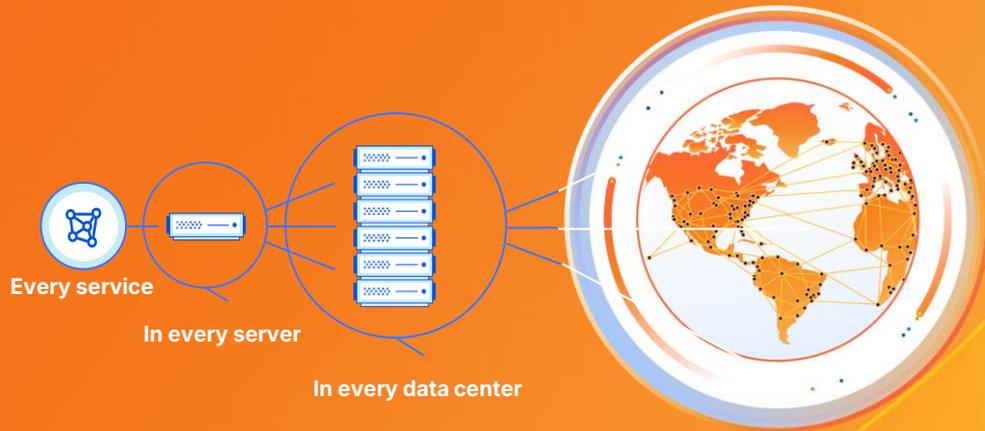


The Rise of Volumetric DDOS

Attack of the TV's to Aisuru Botnets



Across 335+ cities in 120+ countries

Jamie Hodge
Sr Solutions Engineer
CCIE #24140

Provide a single network that delivers local capabilities with global scale

335+ cities

in 120+ countries, including mainland China



w/150+ cities

for AI inference powered by GPUs



~50 ms

from ~95% of the world's Internet-connected population



~13,000 networks

directly connect to Cloudflare, including ISPs, cloud providers, and large enterprises



445Tbps

of network capacity and growing



● Cloudflare city
(as of Q1 2024)

— Cloudflare backbone
(as of Q1 2024)

