PfSense Project

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Key Advantages: Executive Summary

- → PfSense is a free BSD based version of Unix-Cost savings
- → Open source (publicly accessible-anyone can see, modify and distribute code as the see it. Cater to your own business liking.
- → Full feature of a router and firewall
- → Flexible and Powerful tool -Has ability to adapt to numerous applications (home router to a firewall for a large corporate network. From outdated computers to new ones.
- → Useful web based interfaces-also well supported software

Problems Identified

- → My corporation had a minimal budget \$\$
- → Employees accessing policy prohibited websites ie facebook, espn; unapproved e-mails
- → Servers were slow to load; network constantly crashing
- → Current firewall was stale no plug-ins to improve efficiency
- → Very vulnerable to hackers trying to infiltrate company resources, weak setup

Solution-Install PfSense

- → PfSense is free-No licensing fee (big Savings)
- → Load balancer (share load with multiple servicers); failover aggregation runs very well-allows traffic to continually flow-redundancy
- → VPN solution (OpenVPN, IPsec, PPTP)
- → Internet filter- block restricted websites, add allowable websites
- → Usage Monitor-overall bandwidth utilized, size, type, origin and destination of each packet, website visited, how long, data download.
- → Stateful firewall-tracks network connections traversing through it.

Explanation of the solution

- → PfSense provided network security solutions (rules, user access, filters, monitoring and logs.)
- → PfSense has the most advanced technology in protecting my companies network
- → Platforms were reliable and stable.
- → PfSense is very cost efficient
- → Resolved my companies problems (\$\$, slowness, minimal security) in an instant -Time is money

Solution-Cont'd

- → Option to install packages with just one click:
- → Security-stunner, snort, nmap, etc
- → Monitoring-iftop, ntopng, darkstat, etc.
- → Networking- netio, nut, Avahi
- → Routing- frr, olsrd, routed, OpenBGPD
- → Services-iperf, widentd, bind, acme,etc

Summary

- → Very easy to install
- → Free with easy to read graphs
- → Attacks most or all company security issues with current technology-blocks viruses, has an intrusion detection, Failover tolerant (routers share a virtual ip address)
- → PfSense is well supported-Constant updates, forums, & paid support