HUMAN

APPLICATION PROTECTION: DESIGNED FOR LOW LATENCY

Stop bad bots without impacting application performance

ZERO LATENCY FOR 85% OF REAL USERS

Once HUMAN recognizes a website visitor as a trusted user, an encrypted cookie is set for that user, allowing them to pass through HUMAN's decision engine without a server-to-server call. Because of this patented, out of band technology, **85% of human visitors experience 0ms latency** and 95% of all requests are completed in under 2ms.

Bypassing server-to-server calls on trusted requests improves application performance without sacrificing detection efficacy.

- HUMAN's patented technology enables us to deliver unparalleled detection accuracy without adding investigative latency to every request
- Increases efficiency and minimizes impact to user experience
- Configure server-to-server calls only for endpoints that need extra protection

Page-request impact
0ms
for 85% of user requests

Page-request impact under
2ms
for 95% of requests

Patented tech[1] reduces latency by minimizing server-to-server (S2S) calls without compromising detection

LATENCY METRICS ACROSS HUMAN'S GLOBAL NETWORK

Human website visitors get a fast pass, while bots pay the latency price.

HUMANS

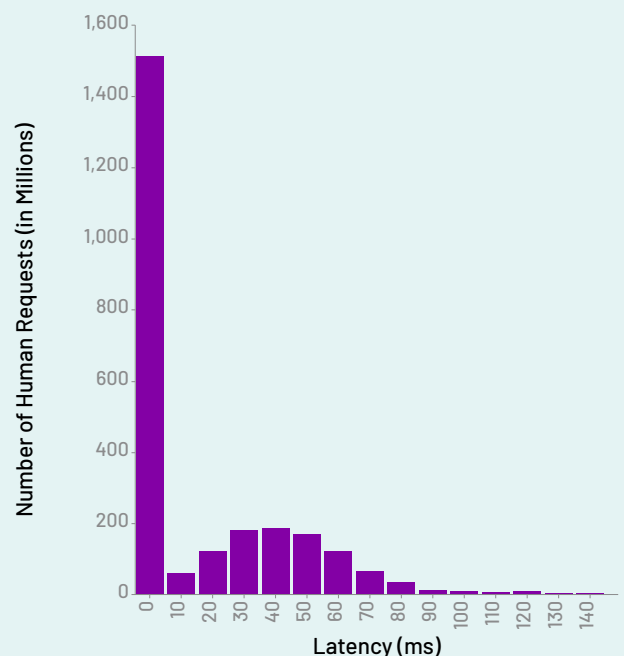**85%** of those deemed human experience **0ms latency**

- Median & 75 percentile: **0ms**
- Average: 20ms

BOTS

Those deemed **bots** experience **higher latency** by design, still in a reasonable range

- Median: **40ms**
- 99th percentile: **160ms**

[1]HUMAN Patent US10951627B2

Latency Experienced by Humans

Number of Human Requests (in Millions)

Latency (ms)

HOW IT WORKS

HUMAN's **patented technology** minimizes the impact on application performance and user experience, delivering unmatched detection accuracy and speed.

Requests that have been identified as a real human receive an encrypted token. This token is decrypted at the edge, bypassing the need for a server-to-server (S2S) call and eliminating additional latency.

As the user continues to browse the application the signal is asynchronously re-evaluated to confirm that it is legitimate. This keeps latency to a minimum without impacting detection.

For highly sensitive actions (e.g. logging into an account), a full S2S call occurs.

> *"We seamlessly integrated Application Protection at our platform edge to ensure maximum protection against automated bot attacks, but also to minimize latency."*
>
> — Alan Murray, Senior Director, Architecture at FanDuel

GLOBAL POPS

HUMAN protects some of the largest online businesses in the world with a robust network of global points of presence (PoPs) across the Americas, Europe, and Asia. New locations are established regularly to enable customers to respond quickly to evolving threats and reduce latency for end users.

Americas
- us-east1 (South Carolina)
- us-east4 (Northern Virginia)
- us-central1 (Iowa)
- us-west1 (Oregon)
- us-west2 (California)
- southamerica-east1 (São Paulo)

Europe
- europe-west1 (Belgium)
- europe-west3 (Frankfurt)

Middle East
- me-central1 (Doha)

Asia Pacific
- asia-northeast1 (Tokyo)
- asia-south1 (Mumbai)
- asia-southeast1 (Singapore)
- australia-southeast1 (Sydney)

THE HUMAN ADVANTAGE

Scale
We verify more than 20 trillion digital interactions weekly across 3 billion unique devices providing unrivaled threat telemetry.

Speed
Our Decision Engine examines 2,500+ signals per interaction, connecting disparate data to detect anomalies in mere milliseconds.

Decision Precision
Signals from across the customer journey are analyzed by 400+ algorithms and adaptive machine-learning models to enable high-fidelity decisioning.

About HUMAN

HUMAN is trusted by the world's leading enterprises and internet platforms to prevent, detect, and respond to cyber attacks with unmatched scale, speed, and decision precision across their advertising, application, and account surfaces. Safeguard your customer journey end to end with complete confidence by consolidating with the Human Defense Platform. To Know Who's Real, visit humansecurity.com.