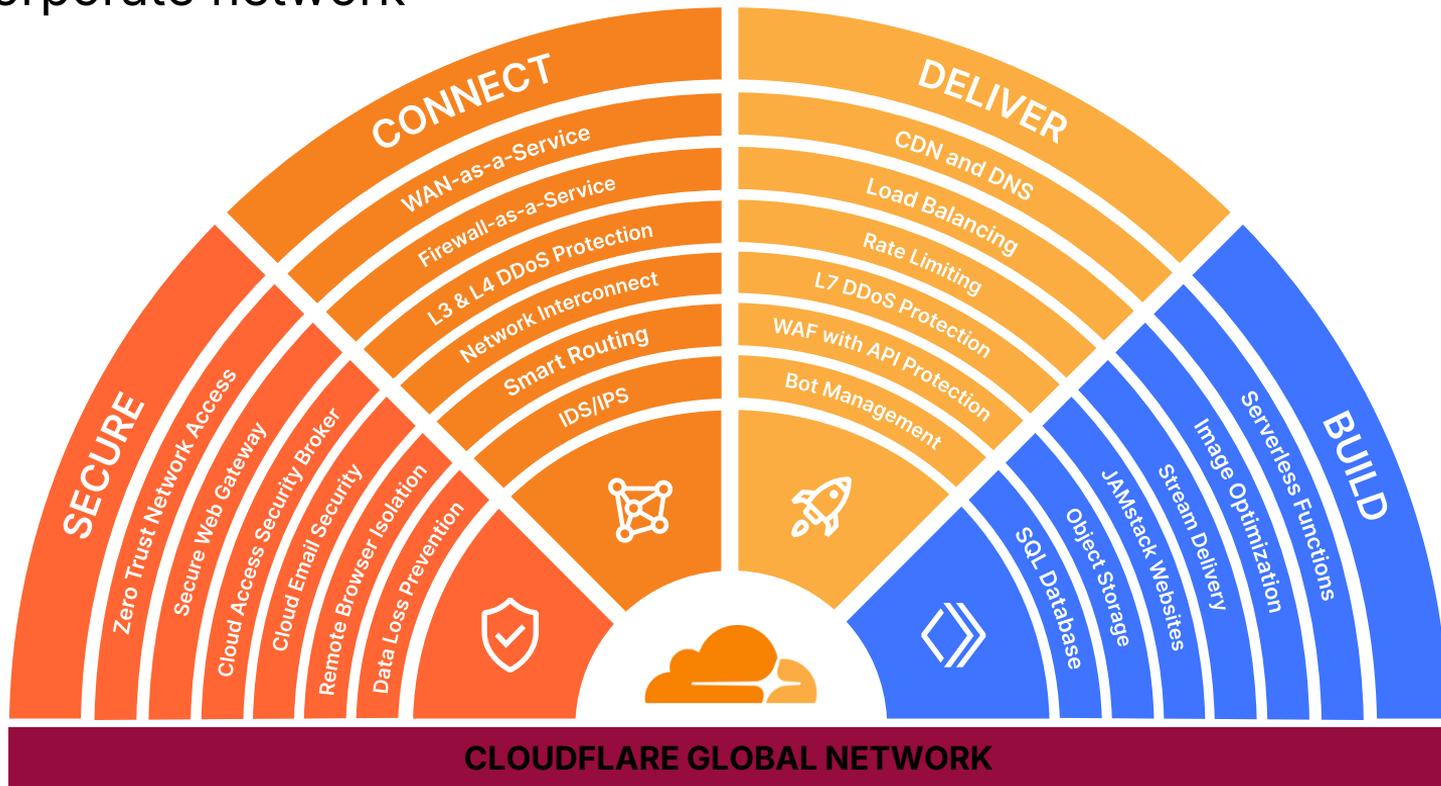
Hyperscalers Size comparison



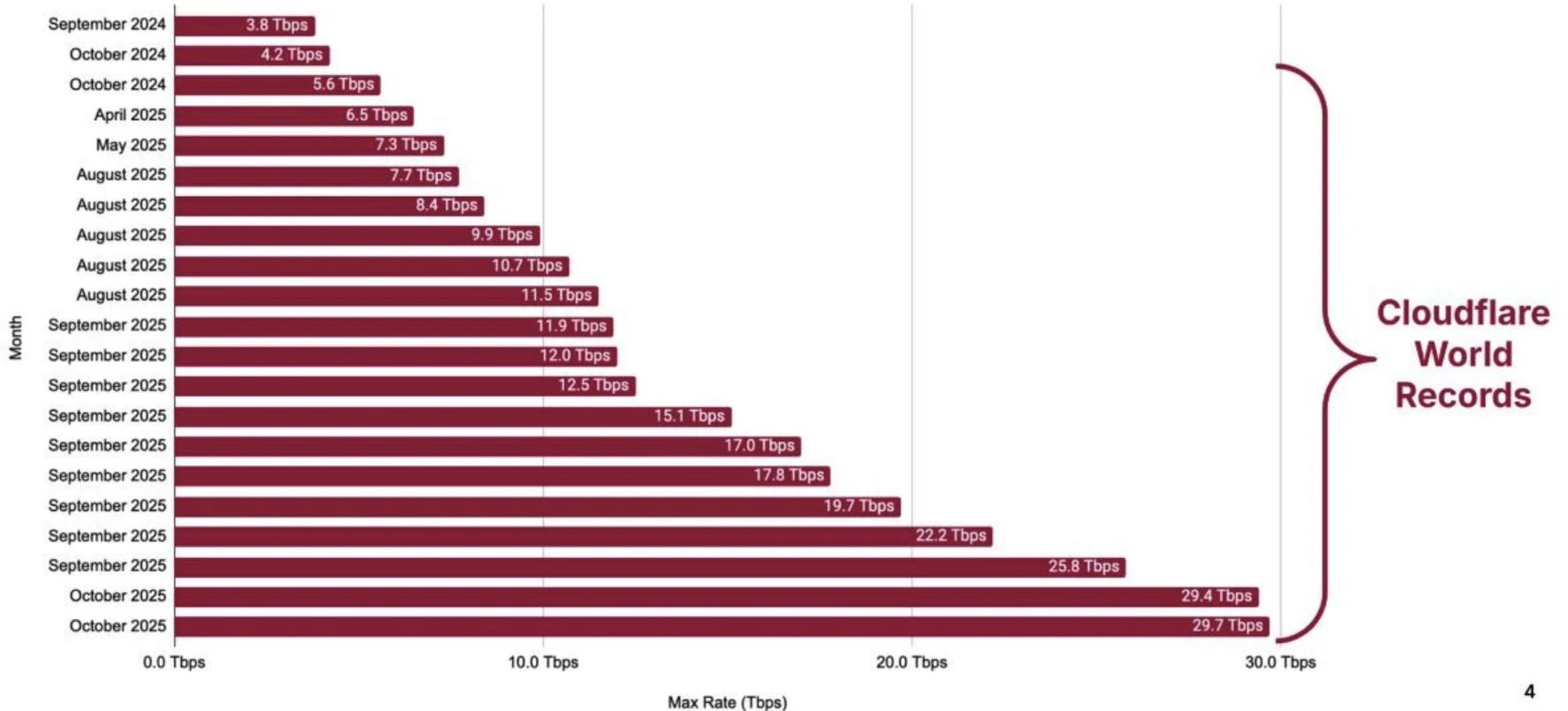
A	B	C	D	E
Feature	Cloudflare	AWS	Azure	GCP
POP/Edge Count	~330 cities (over 12,000 networks)	~600 PoPs (400+ Edge Locations + 13 regional caches)	192 edge locations (across 109 metro cities)	187 network edge locations
Network Strategy	Maximize proximity to end-users globally	Global reach for diverse cloud services, strong CDN	Global reach for diverse cloud services, strong CDN	Global reach for diverse cloud services, strong CDN
Cities	335+	90	109	187
POP's	335+	400+	200+	200+
Throughput	445 TBPS	150Tbps	100Tbps	100Tbps



