HUMAN

Application Protection Case Study

Leading Online Learning Platform Eliminates Malicious Bots for Optimal Application Performance

This leading global online learning and teaching platform is used by 80% of Fortune 100 companies. It offers more than 150,000 courses in 65 languages and serves more than 50 million users worldwide.

Challenge

When its service was launched, the company increased its popularity by encouraging users to consume as much content as possible. This strategy motivated users to deploy bots to scrape and download content. Because the platform was primarily designed for streaming content, it was unable to handle the flood of concurrent content downloads and performance slowed significantly.

In addition, many users complained that their accounts were compromised. Users' login and password combinations were being validated by **brute force credential stuffing attacks** on the login page, leading to account takeovers (ATOs). As the team investigated, they also noticed a high number of **bot-created fake accounts** that were used to plagiarize content and post it on other platforms.

Bots were hurting both the user experience and the content publishers on the e-learning service, which ultimately slowed revenue growth. The company needed to resolve its application performance, user account security, and content protection challenges quickly to ensure its continued leadership and growth in the e-learning market.

Solution

The company wanted a solution that could manage bot traffic at the edge before unwanted requests reached its infrastructure. HUMAN Application Protection addressed the company's application performance and bot attack challenges. Application Protection is a behavior-based bot management solution that protects web and mobile applications and APIs from automated attacks safeguarding online revenue, competitive edge, and brand reputation.

APPLICATION PERFORMANCE

The company's application platform was being attacked by multiple types of bots that were overloading its systems, negatively impacting application performance and causing unplanned downtime. Its CPU resources were being taxed by the volume of automated attacks. With Account Protection, the company was able to block malicious traffic at the edge, limit specific types of bots attacking the system, and throttle traffic to keep the application running at its optimal level.

SCRAPING

As a site with a great deal of valuable content, it was no surprise that the company was under attack from scraping bots. Scraping bots were infiltrating its system to steal course content. Account Protection identified these scraping bots—often particularly sophisticated in their ability to mimic human behavior—and found they were typically operated by competitors to steal content.

ACCOUNT TAKEOVER AND ABUSE

ATO bots were also attacking the company's login pages, taking over valid user accounts or creating fake accounts to steal and resell gated content, such as practice quizzes. Over 80% of the traffic to the company's login pages was from ATO bots. Account Protection was able to identify and defend against these attacks and prevent ATOs.

Results

The ability to detect and mitigate bot activity with Account Protection yielded a number of positive results for the online learning platform.

- **Preserved performance:** Account Protection kept the application platform performing at optimal levels and maintained better than 99.99% uptime.
- **Maintained competitive edge:** Reducing content scraping prevented competitors from stealing core content and enabled the company to maintain its competitive edge.
- **Safeguarded user accounts:** ATO attacks diminished, restoring customer confidence and improving brand reputation.

> **"Bots were overloading our systems, negatively impacting application performance and causing unplanned downtime."**
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> — VP of Information Technology, Online Learning Platform

About HUMAN

HUMAN is a leading cybersecurity company committed to protecting the integrity of the digital world. We ensure that every digital interaction, transaction, and connection is authentic, secure, and human. HUMAN verifies 20 trillion digital interactions, providing unparalleled telemetry data to enable rapid, effective responses to the most sophisticated threats. Recognized by our customers as a G2 Leader, HUMAN continues to set the standard in cybersecurity. For more information, visit ***www.humansecurity.com***