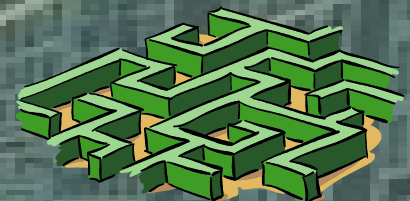


What is OpenBSD doing (out-of-the-box)

➤ Michael Pounov

OpenBSD overview from recent few years ...

Fast traveling into one integrated OS.
It is Focused onto security, network, clean design,
correct code and reliability..

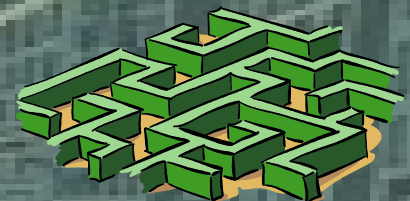


☐ *For Introduction - Many programs are changed with self made*

- Groff → mandoc
- Scrrren → tmux
- Ntpd → openntpd
- Pkg_* → with new pkg_* tools

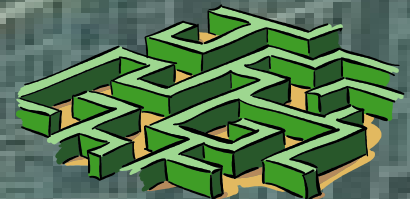
- Cvs → opencvs
- Sendmail → opensmtpd

and others was be added ...



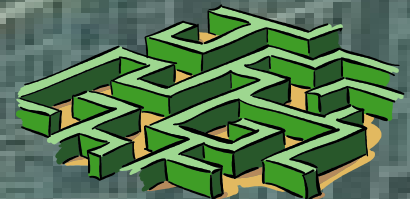
Ok! Lets our journey begins

- XENOCARA
- Compilers: GCC 4.2.1 and PCC
- Perl
- Web servers: Apache 1.3 and NGINX
- Self Security monitoring
- System monitoring
- Rescue & Repair system
- Remote system upgrade
- Laptop (power management)
- New ports system



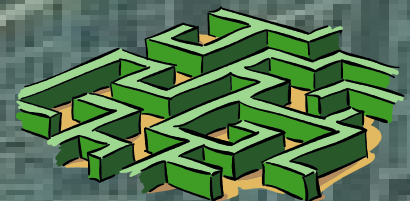
System goodies - Monitoring

- atactl
0 * * * * /sbin/atactl /dev/sd0c smartstatus
- sensorsd
- snmpd, snmpctl
- bgplg
- scan_ffs
- scsi
- pflogd
- apmd, apm
- gpioctl
- watchdogd, watchdog



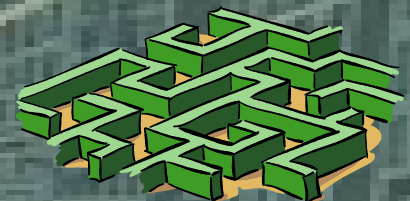
Network - Warming Up!

- ⇒ OpenBGPD: bgpd, bgpctl
- ⇒ OpenOSPF: ospfd, ospfctl
- ⇒ OpenOSPF: ospf6d, ospf6ctl
- ⇒ OpenBSD IPSEC: isakmpd, ikev2
- ⇒ relayd, relayctl
- ⇒ OpenBSD DHCPD: dhcpd, dhcrelay
- ⇒ named
- ⇒ OpenNTPD: ntpd
- ⇒ OpenBSD LDAP: ldapd, ldapctl
- ⇒ OpenBSD LDAP: ldapd, ldapctl
- ⇒ OpenSSH: sshd, ssh, sftp, ssh-*
- ⇒ PF: authpf, authpf-noip
- ⇒ npppd, npppctl
- ⇒ ifstated, hotplugd



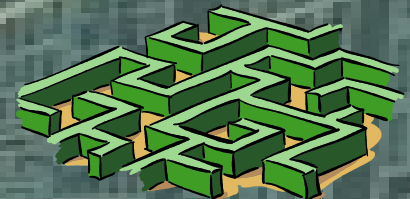
Network - Interfaces

- VLAN Q-in-Q and Q-in-Q-in-Q... :-)
- VRF Rdomain, RtLabel, MultiRPath
- MPLS mpe, ldp
- IPSec IKEv1, IKEv2, enc and crypto devices
- PF pflog, pfsync, pflow
- CARP redundancy, balancing-arp, ip
- Trunk broadcast, failover, lacp, loadbalance, none, roundrobin
- Tunnels GRE, GIF, TUN, PPPOE, pipex
- Bridge pseudo interfaces like VETHER
- Really ***FULL*** IPv6 support , NAT6, Frags & etc
- Removed hostapd & wpa_supplicant



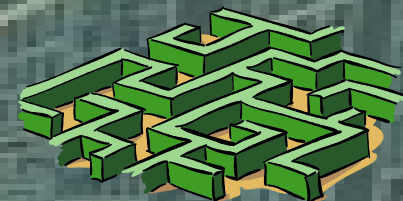
PF – Heart of OpenBSD

- WARNING: PF is product of OpenBSD and only in there is **FULLY** functional!
- PF has many differences against other neighbor's PF ports :)
- Main differences::
match, nat-to, binat-to, rdr-to, route-to, reply-to, dup-to, divert-to, once, probability, prio, received-on, rtable, tos, set hostid, set reassemble, set ruleset-optimization, set state-defaults, new anchor syntax, pflow, no-sync, new scrub syntax
- Have you seen siberian moose? Ok, this is totally different! :-D



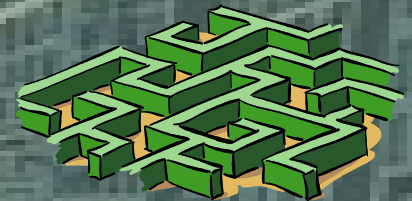
And some interesting service for finish RELAYD

- Reverse proxy, SSL accelerated reverse proxy
- Transparant proxy with filter
- Application redirector
- Load balancer
- Host's health monitoring
- Methods for host check: icmp, tcp, http/https, external scripts
- NAGIOS and MUNIN have plugins for harvesting statistics
- Modes for balancing: hash, loadbalance, roundrobin



Q & A

- If we have some free time to losing to the end ... I should try to show some production machines with OpenBSD. :-D



Thanks!

➔ Go troll start from this point ... :-D