Empower security, network, IT and developer teams to use the Internet as your corporate network



A selected handful of the largest DDoS attacks mitigated by Cloudflare



2024 DDOS STATISTICS



2024 & 2025 DDOS CLOUDFLARE STATISTICS



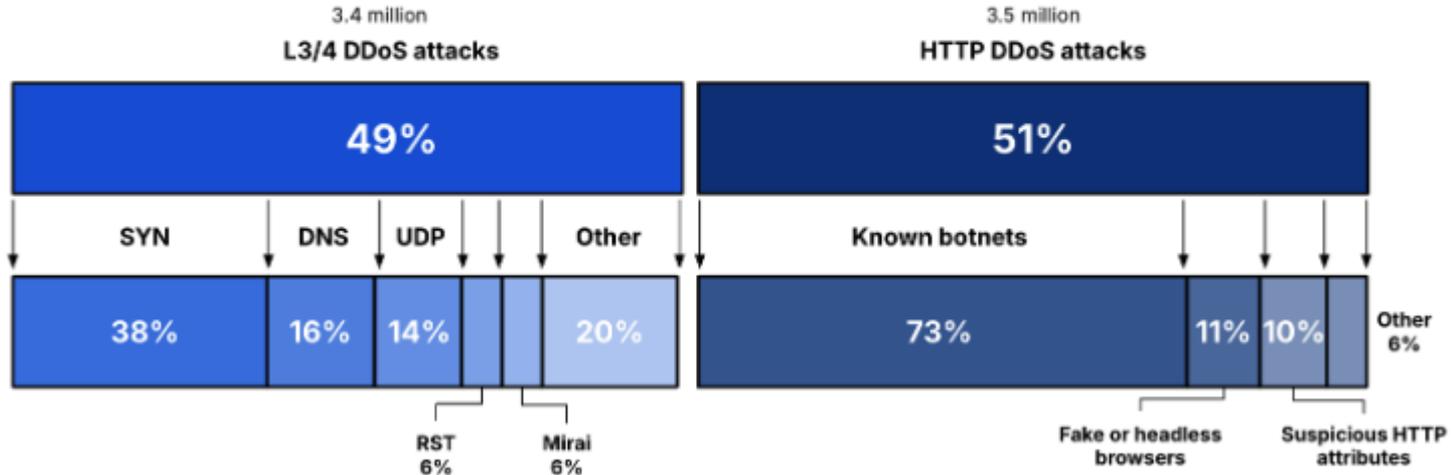
- In 2024, Cloudflare DDoS defense blocked **21.3 million DDoS attacks**
- In 2025, Cloudflare DDOS defence blocked **36.2 million DDOS attacks**
- **53% increase** compared to 2023
- **556% increase** compared to 2024
- 420 of those attacks were **hyper-volumetric**
- Exceeding rates of **1 billion packets per second (pps)**
- Attacks over 1Tbps grew by a staggering **1,885% quarter-over-quarter**
- During the week of **Halloween 2024**, Cloudflare DDoS defense systems successfully and autonomously detected and blocked a **5.6 Terabit per second (Tbps) DDoS attack**
- **The largest attack ever reported in 2024, since then 29.7 Tbps in 2025!!!**

