NOSIA

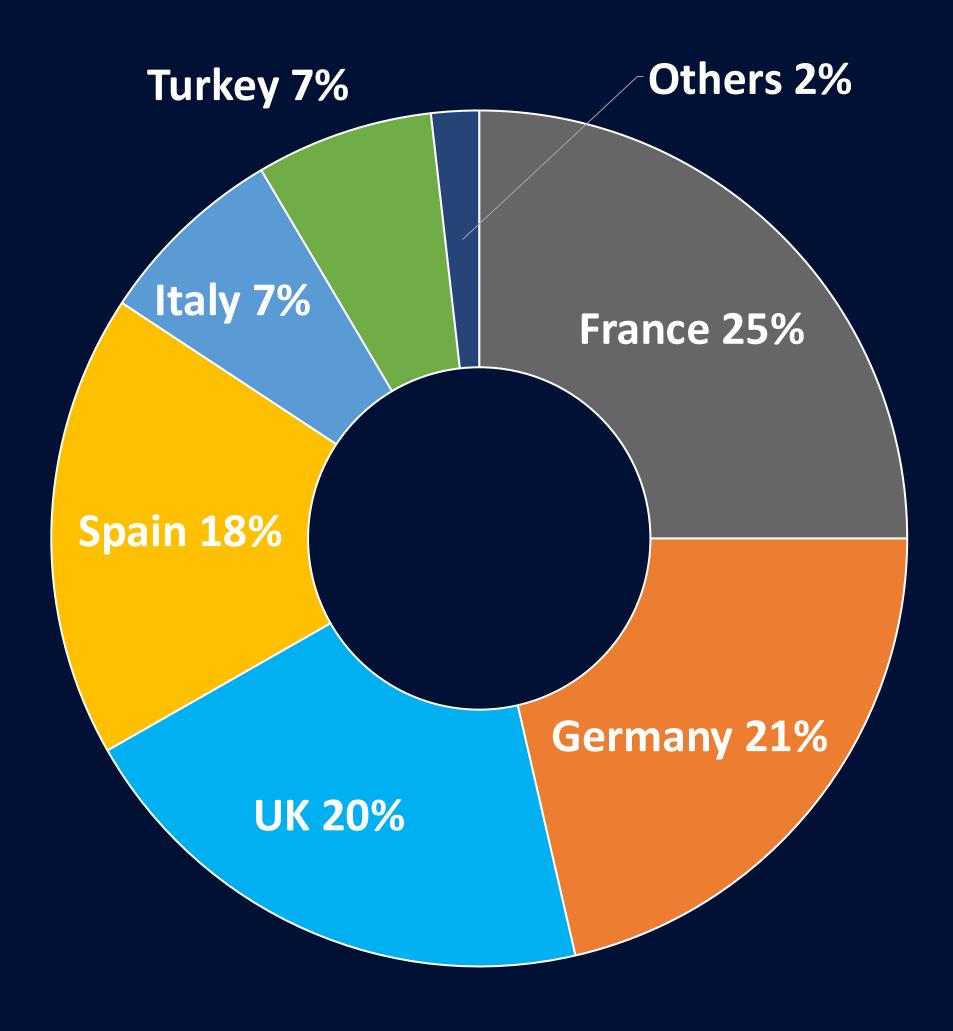
Defending the realm Deepfield in LINX

Vice President & CTO, NI Europe





DDoS Attack Distribution Across Europe



ENISA Security report, 2023



DDoS: Shifting Attack Vectors

2000 – 2020 Spoofed

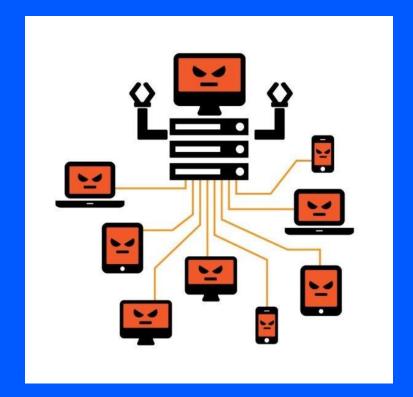


Small number of compromised machines generating spoofed traffic to victim or via misconfigured DNS, NTP, Memcache severs

Blocked on scrubber using SYN-cookie, port / protocol / packet size access control lists (ACLs) or policers

2020 – 2024
Botnet &
Industrialization

Of Attacks



Thousands of compromised IoT botnet devices generating traffic floods or sending realistic HTTP/DNS/VoIP requests to servers. GigE symmetric rollouts.

