



CLEANPIPE

Effective protection from Distributed Denial
of Service attacks

CleanPipe

Gli attacchi Distributed Denial of Service (DDoS) sono attacchi informatici che, sovraccaricando di richieste il server vittima, rendono impossibile l'erogazione dei servizi.

CleanPipe consente di proteggere gli accessi IP G@TE/IP Look intercettando e eliminando a monte il traffico malevolo: la capacità del collegamento e i server del Cliente o del suo Cliente finale non sono impattati dal traffico dell'attacco.

Caratteristiche del servizio

Platform cleaning capacity	Attack duration	Addressing space
GBPS 160	Number of hours Unlimited	<ul style="list-style-type: none">• Number of addresses up to 65,536• Subnets attackable up to 20

Who is it for?

Operators wishing to offer a secure and always efficient Internet connection to their end customers, who need maximum continuity of their business (e.g. banks)

Preliminary services

CleanPipe is an additional option of the IP G@TE and IP Look services.

Description

The CleanPipe option of protecting accesses from Distributed Denial of Service (DDoS) attacks can be requested in one of two ways:

Reactive

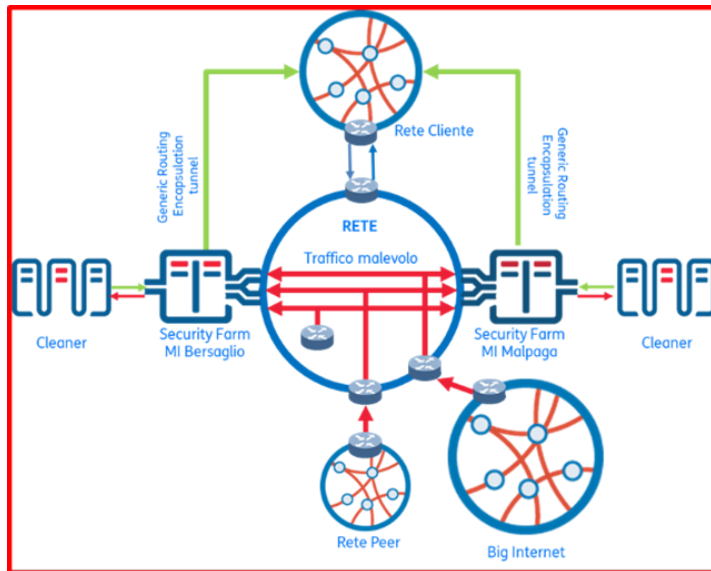
- the Customer pays for the intervention request by opening a Trouble Ticket;
- acceptance is within one hour (h24 7x7);
- continuous assistance throughout the duration of the attack until it is exhausted.

Automatic proactive

- attack mitigation is triggered as soon as download traffic volumes to the protected IP addresses exceed predefined thresholds;
- the customer has the option also to activate reactive mode.

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The following figure illustrates the mitigation process of a DDoS attack:



There are two phases:

- **Modification of the IP backbone** routing so that all traffic destined for the attack target IP (belonging to the IP sub-networks of the access protected by the CleanPipe) is diverted towards the traffic cleaning architectures;
- **Reinjection of the legitimate component of traffic** towards the device that terminates access to the customer's home through pre-configured and always active GRE tunnels.

Prices

CleanPipe Reactive:

- Activation fee;
- Monthly fee, based on the speed of network access and the number of cleaning interventions included in the profile;
- One-off payment for each subsequent cleaning not included in the monthly fee

Automatic Proactive CleanPipe:

- Activation fee;
- Monthly fee, based on the speed of network access and included an unlimited number of cleaning operations.

Regulatory Conditions

The services described above are aimed exclusively at:

- Operators with an individual license or a general authorisation for telephone networks and services for public use which existed before the entry into force of Italian Legislative Decree no. 259 of 1 August, 2003, containing the "Electronic Communications Code" (referred to in Article 38 of the Code), as last amended by Italian Legislative Decree no. 259 of 28 May, 2012. 70.
- Companies with a general authorisation for electronic communications networks and services pursuant to Art. 25 of the above-mentioned Italian Legislative Decree no. 259/2003, as last amended by Italian Legislative Decree no. 70 of 28 May 2012 70.

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