ANATOMY OF 2024 DDoS ATTACKS



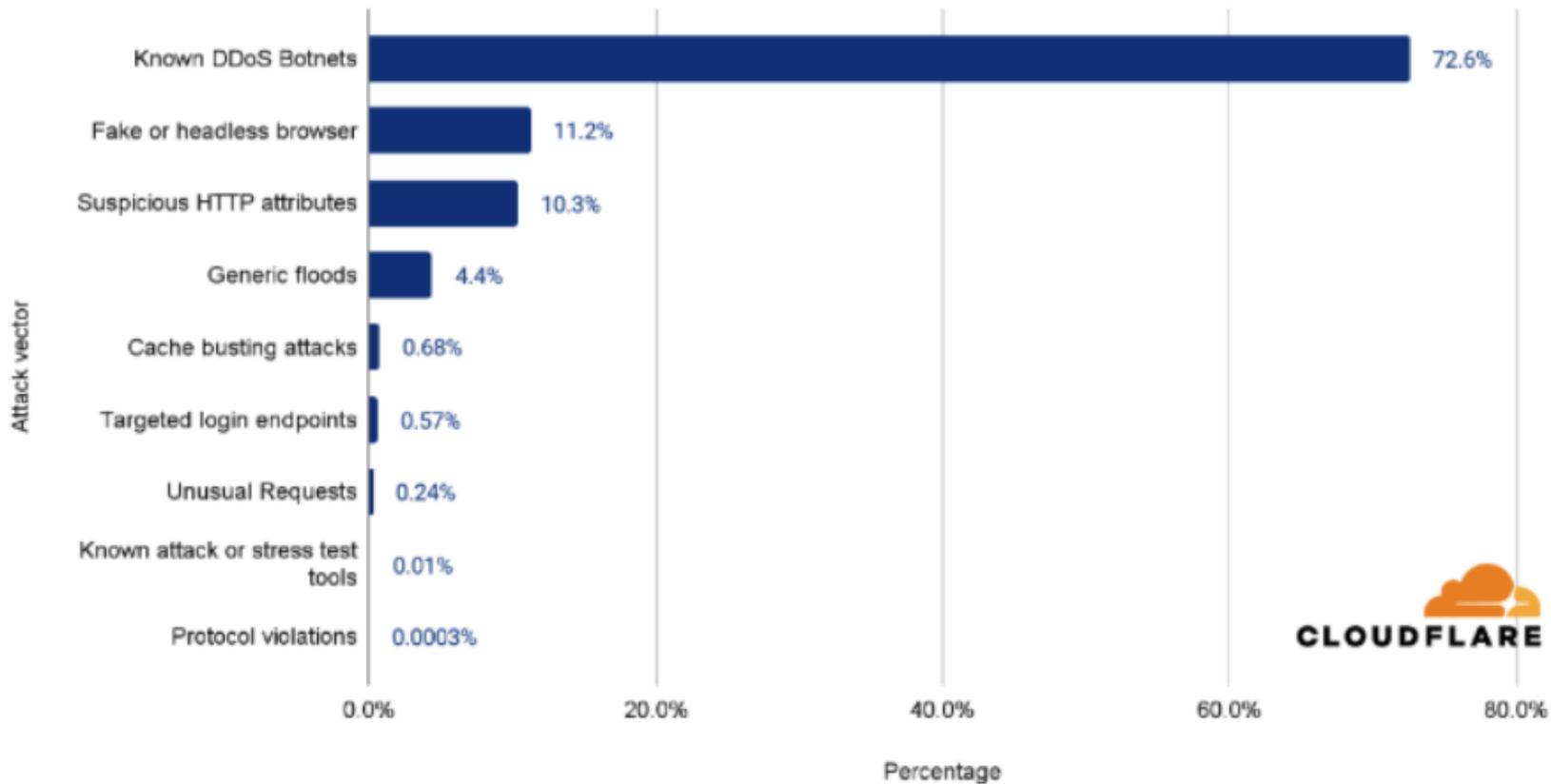
- Cloudflare mitigated **6.9 million DDoS attacks**. This represents a growth of **83% year-over-year (YoY)**.
- 49% (3.4 million) were **Layer 3/Layer 4** DDoS attacks
- 51% (3.5 million) were HTTP DDoS attacks.

