The BSDs & pkgsrc - Introductory fun for the whole family

Featuring slides from a past life describing The BSD Family of Operating Systems

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There are two main flavors of UNIX: one from AT&T ("original") and one from the University of California, Berkley ("extra crispy")
1989
FreeBSD handbook
NetBSD Guide
NetBSD Internals
OpenBSD FAQ

2014
NetBSD

IoT visionaries by targeting a Toaster

VAX support

veriexec

ATF

Unprivileged builds

build.sh

pkgsrc
FreeBSD
Moving towards free from GPL in base
dummynet
jails / VIMAGE
geom
ports
bhyve
Capsicum
RISC-V support
BERI - CheriBSD
DragonFly BSD
HAMMER
Scaling on multi-cpu systems
Clustered Filesystem
Scheduler improvements
LWK (Light Weight Kernel Thread) / User Thread Scheduler
vkernerl
swapcache
RetroBSD
LiteBSD

```
2.11 BSD Unix for PIC32, revision 892 build 1:
Compiled 2014-03-29 by
/usr/local/retrobsd/sys/pic32/max32-eth

CPU: 795F512L 80 MHz, bus 80 MHz
oscillator: XT crystal, PLL div 1:2 mult x20
console: tty0 (5,0)
sd0: port SPI2, select pin C14
sd0: type SDHC, size 15339520 kbytes, speed 13 Mbyte/sec
phys mem = 128 kbytes
user mem = 96 kbytes
root dev = rd0a (0,1)
root size = 163840 kbytes
swap dev = rd0b (0,2)
swap size = 2048 kbytes
temp0: allocated 47 blocks
/dev/rd0a: 576 files, 8644 used, 154555 free
Starting daemons: update cron

login:  
```
The way it was characterized politically, you had copyright, which is what the big companies use to lock everything up; you had copyleft, which is free software's way of making sure they can't lock it up; and then Berkeley had what we called ‘copycenter’, which is ‘take it down to the copy center and make as many copies as you want.’

— Kirk McKusick, BSDCon 1999
NASA
Network stack
pkgsrc

Android
OpenBSD libc
mksh

Apple
NetBSD & FreeBSD for Darwin
PF
Airport OS

Toyota
OpenBSD libraries?

Juniper
NetApp
Force10
Sony Playstation
....
Packaging
Ports
Started in FreeBSD
circa 1994
NetBSD pkgsrc / OpenBSD ports adopted around 1997
DragonFly BSD Dports ~ 2012?
### pkgsrc platform support

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<th>Platform</th>
<th>Date Support Added</th>
<th>Notes</th>
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<td>README.Solaris</td>
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<td>Oct 2001</td>
<td>README.MacOSX</td>
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<td>FreeBSD</td>
<td>Nov 2002</td>
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<td>Dec 2002</td>
<td>README.IRIX README.IRIX5.3</td>
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<td>BSD/OS</td>
<td>Dec 2003</td>
<td>README.AIX</td>
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<tr>
<td>AIX</td>
<td>Dec 2003</td>
<td>README.Interix</td>
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<td>Interix (Microsoft Windows Services for Unix)</td>
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<td>DragonFlyBSD</td>
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<td>HP-UX</td>
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<td>Haiku</td>
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<td>Jan 2011</td>
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<td>Cygwin</td>
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<td>GNU/kFreeBSD</td>
<td>Jul 2013</td>
<td>README.GNUkFreeBSD</td>
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<tr>
<td>Bitrig</td>
<td>Jun 2014</td>
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pkg_tools
pkgng
OpenBSD pkg_tools?
FreeBSD - poudriere
NetBSD pkgsrc - pbulk
OpenBSD - dpb
Security Notification
FreeBSD vuxml
pkgsrc pkg-vulnerabilities