

PineApp™ Outbound Spam Guard™

An Anti-Botnet Solution

With global broadband penetration rates increasing and mobile phone/ smart phone technologies becoming more accessible, the burden on ISPs and Telcos to provide reliable, efficient internet services is more complex and necessary than ever.

With this increased burden, Service Providers are facing a serious challenge from malicious, but organized, networks of computers called botnets. Botnets operate within a network, using a Service Provider's infrastructure to distribute massive quantities of spam. Botnets are responsible for the distribution of up to 90% of the world's spam and strike at a Service Provider's core business assets: **IP addresses** and **bandwidth**.

Solution Overview

The PineApp OSG is a carrier-grade solution that can be easily deployed to scan and block up to 99% of all unwanted or malicious outbound email traffic. Easy to deploy, the OSG functions as a transparent proxy that informs the Service Provider, in real time and with granular level statistics, about which IP addresses within their networks are being controlled by botnets.

The OSG is the ideal solution to neutralize botnet activity within a Service Provider's network. By harnessing the power of PineApp's OSG, a Service Provider can reduce their blacklisted IPs, improve their IP reputation and reduce the unwanted consumption of their bandwidth.

Transparency

For a Service Provider, a standard anti-spam or mail relay solution will not suffice. For a solution to be "carrier-grade", it must effectively filter massive quantities of outbound email traffic without compromising the quality of service that users have come to expect. The OSG leaves no trace on the original email message and easily fits within the Service Provider's current network configuration.

Scalability

The PineApp Outbound Spam Guard Technology has been developed to address the needs of the world's largest Service providers with the ability to process over 40 Million email sessions per hour. Without compromising service continuity or quality, the OSG successfully blocks 99%, or more, of all unwanted outgoing email messages.

The OSG is a robust and reliable solution capable of delivering results - even in the most challenging networks.



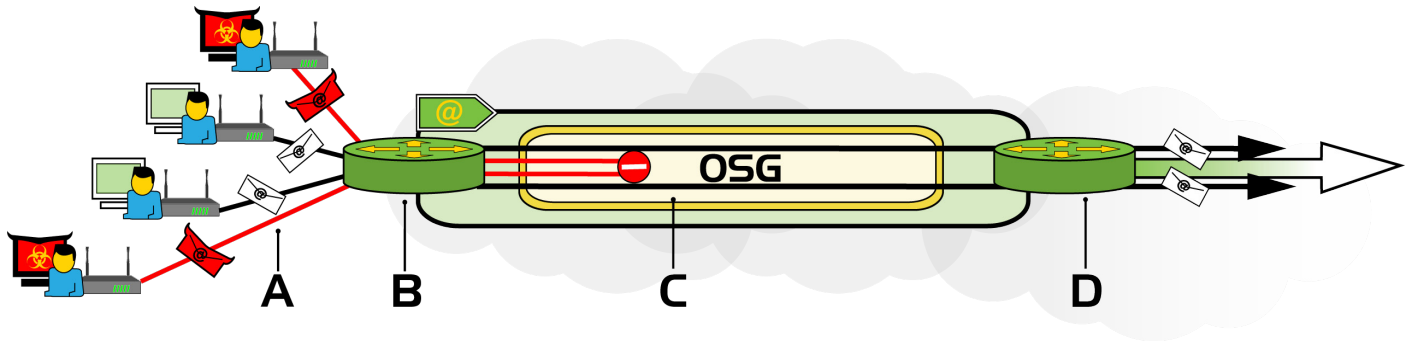
Features

- + Transparent solution
- + IP reputation
- + Over 12 Anti-Spam Engines
- + Recurrent Pattern Detection technology
- + IP rate limiting
- + Optional IP whitelisting
- + Detailed real time statistics

Benefits

- + Identify spammers within your network
- + Prevent IP (and ISP) blacklisting
- + Improve service reputation
- + Carrier-grade scalable solution
- + Neutralize the threat of botnets
- + Reduce overall bandwidth consumption
- + Improve SLAs
- + Available as hardware, software and on all virtualized platforms

The PineApp OSG in Action



- A. ISP clients use IP addresses to deliver emails from various sources. Concurrently, botnets use IP addresses to spam
- B. ISP automatically routes all outgoing SMTP traffic to the OSG array - including mobile/cellular, mail relays, etc

- C. OSG transparently inspects traffic, enabling various Anti-Spam engines to thoroughly scan outbound emails and reject or drop or all outbound spam
- D. Clean emails leave ISP network with original IP address intact and no affect on end user service experience

OSG Highlights

IP Rate Limiting

If any attack or email blast occurs from a known, unauthorized IP address, it is automatically blacklisted according to traffic volumes. The system allows you to limit maximum messages and sessions per IP by Hour/Minute/Second.

Internal IP Reputation System

This highly efficient engine uses proprietary technology to detect and block Spam originated from Zombies within the ISP's pool at the SMTP session level. Enforcement is applied internally, and the risk of blacklisting, as a result of mass delivery volumes, is reduced significantly.

Recurrent Pattern Detection Technology

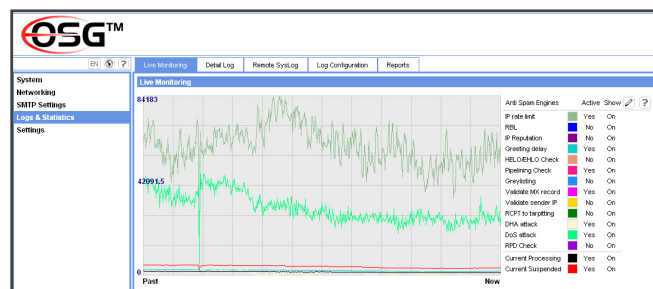
RPD technology analyzes large volumes of email traffic in real time, and is able to detect new Spam and Malware outbreaks as soon as they emerge, as well as mail sent from botnets (language independent), according to a repeating pattern within the actual mail message.

Transparent Solution

PineApp OSG provides full transparency during the entire inspection process. Traffic is redirected to the OSG, using routing rules, where SMTP traffic is fully inspected without leaving any record within the message's headers and without changing the source IP address by any means. Thus, the entire inspection process remains fully transparent.

Real Time Statistics

The PineApp OSG provides system administrators with real time and aggregate statistics related to outbound SMTP sessions including blocking rates of all enabled Anti-Spam Engines, top blocked IPs, alerts of black-listed IPs within the network and much more.



Screen shot of OSG user interface providing real time SMTP statistics

PineApp Ltd represented in Southern Africa by SeKure-IT cc, Johannesburg.

Tel: +27 (0) 11 609 9495, Fax: +27 (0) 11 452 4251, Email: hilton@sekureit.co.za, Web: www.pineapp.com