Distribution of 6.9 million DDoS attacks 2024 Q4



DDOS ATTACK VECTORS

BOTS # 1

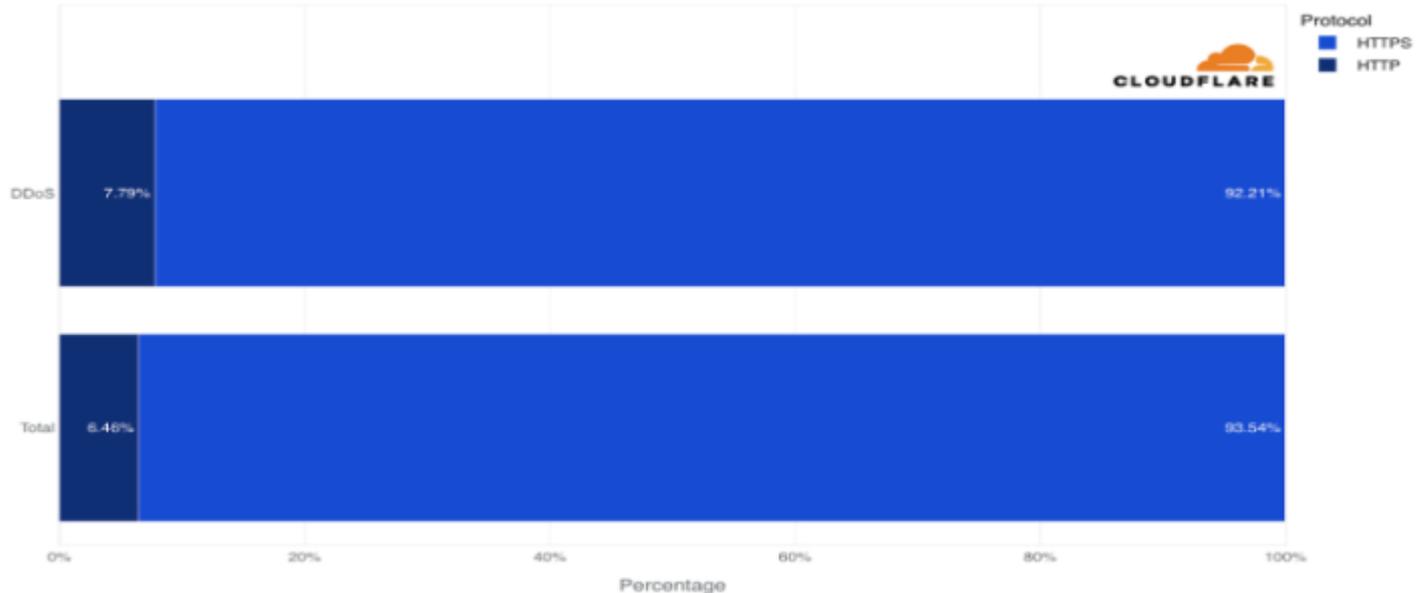


HTTP VS HTTPS ATTACKS

HTTPS #1



- 94% of legitimate traffic was **HTTPS**.
- 6% of legitimate traffic was HTTP
- **DDoS attack traffic**
 - **92%** of HTTP DDoS attacks over **HTTPS**
 - ~~4%~~ 8% were over plaintext HTTP.





