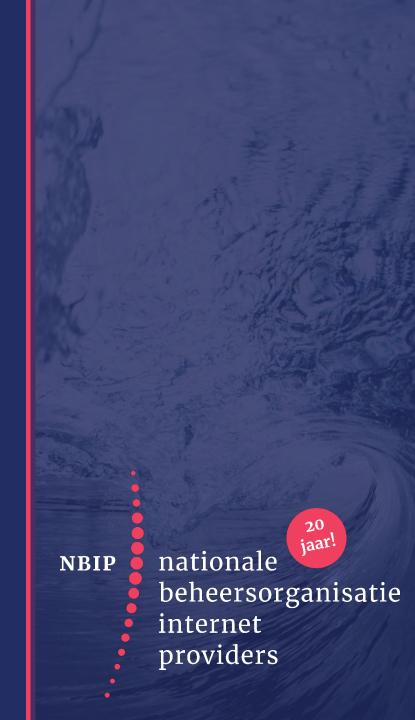


### whois ORG-SN292-RIPE

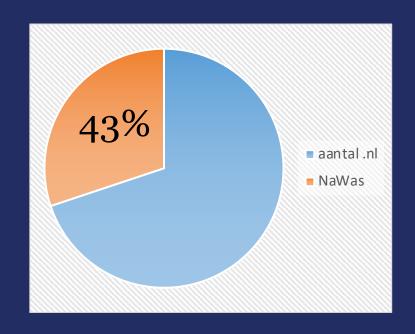
- org-name: Stichting NBIP https://www.nbip.nl/en/
- Independent non-profit foundation
- Sector initiative started in 2002

- Services for Internet Providers
  - Lawful Interception
  - Clean Networks Platform <u>www.cleannetworks.net</u>
  - DDoS Scrubbing Center NaWas
    - Mitigation
    - Reporting
    - Research and cooperation



### whois ORG-SN292-RIPE

- 6,5 M .nl domains protected by NaWas (2020)
- Aprox 1,6 M websites



- In 2013 request for anti DDoS solution
- Started POC 2<sup>nd</sup> 1/2
  2013
- NaWas operational in 2014
- NaWas connected to LINX in 2019
- NaWas connected to Italian IX and Netix in 2020







- Every quarter
  - nbip.nl/ddos-report



Stichting NBIP nbip.nl

# DDoS attack figures from the third quarter 2022







Number of attacks:

Average number of attacks per day:

Maximum attack size:

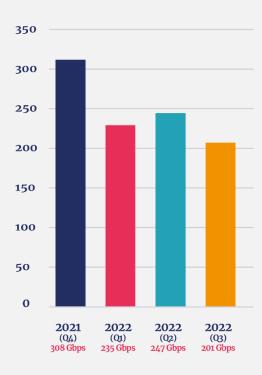
442

4,8

**201**Gbps

# DDoS attack figures from the third quarter 2022

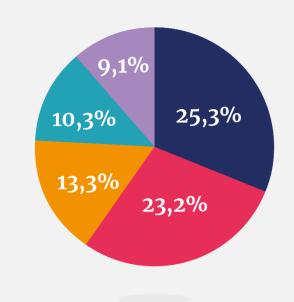




Prolonged attacks >4 hours

2022 2022 (second quarter) (third quarter)

**12** 



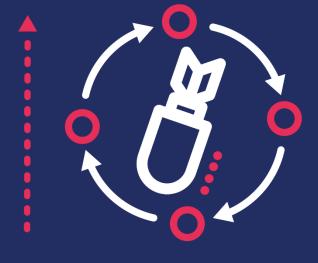
■ DNS amplification ■ UDP flood

NTP amplification **I** LDAP amplification

TCP flag attack

## Trends DDoS attack figures from the third quarter 2022







Fewer attacks than in the last quarters of '22, the downward trend since Q4 2021 continues Over a quarter of all detected DDoS attacks were 'DNS amplification' attacks

The forecast is that there will be less DDoS attacks in 2022 than in the previous year.

# Anti-DDoS-Coalitie



- Cooperation on knowledge sharing about DDoS attacks (2018)
  - Universities, IX's, ISP's, banks, goverment, law inforcement
  - National Cyber Security Centre (NCSC) facilitator





Presentations

#### News



New version of the DDoS Clearing House core components

30 September 2020

SIDN Labs and SURF have released a new version of the DDoS Clearing House in a Box, a system that enables network operators to automatically



the current DDoS attacks

4 September 2020

The website reflects coalition's joint efforts over the past two years In recent weeks, dozens of companies in The Netherlands and Europe have been targeted

Read More »

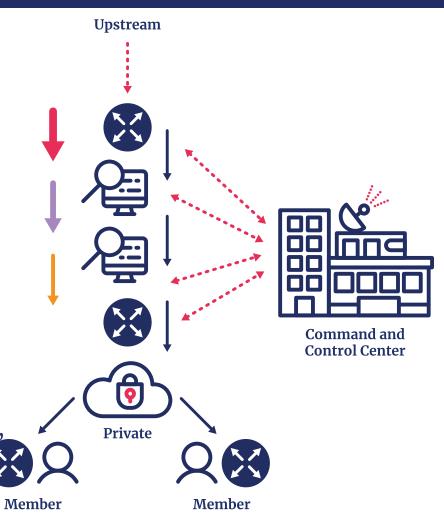
Stichting NBIP nbip.nl



# NaWas



- North: Internet
  - Several Tier-1 Transit
  - Public peering on Internet Exchanges
  - Amsterdam as one of major hubs in Europe
- West East: 3-stage scrubbing
  - Multiple vendors
  - Fail-over on multiple sites
  - Prefiltering with NaWas filters (migrating to FlowSpec)
- South: Clean Traffic
  - private connections
  - Only reachable through NaWas
  - PoP's via AMS-IX, NL-IX, Dcspine, Linx, Mix, Top-IX, Namex, Netix and Netnod





#### **R&D NaWas**

- DDoS Detectie as a Service (DaaS)
- Web Application Firewall (WAF-dp)
- Clearing House (Anti-DDoS coalition)
- DDoS Pattern Recognition generate filter rules (Dissector)

