

NaWas Anti-DDoS

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<https://www.nbip.nl/nawas/>

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 – www.cleannetworks.net
 - DDoS Scrubbing Center – NaWas
 - Mitigation
 - Reporting
 - Research and cooperation

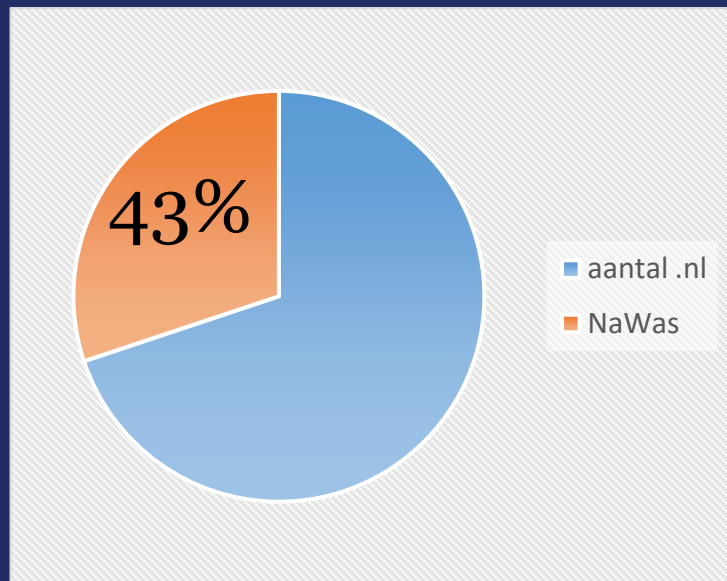
NBIP

nationale
beheersorganisatie
internet
providers

20
jaar!

whois ORG-SN292-RIPE

- 2.5 M .nl domains protected by NaWas
- Aprox 1,6 M websites
- 13 M IP address



- Independent not-for-profit foundation
- Transparent knowledge sharing
- 6 IX in EU and UK
- 150 members
- Members from 8 countries in EU

NBIP

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How it works – NaWas

- **North: Internet**

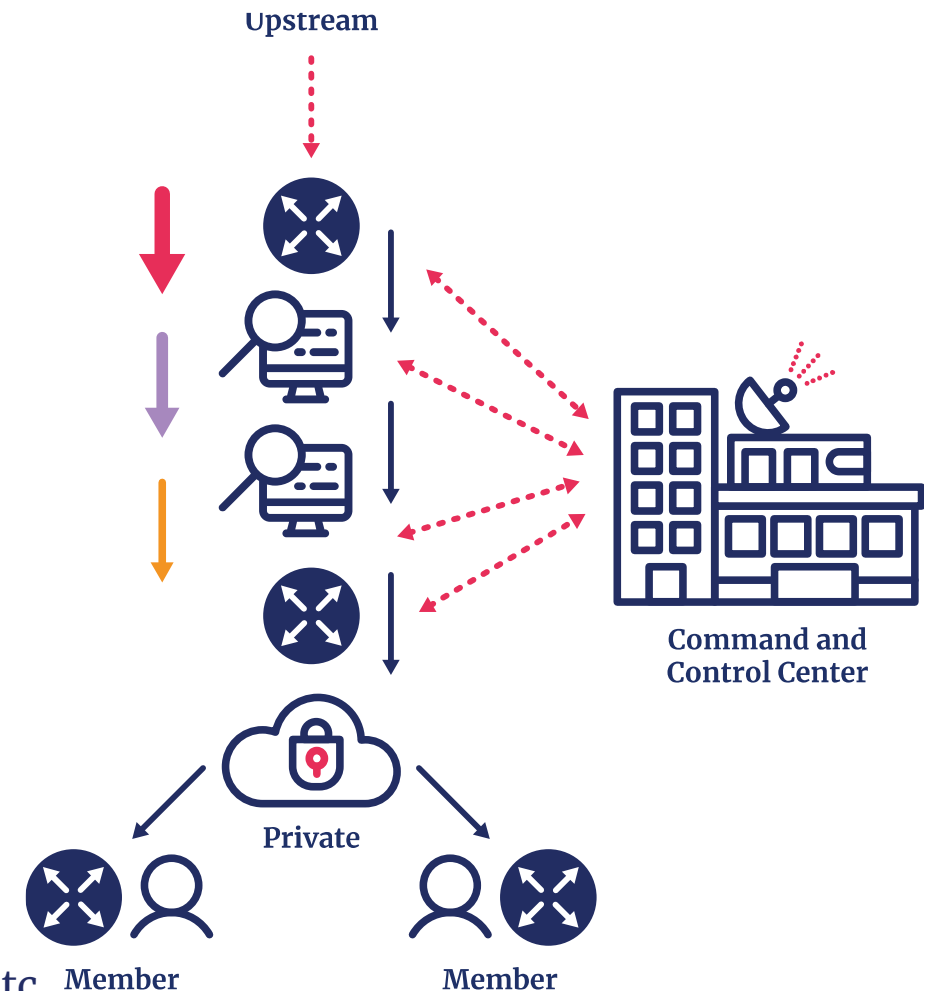
- Several Tier-1 Transit
- Public peering on Internet Exchanges
- Amsterdam and Denmark