**2024
HALLOWEEN
DDOS ATTACK**

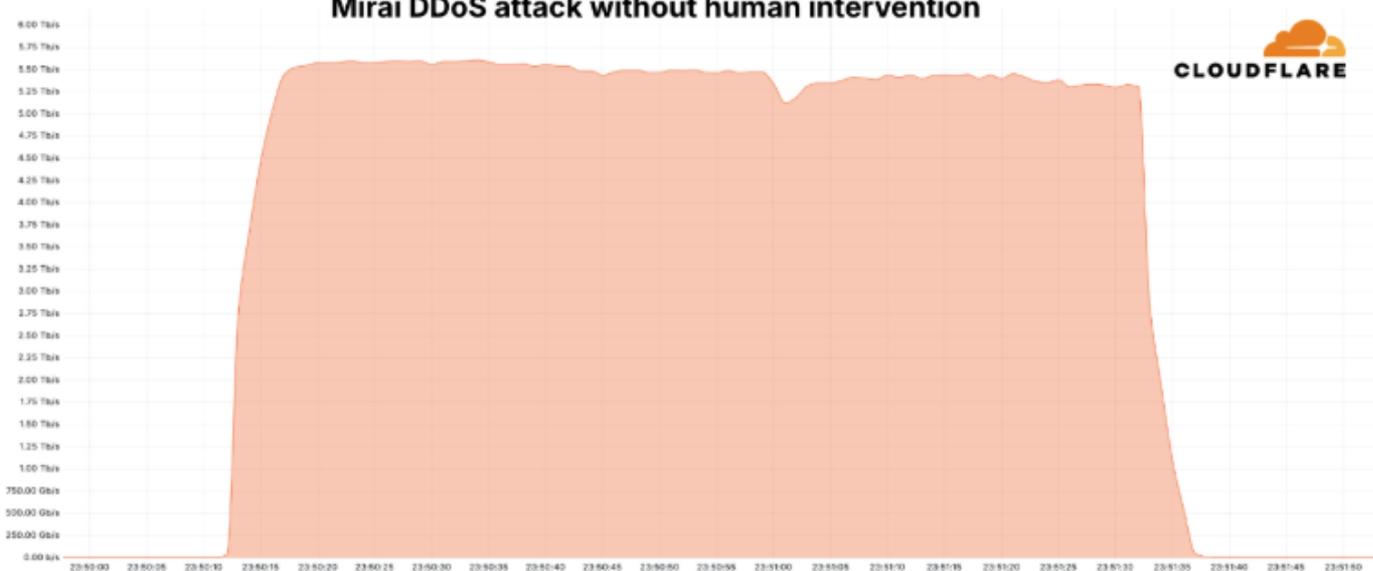


5.6TBPS LARGEST DDoS ATTACK ON RECORD !!



- On **October 29**, a 5.6 Tbps **UDP DDoS attack** launched by a Mirai-variant botnet
- Targeted a Cloudflare **Magic Transit** customer
- The attack lasted only **80 seconds** and originated from over **13,000 IoT devices**.
- Detection and mitigation were fully autonomous.
- It required **no human intervention**, didn't trigger any alerts, and **no performance degradation**.

Cloudflare's autonomous DDoS defenses mitigate a 5.6 Tbps Mirai DDoS attack without human intervention

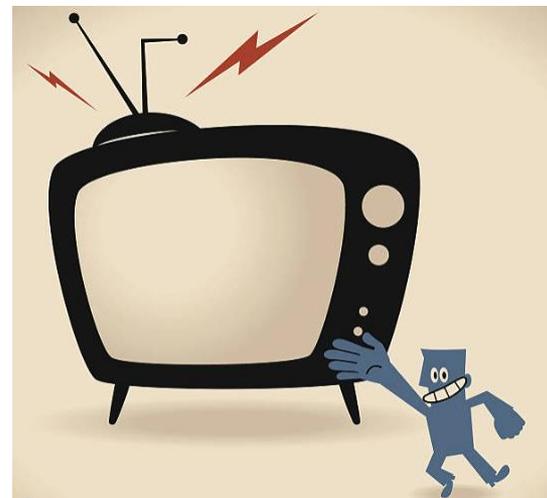
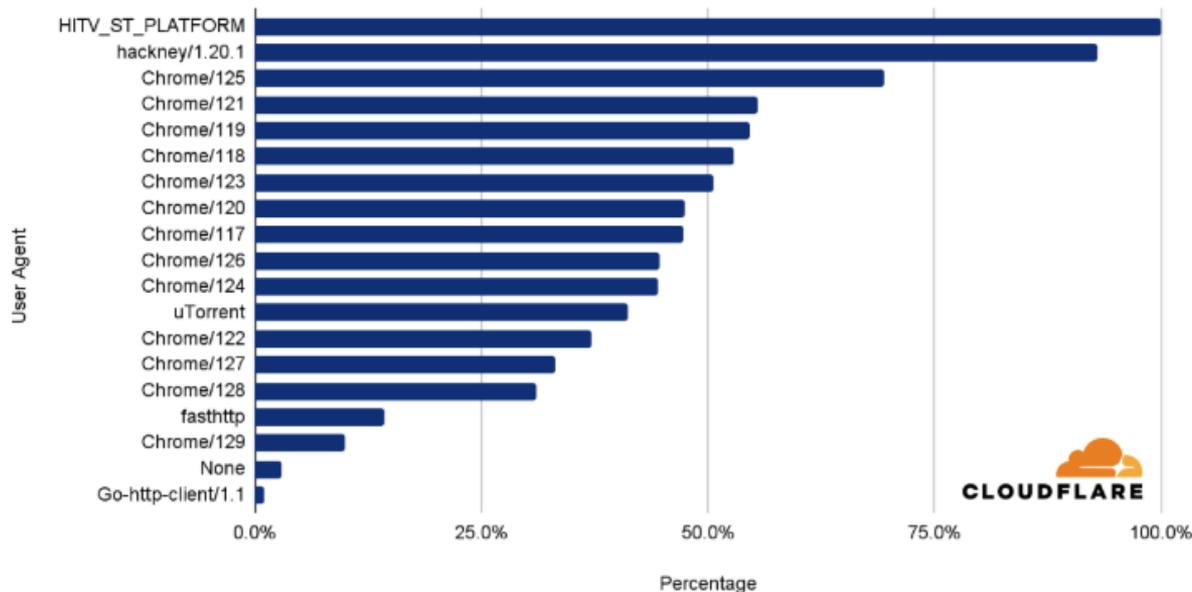


