Wholesale Market

Clean Pipe

Effective protection from Distributed Denial of Service attacks

TIM

Clean Pipe

Distributed Denial of Service (DDoS) attacks are computer attacks that overload the victim server with requests, making it impossible to provide services.

CleanPipe protects G@TE/IP Look IP accesses by intercepting and eliminating malicious traffic upstream: the capacity of the connection and the Customer's or its end customer's servers are not impacted by the attack traffic.

Service features

Platform cleaning capacity	Attack duration	Addressing space
GBPS **160**	Number of hours Unlimited	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 of the CleanPipe service
The CleanPipe option of protecting accesses from Distribute 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 7×7);
> 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:
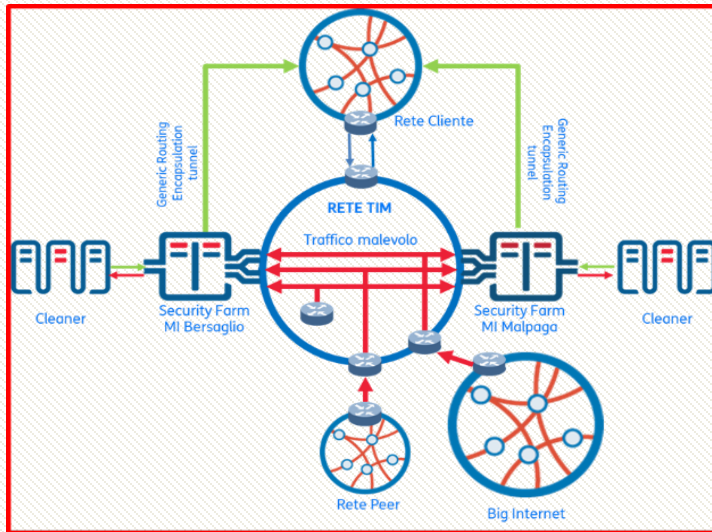
There are two phases:

Modification of the routing of the TIM IP backbone 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 to the traffic cleaning architectures;

Reinjection of the lawful component of the traffic towards the device terminating the access in the Customer's home through preconfigured and always active GRE tunnels.

Prices

Reactive CleanPipe:
- An activation fee;
- Monthly fee, depending on the speed of access to the TIM network and the number of cleaning operations included;
- One-off fee for each subsequent cleaning operation not included in the monthly fee.

Proactive Automatic CleanPipe:
- An activation fee;
- Monthly fee, depending on the speed of access to the TIM network and includes 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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