- **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, VIX, etc



Mitigation on NaWas

- Pre-filter very high volume traffic
 - UDP src/dst port filters on destination IP
 - High volume filtering
- Challenging traffic
 - Filtering known DDoS types
 - Limiters on profiles
- Intelligent behavioural and content filtering
 - Filter on known content, like often used DNS queries
 - Behavioural DDoS traffic

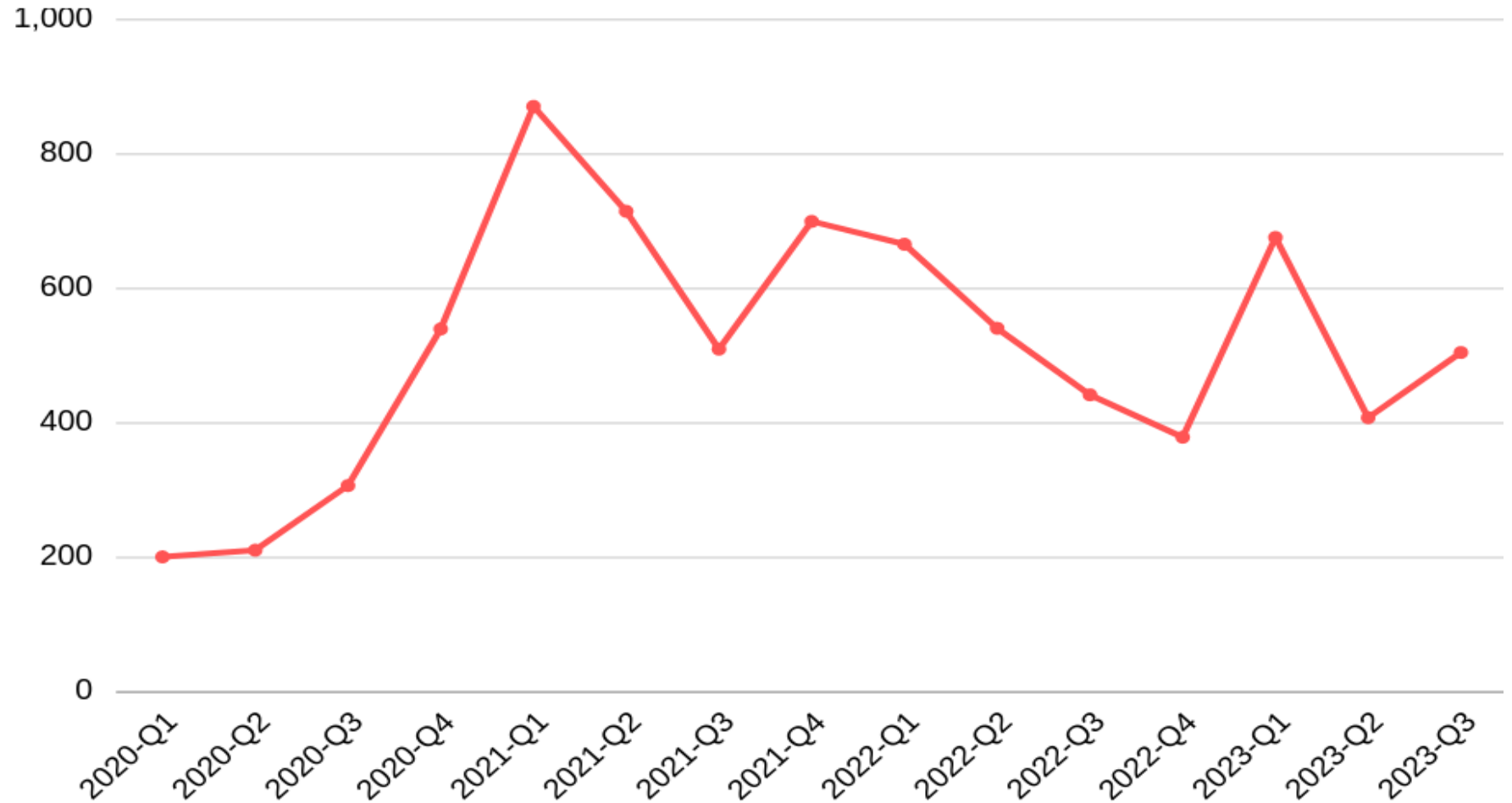
Interesting DDoS Stats



- Cisco predicted the no of attacks will double from 2018 to 2023 (15.4 M)
- Between 10% and 20% are financially motivated
- Top targeted industries, Finance 34%, Telco 26%, Retail 17%
- Bot sources, China 2M, US 1.8M
- Ave cost-per attack on commercial infra – 52K SME, 400K LE

NaWas

- No of Attacks



DDoS attack figures from the **third quarter 2023**



Number of
attacks:

505



Average number of
attacks per day:

5.5



Maximum
attack size:

213 Gbps

Trends DDoS attack figures from the **third quarter 2023**



Increase in new attack types, such as Rapid Reset Attack



Significantly more small-scale attacks (1-10 Gbps) than in Q2



Noticeable rise in attacks with a high PPS (parts per second in millions)

How it was going

2018



Directeuren NBIP en DINL uit kritiek op ABN Amro, ING, Rabobank en Volksbank