WHEN YOUR TV ATTACKS !!

HITV_ST_PLATFORM user agent is used with smart TVs and set-top boxes. Suggests that the devices involved in certain cyberattacks are **compromised smart TVs or set-top boxes**.

Percentage of DDoS requests out of total requests per user agent

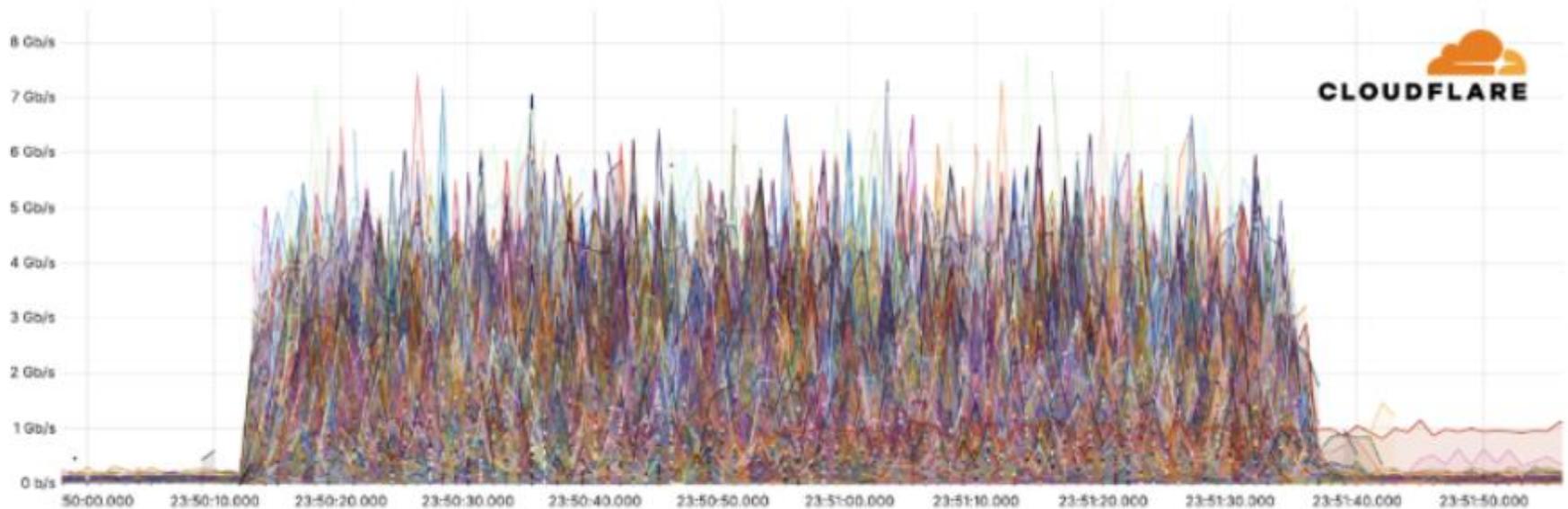
2024 Q4



13,000 UNIQUE IP's TOTAL



5500 UNIQUE SOURCE IP's PER SECOND!!



“Cloudflare Magic Transit has made a huge difference to Godwin Heights Public School District. Last year, I had to sit at my desk and monitor for DDoS attacks. This year, I can focus on other duties because Magic Transit blocks these attacks.”

