PF firewall (FreeBSD, OpenBSD) configuration and debug commands cheat sheet

Author: Yuri Slobodyanyuk, https://www.linkedin.com/in/yurislobodyanyuk/

PF (Packet Filter) management for FreeBSD & OpenBSD

Command	Description
pfct -d	Disable PF in place, does not survive reboot.
pfctl -ef /etc/pf.conf	Enable PF and load the rule set from file `/etc/pf.conf` in one go.
pfctl -nf /etc/pf.conf	Parse security rules stored in a file without installing them (dry run).
pfctl -F <all/rules/nat/states>	Flush, accordingly: • `all` Everything (filter rules, nat, but NOT sateful table - those already connected will stay so). Blank/flushed rules mean "permit any any". • `rules` Rules only (stateful table of existing connections stay intact) • `nat` NAT rules only • `states` Stateful table (but again - active connections stay alive)
pfct -k <source IP of connection to clear> [-k <destination>]	Kill an active connection from the state table. You can specify IP address as the 1st selector to the 1st `-k` and optionally, destination selector with another `-k` key. `0.0.0.0/0` as a wildcard can be used. E.g. to clear all connections from any to 10.10.10.13/32 `pfctl -k 0.0.0.0/0 10.10.10.13/32`. To add selectors, look at available ones via **pfctl -s state**.
pfctl -z	Clear all per rule statistics/counters

Command	Description
pass in quick on egress from 62.13.77.141 to any	'Quick' rule, means allow this traffic to pass through on all interfaces, otherwise we would need 2nd rule allowing this traffic in *outgoing* direction on egress interface, to allow destined to ANY port/protocol with the source being `62.13.77.141` and destination being ANY IP address behind the PF firewall. NOTE: here, `egress` is not a direction, but a group name to which the interface in question (`em0`) belongs to. In OpenBSD you set it in a file `/etc/hostname.em0: group egress` or in real-time with the command: `ifconfig em0 group egress`.