Banken moeten meer samenwerken om te voorkomen dat cybercriminelen hun diensten platleggen met DDoS-aanvallen. Ze zouden zich vaker moeten aansluiten bij collectieve initiatieven tegen cybercrime. Nu kiezen ze nog te vaak voor een individuele aanpak van netwerkbeveiliging bij één security-leverancier, daardoor missen ze de kennis en kunde van een grote achterban. Criminelen zijn namelijk ook in groepsverband georganiseerd.

Lees verder
op: <https://www.computable.nl/artikel/nieuws/security/6290656/250449/banken-moeten-meer-samenwerken-tegen-ddos.html>



'NaWas kan uitval van diensten door DDoS-aanvallen voorkomen'

30 januari 2018 [Nieuws](#)

De DDoS aanvallen die de afgelopen dagen ABN AMRO, ING, de Rabobank en de Belastingdienst plagen hoeven niet te leiden tot uitval van diensten. Dat stelt Octavia de Weerd van de [Nationale Beheersorganisatie Internet Providers \(NBIP\)](#).

De NBIP is een not for profit organisatie die zich toelegt op het snel en adequaat afslaan van grootschalige en/of langdurige DDoS aanvallen.



Banken waren opnieuw doelwit van ddos-aanval

Teenager suspected of crippling Dutch banks with DDoS attacks

A large distributed denial of service attack on banks and other organisations in the Netherlands, first thought to emanate from Russia, is now thought to have been launched by a local teenager



Secrets of our Success

- Cooperative shared model
- High-end technical services
- 24/7 available
- Transparant knowledge sharing
- Sustainable model

**Together
Smarter and
Stronger**