



Human Defense Platform for Amazon Cloudfront via Lambda@Edge

Challenges

Digital fraud and abuse by malicious bots

Online organizations face an ever-evolving threat of digital fraud and abuse from automated bot attacks. Today's advanced bots closely mimic human behavior, rotate IP addresses, and piggyback on real identities and devices. Because of this, sophisticated bots don't trigger volumetric or IP reputation alerts in legacy systems, and can evade commonly deployed signature-based defenses and web application firewalls (WAFs). Bot-based fraud causes financial losses due to chargebacks, increased infrastructure costs, and expenses associated with incident remediation and recovery. Automated activity taxes your bandwidth and skews your web engagement metrics. Furthermore, bot-driven fraud damages brand reputation and consumer trust. Relying on legacy bot defenses leaves your business vulnerable.

The HUMAN Solution

HUMAN stops bot attacks on websites, mobile applications, and APIs

The Human Defense Platform is a suite of cybersecurity solutions that disrupt digital fraud and abuse. Our bot mitigation solutions stop automated attacks, such as account takeover, new account fraud, transaction abuse, scraping, and data contamination. Detection is based on behavioral analytics, advanced machine learning, predictive models, and security research. Mitigation actions include hard blocks, honeypots, misdirection, and deceptive content. HUMAN integrates with Amazon Cloudfront via Lambda@Edge to block bots at the edge, preserving page load performance and optimizing infrastructure costs. If required, our frictionless verification tool provides an additional detection mechanism without impacting user experience.

Benefits

The Human Defense Platform ensures bot-free, low latency traffic over your cloud-native web and mobile applications with CloudFront via Lambda@Edge.



»» Decisions at Lightspeed

AWS and HUMAN automatically inspect all bot traffic at the edge, before it hits your application.

»» Frictionless Detections

Validate 95% of users in under 2ms. Signals are sent out-of-band to ensure low latency.

»» Unparalleled Accuracy

2500+ signals pass through 350+ machine learning algorithms to detect and mitigate bad bots, without false positives and negatives.

HUMAN on AWS

With tight integration into Amazon CloudFront, the Human Defense Platform for AWS adds an extra layer of protection to applications running on Amazon CloudFront. The solution analyzes advanced behavioral and network signals with machine learning and threat intelligence to protect your business and users from automated attacks. Our partnership ensures rapid deployment, low latency, market-leading detection capabilities, flexible scalability, and support for whatever type of authentication you prefer.



Case Study: FanDuel

»» Challenges

FanDuel, a sports betting platform, was a large target for account takeover (ATO) attacks. The company experienced up to 10 million malicious login attempts per day, which overwhelmed their login page, harmed their user experience, and threatened their user accounts.

»» Solution

FanDuel deployed HUMAN to protect the platform from ATO and other bot attacks. Custom parameters allowed FanDuel to store specific data points. Seamless integration with Amazon CloudFront ensured low latency, preserving page load performance and optimizing infrastructure costs.

»» Results

HUMAN mitigated 99.9% of malicious inbound traffic to FanDuel's site. The solution blocked 3,000+ bad login attempts per second, even though these requests had already passed through a WAF. Overall, HUMAN helps protect FanDuel's reputation, consumer trust, and revenue.



Features

Bot Mitigation

HUMAN uses behavioral analysis, machine learning, and threat intelligence to detect sophisticated bots on web and mobile apps and APIs. The solution mitigates bot traffic according to customer-defined policies, with actions such as hard blocks, honeypots, misdirection, and deceptive content. There is a continuous feedback loop that strengthens our detection algorithms every time fraud is detected. Customers can review incident details, manage policies, and generate reports in the HUMAN Portal.

Human Challenge

Human Challenge is a user-friendly, frictionless CAPTCHA-alternative that differentiates humans from bots. It appears as a simple button that users "press and hold." Behind-the-scenes, Human Challenge executes additional detections using proof-of-work, machine learning, and threat intelligence to identify even the most advanced CAPTCHA-solving bots. Our bot mitigation technology automatically validates 99.99% of users without the need for extra checks; Human Challenge is only served to the remaining 0.01%.

Visit [AWS Marketplace](#) or [humansecurity.com](#) to purchase or start a Free Trial today.



Get started with HUMAN solutions on AWS

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