

# FreeBSD in packages

Andrey Zonov, August 2012

# How to update FreeBSD?

# How to update FreeBSD?

- `svn co svn://svn.freebsd.org/base/stable/9 /usr/src`

# How to update FreeBSD?

- `svn co svn://svn.freebsd.org/base/stable/9 /usr/src`
- `make buildworld buildkernel`

# How to update FreeBSD?

- `svn co svn://svn.freebsd.org/base/stable/9 /usr/src`
- `make buildworld buildkernel`
- `make installkernel`

# How to update FreeBSD?

- `svn co svn://svn.freebsd.org/base/stable/9 /usr/src`
- `make buildworld buildkernel`
- `make installkernel`
- `reboot`

# How to update FreeBSD?

- `svn co svn://svn.freebsd.org/base/stable/9 /usr/src`
- `make buildworld buildkernel`
- `make installkernel`
- `reboot`
- `mergemaster -p`

# How to update FreeBSD?

- `svn co svn://svn.freebsd.org/base/stable/9 /usr/src`
- `make buildworld buildkernel`
- `make installkernel`
- `reboot`
- `mergemaster -p`
- `make installworld`



# How to update FreeBSD?

- `svn co svn://svn.freebsd.org/base/stable/9 /usr/src`
- `make buildworld buildkernel`
- `make installkernel`
- `reboot`
- `mergemaster -p`
- `make installworld`
- `make delete-old`

# How to update FreeBSD?

- `svn co svn://svn.freebsd.org/base/stable/9 /usr/src`
- `make buildworld buildkernel`
- `make installkernel`
- `reboot`
- `mergemaster -p`
- `make installworld`
- `make delete-old`
- `mergemaster -iUF`

# How to update FreeBSD?

- `svn co svn://svn.freebsd.org/base/stable/9 /usr/src`
- `make buildworld buildkernel`
- `make installkernel`
- `reboot`
- `mergemaster -p`
- `make installworld`
- `make delete-old`
- `mergemaster -iUF`
- `reboot`

# How to update FreeBSD?

- `svn co svn://svn.freebsd.org/base/stable/9 /usr/src`
- `make buildworld buildkernel`
- `make installkernel`
- `reboot`
- `mergemaster -p`
- `make installworld`
- `make delete-old`
- `mergemaster -iUF`
- `reboot`
- `portmaster -a`

# How to update FreeBSD?

- `svn co svn://svn.freebsd.org/base/stable/9 /usr/src`
- `make buildworld buildkernel`
- `make installkernel`
- `reboot`
- `mergemaster -p`
- `make installworld`
- `make delete-old`
- `mergemaster -iUF`
- `reboot`
- `portmaster -a`
- `make delete-old-libs`

# How to update FreeBSD?

- `svn co svn://svn.freebsd.org/base/stable/9 /usr/src`
- `make buildworld buildkernel`
- `make installkernel`
- `reboot`
- `mergemaster -p`
- `make installworld`
- `make delete-old`
- `mergemaster -iUF`
- `reboot`
- `portmaster -a`
- `make delete-old-libs`
- `reboot`

# How to update FreeBSD?

- `svn co svn://svn.freebsd.org/base/stable/9 /usr/src`
- `make buildworld buildkernel`
- `make installkernel`
- `reboot`
- `mergemaster -p`
- `make installworld`
- `make delete-old`
- `mergemaster -iUF`
- `reboot`
- `portmaster -a`
- `make delete-old-libs`
- `reboot`
- `profit!`

# How to update FreeBSD with pkgng?



# How to update FreeBSD with pkgng?

- `pkg upgrade -y`

# How to update FreeBSD with pkgng?

```
• pkg upgrade -y  
• profit!  
• profit!  
• profit!  
• profit!  
• profit!  
• profit!  
• profit!  
• profit!  
• profit!  
• profit!  
• profit!  
• profit!
```