Difficult to mitigate using traditional DDoS mitigation appliances

2024+
Al & Proxies



Hundreds of thousands of residential proxies, compromised IoT sending realistic HTTP/DNS/VoIP requests to servers

High automation and attack variability. Both microburst and long-lived.

Compute

Bandwidth / Data

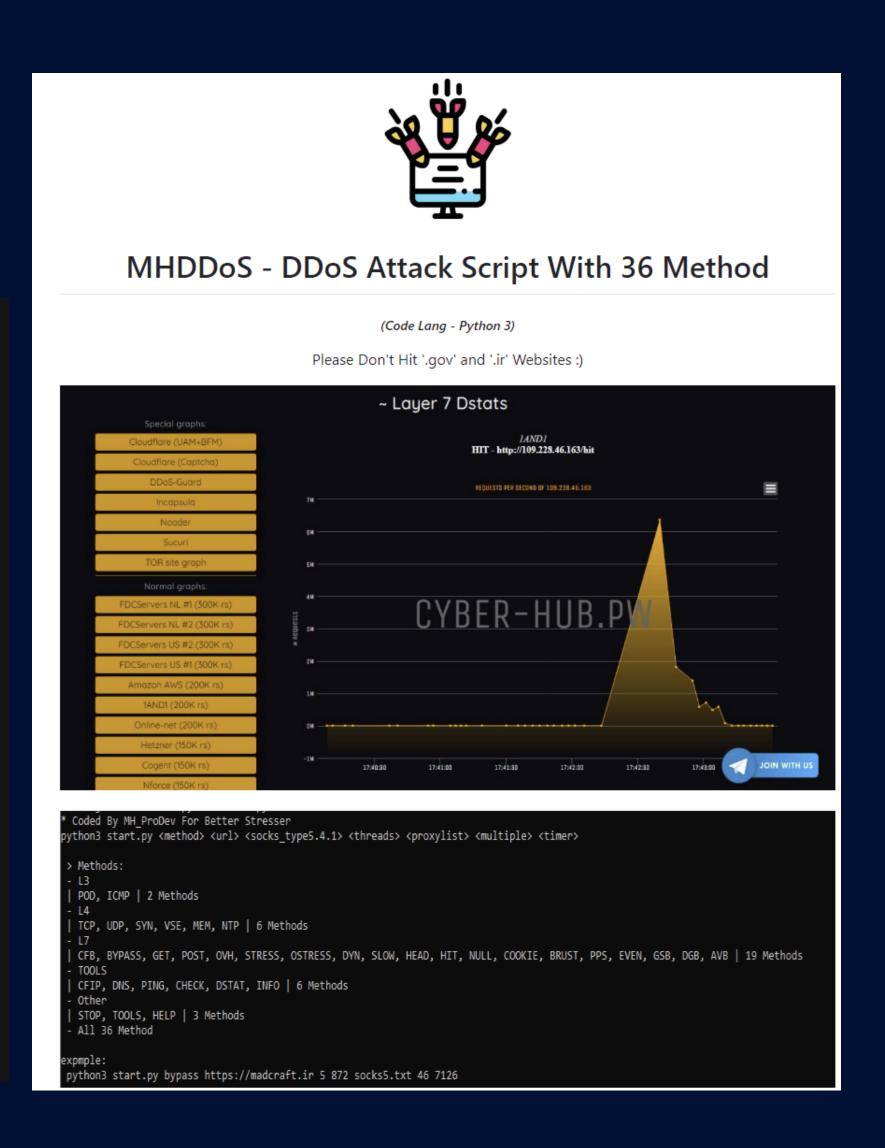
Speed / Automation



Attack Tools – Sophistication, Automation & Evasion

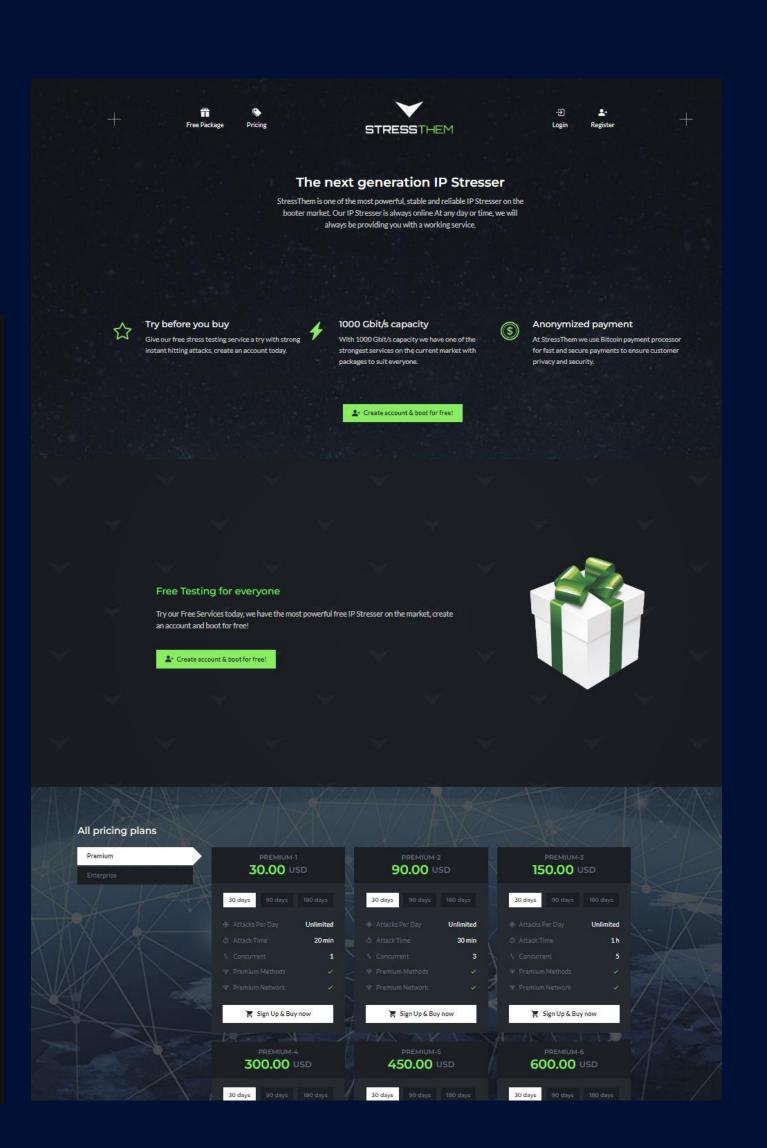
MHDDoS (on Github)

- 56 different methods
- Automated evasion for top cloud protection services
- Run through different methods



Stressthem (aaS)

- DDoS aaS business model
- Multiple attack methods, simultaneous attacks, attack sizes
- Free trial...up to \$600/m





Trends Impacting CSP/Enterprise







Automation & "DDoS Middleware Market" Reducing the Cost



Our approach: Big data + AI/ML-driven DDoS security Beating them at their game...

Use large, high-quality data sets

- Deepfield DDoS Library
- 10,000+ attacks from real networks

Maintain 'maps' of the internet; fingerprint apps and traffic incl. DDoS

- Deepfield Cloud
 Genome®
- Deepfield Secure Genome®

Create dynamic traffic models and monitor traffic in real time

- Deepfield Defender
- Mitigation Compiler Engine

Capitalize on processing power of network processors

- Across all FP platforms
- FP4, 5, Cx



#