Modern websites shift operations to the client-side to increase performance and enrich the user experience. They also make extensive use of third-party scripts and open source libraries to innovate faster and deliver rich new capabilities. In fact, almost 70% of the scripts on a typical website are third-party. These scripts run on the client side, outside of the site owner’s visibility or control, creating a major cybersecurity blind spot. Client-side attacks can collect your users’ data right from the browser, leading to the theft of credit card numbers and other personally identifiable information (PII). News of data breaches and PII compromises are a daily occurrence, and lack of real-time visibility and control over the behavior is among the most serious security threats to online businesses today, leaving you exposed to compliance penalties, brand damage and loss of revenue.

HUMAN Code Defender

HUMAN Code Defender is a client-side web application security solution that provides comprehensive real-time visibility and granular control into your modern website’s client-side supply chain attack surface. Using behavioral analysis and advanced machine learning, Code Defender identifies vulnerabilities and anomalous behavior to reduce the risk of non-compliance. It provides comprehensive client-side mitigation, partnering granular control over legitimate JavaScript with Content Security Policy (CSP) mitigation capabilities. This multilayered protection lets security teams both block specific actions in a script, without blocking the full script, and block unwanted scripts entirely. With Code Defender, you get full visibility into the scripts running on your site including how they are interacting, additional scripts they are using and any exposure details. These insights identify high-risk PII, PCI and vulnerability incidents so response teams can act fast.

Unlike other solutions that rely only on manual code reviews or external scanners, Code Defender continuously monitors and analyzes the behavior of all client-side scripts in real users’ browsers. The solution inventories and baselines known expected behavior, and then applies machine learning models to help identify new malicious, suspicious or anomalous behavior that warrants attention with appropriate severity levels based on the level of perceived risk to a website. The solution runs 24/7/365, giving security operations teams real time visibility and control over all downstream client-side risks, freeing up application development teams to focus on innovation.

“We wanted to find the anomalies and changes in our client-side scripts, Code Defender greatly simplifies this process. Combined with the threat intelligence, it helps us identify the risks to our website, and enables us to work with our partners in e-commerce to mitigate those risks.”

— Lee Tarver, Sr. Manager, Security Architecture and Engineering, Sally Beauty

Benefits for digital businesses

Reduce Risk of Data Breaches
• Detect and prevent client-side attacks on your website
• Secure sensitive customer data
• Maintain compliance with data privacy regulations

Improve Operational Efficiency
• Visibility and control over JavaScript on your website
• Close the blindspots in first, third and nth-party client-side code
• Respond fast with comprehensive mitigation and actionable insights
The HUMAN Advantage

Multi-layered Protection
- Comprehensive Client-side Visibility - Gain real-time visibility into first-, third- and Nth-party scripts.
- Client-side Mitigation - Provides granular control over legitimate JavaScript to block specific actions without blocking the entire script, enabling enforcement of regulatory compliance.

Behavior-based Learning
- Automatically learn, inventory and baseline all script activity on.
- Automate CSP management using an out-of-band Enforcer.

Easy to Deploy
- Integrate the lightweight JavaScript Sensor quickly and easily into your web pages.
- Actionable dashboards offer an at-a-glance overview to help teams quickly identify high-risk vulnerability incidents.

Powered by HUMAN Defense Platform
HUMAN uses a modern defense strategy to safeguard organizations from digital supply chain attacks and fraud, increasing ROI and trust while decreasing customer friction, data contamination, and cybersecurity exposure. Code Defender runs on the HUMAN Defense Platform, which powers an award-winning suite of application protection solutions enabling full visibility and controls of data provided to third party applications running on websites or mobile applications.

Key Integrations
- Edge Integrations (CDN, Cloud)
  - fastly
  - YOTTAA
  - Cloudflare

- Application SDK/Middleware
  - Node
  - Java
  - Ruby
  - Go
  - Python

- Load Balancers and Web Servers
  - Apache
  - NGINX
  - Citrix NetScaler

- Serverless and Cloud Frameworks

- E-commerce Platforms
  - Salesforce Commerce Cloud
  - Magento

About HUMAN
HUMAN is a cybersecurity company that safeguards 500+ customers from sophisticated bot attacks, fraud and account abuse. We leverage modern defense—internet visibility, network effect, and disruptions—to enable our customers to increase ROI and trust while decreasing end-user friction, data contamination, and cybersecurity exposure. Today we verify the humanity of more than 15 trillion interactions per week across advertising, marketing, ecommerce, government, education and enterprise security, putting us in a position to win against cybercriminals. Protect your digital business with HUMAN. To Know Who’s Real, visit www.humansecurity.com.