# How to update FreeBSD with pkgng?

# How to update FreeBSD with pkgng?

- `svn co svn://svn.freebsd.org/base/stable/9 /usr/src`

# How to update FreeBSD with pkgng?

- `svn co svn://svn.freebsd.org/base/stable/9 /usr/src`
- `./builder world`

# How to update FreeBSD with pkgng?

- `svn co svn://svn.freebsd.org/base/stable/9 /usr/src`
- `./builder world`
- `./builder kernel`

# How to update FreeBSD with pkgng?

- `svn co svn://svn.freebsd.org/base/stable/9 /usr/src`
- `./builder world`
- `./builder kernel`
- `pkg upgrade -y`

# How to update FreeBSD on cluster?



# How to update FreeBSD on cluster?

- `make installworld`

# How to update FreeBSD on cluster?

- `make installworld (/usr/obj)`

# How to update FreeBSD on cluster?

- ~~make installworld~~ (/usr/obj)
- make packageworld

# How to update FreeBSD on cluster?

- ~~make installworld~~ (/usr/obj)
- make packageworld
- tar -C / -xf base.txz

# How to update FreeBSD on cluster?

- ~~make installworld~~ (/usr/obj)
- make packageworld
- tar -C / -xf base.txz
- make delete-old

# How to update FreeBSD on cluster?

- ~~make installworld~~ (/usr/obj)
- make packageworld
- tar -C / -xf base.txz
- ~~make delete-old~~ (/usr/src)

# How to update FreeBSD on cluster?

- ~~make installworld~~ (/usr/obj)
- make packageworld
- tar -C / -xf base.txz
- ~~make delete-old~~ (/usr/src)
- mergemaster

# How to update FreeBSD on cluster?

- ~~make installworld~~ (/usr/obj)
- make packageworld
- tar -C / -xf base.txz
- ~~make delete-old~~ (/usr/src)
- ~~mergemaster~~ (/usr/src)



# How to update FreeBSD on cluster?

- ~~make installworld~~ (/usr/obj)
- make packageworld
- tar -C / -xf base.txz
- ~~make delete-old~~ (/usr/src)
- ~~mergemaster~~ (/usr/src)
- portmaster

# How to update FreeBSD on cluster?

- ~~make installworld~~ (/usr/obj)
- make packageworld
- tar -C / -xf base.txz
- ~~make delete-old~~ (/usr/src)
- ~~mergemaster~~ (/usr/src)
- ~~portmaster~~ (/usr/ports)

How to update FreeBSD  
on cluster with pkgng?

# How to update FreeBSD on cluster with pkgng?

• `pkg upgrade -y`

# How it works?

# How it works?

```
base:
for file in /usr/share/examples/*; do
    if cmp /etc/$file /usr/share/examples/$file; then
        rm /etc/$file
    fi
done
```

# How it works?

```
base:
for file in /usr/share/examples/*; do
    if cmp /etc/$file /usr/share/examples/$file; then
        rm /etc/$file
    fi
done
kernel:
kldxref /boot/kernel
```

# How it works?

- base:  
for file in /usr/share/examples/\*; do  
    if cmp /etc/\$file /usr/share/examples/\$file; then  
        rm /etc/\$file  
    fi  
done
- kernel:  
kldxref /boot/kernel
- lib32:  
chflags noschg /libexec/ld-elf32.so.1 /usr/lib32/\*



# How it works?

- base:  
for file in /usr/share/examples/\*; do  
    if cmp /etc/\$file /usr/share/examples/\$file; then  
        rm /etc/\$file  
    fi  
done
- kernel:  
kldxref /boot/kernel
- lib32:  
chflags noschg /libexec/ld-elf32.so.1 /usr/lib32/\*
- rescue:
- zoneinfo:  
nothing

# Plans

# Plans

📌 make release?

# Plans

- 📌 make release?
- 📌 ports?

# Plans

- 📌 make release?
- 📌 ports?
- 📌 tinderbox?

# Plans

- make release?
- ports?
- tinderbox?
- metapackages?

# Plans

- make release?
- ports?
- tinderbox?
- metapackages?
- new packages:
  - libc-gdb
  - lib\*-gdb

Thanks!