Johann Radloff
Director of Information Services

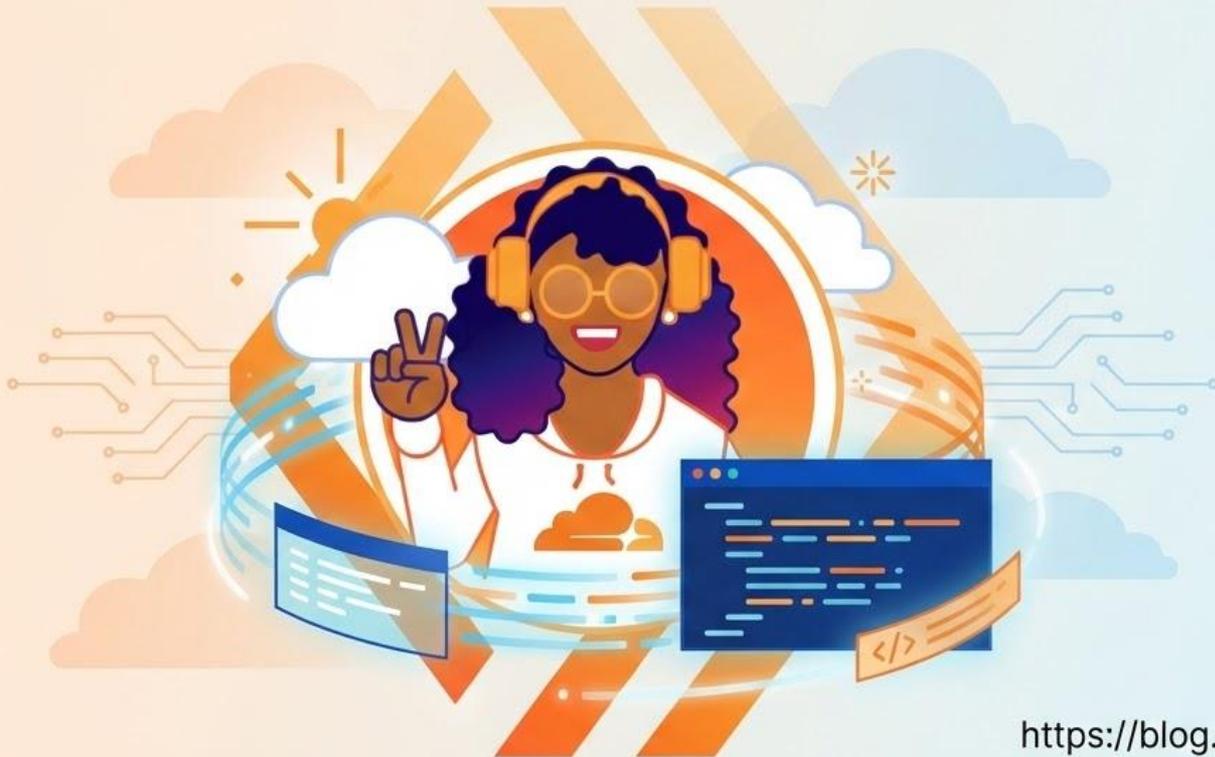


Cloudflare for Students - Developer Platform



Introducing **FREE** Access for University Students!

1 YEAR
FREE ACCESS



SCAN ME!

<https://blog.cloudflare.com/workers-for-students/>

Cloudflare is Hiring!



Announcing Cloudflare's goal to hire 1,111 interns in 2026



+1,111



SCAN ME!



See Open Positions

Now let's play a game!



Kahoot!



Thank you

→ 1 778 386 3981

✉ jhodge@cloudflare.com

🌐 <https://www.cloudflare.com/en-ca/education/>