code, BotGuard for Applications revealed that almost 60% of all account sign-in and sign-up events came from a single bot fingerprint that was not detected by their existing bot protection measures.

3. Now with an enterprise-grade solution that provides reliable, actionable, evidence of bot activity, the product team can focus on providing a world-class streaming service rather than the distractions of defending their site from bot attacks.

CHALLENGE:

Precision in Detection Required.

Single Page Applications (SPAs) offer product teams great flexibility in creating engaging user experiences but can be difficult to protect from bots. Attackers automate their attacks, using tools like headless browsers, on the SPA APIs.

A leading streaming service built an exceptional SPA but suspected that bots were evading their existing defenses. The innovative product team built defenses to guard against account takeover. However, the team felt that they were fighting a losing battle as bad actors continually probed their platform to outsmart these defenses. When logged in, the bots bombarded real users with spam, attempting to direct users to external sites and polluting the user experience.

The product team wanted to get back to focusing on what they did best, providing a world-class streaming platform, not on bot detection and mitigation. A bot risk score from a bot management solution was of little use to them, they needed absolute precision in detection to know if the device connecting to their service was real or not. They couldn't risk false positives ruining their users' interaction with their SPA.

SOLUTION:

BotGuard for Applications

The product team engaged with HUMAN in an effort to improve their defenses against sophisticated bots. BotGuard for Applications was implemented using a single line of code, the BotGuard SPA JavaScript tag, to understand if automation was being used to exploit the SPA's APIs. BotGuard uses 2500 continually updated signals and 350 algorithms built with over 10 years of experience to determine with precision if a device accessing your application is a bot or not. BotGuard's sophisticated multilayered detection technology immediately uncovered evidence of more than 400,000 bot-related events that had not been previously detected. These events each had a unique but similar fingerprint of automation, likely originating from the same bot tool. BotGuard for Applications revealed that nearly 60% of all the platform's account sign-in and sign-up events came from this single user agent that was not detected by their existing bot protection measures.The company has now fully deployed BotGuard for applications across the SPA and is now 100% protected against this threat.

RESULTS:

Return to Focus

The product team achieved their objectives with higher detection efficacy through increased signal collection and minimal false positives. BotGuard now effectively protects the platform against account takeover through credential stuffing and cracking attacks. Furthermore, it stops new account fraud and sensitive data scraping while maintaining a frictionless and spam-free digital experience for the platform users.

The HUMAN Satori threat intelligence team took the analysis further. Using data from HUMAN's Human Verification Engine the team traced the bot's profile across the internet and found it was being used to target similar streaming platforms. By deploying BotGuard for Applications, the company not only protected their SPA more effectively but helped identify an emerging threat. This novel method of tag evasion was reverse engineered by HUMAN and built into the Human Verification Engine to provide immediate collective protection to all HUMAN customers.

With BotGuard for Applications being further deployed on high-value interactions across the platform for increased signal collection and protection, the product team can now focus on continuing to provide a world-class streaming service rather than the distractions of defending their site from bot attacks.

About Us

HUMAN is a cybersecurity company that protects enterprises from bot attacks to keep digital experiences human. We have the most advanced Human Verification Engine that protects applications, APIs and digital media from bot attacks, preventing losses and improving the digital experience for real humans. Today we verify the humanity of more than 10 trillion interactions per week for some of the largest companies and internet platforms. Protect your digital business with HUMAN. To Know Who's Real, www.humansecurity.com.