Introducing FreeBSD in new environment The good, the bad and the ugly

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Who am I?

- ► FreeBSD user since 1998 (thanks to FreeBSD on the desktop!)
- ► FreeBSD committer since 2010
- portmgr since 2011
- core team 2014 2018
- Contributing mostly in my free time



Who am I?

- FreeBSD user since 1998 (thanks to FreeBSD on the desktop!)
- FreeBSD committer since 2010
- portmgr since 2011
- core team 2014 2018
- Contributing mostly in my free time
- No more a student since 2003
- Working mostly in France and Africa
- Only one job really officially FreeBSD related



Disclaimer: subjective french point of view





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Targets



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Old school sysadmin usage



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- Old school sysadmin usage
- Appliances usage



Targets

- Old school sysadmin usage
- Appliances usage
- Modern devops usage



Targets

- Old school sysadmin usage
- Appliances usage
- Modern devops usage
- Diskless





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sysadmins:

- before: "Who is the vendor?"
- now: "Never heard of that Linux distro?"



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- developers



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 - before: "Who is the vendor?"
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- PCI DSS auditors





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BSD is for real hardcode sysadmins



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- BSD is for real hardcode sysadmins
- BSD is hard to use



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- BSD is a source only OS



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- one true BSD



- BSD is for real hardcode sysadmins
- BSD is hard to use
- BSD is a source only OS
- one true BSD
- There must be a reason for \$feature not exist





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Never impose



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- Never impose
- Do not convert



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- Never impose
- Do not convert
- Be accessible

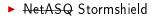


- Never impose
- Do not convert
- Be accessible
- Be reactive





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- NetASQ Stormshield
- ▶ pfSense



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- FreeNAS



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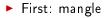


- NetASQ Stormshield
- ▶ pfSense
- FreeNAS
- Niksun
- Juniper
- Isilon





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First: mangle

- how do I install logrotate?
- how do I install rsyslog?



First: mangle

- how do l install logrotate?
- how do I install rsyslog?
- Second: learn



Users: wants to feel at home

- First: mangle
 - how do l install logrotate?
 - how do I install rsyslog?
- Second: learn
 - oh, newsyslog is nice
 - hey your syslog does that?





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► long ago:

▶ the good: easily customisable



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long ago:

- ▶ the good: easily customisable
- the bad: hard to reproduce a setup
- the bad: hard to maintain a repo



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- the ugly: hard to automate
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- nowadays:
 - the good: easy to create/maintain a repo
 - ▶ the good: simple and straight forward command line interface
 - the good: easy
 - the good: up to date packages



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 - the good: easy to create/maintain a repo
 - ▶ the good: simple and straight forward command line interface
 - the good: easy
 - the good: up to date packages
 - the bad: no LTS repo
 - the bad: multi repository support



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Automation

The good:
rc.conf.d
*.d



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Automation

- ► The good:
 - rc.conf.d
 - ► *.d
- The badgood:
 - ► crontabs
 - syslogd



Automation

- The good:
 - rc.conf.d
 - ► *.d
- The badgood:
 - crontabs
 - syslogd
- ► The bad:
 - ▶ jail.conf
 - inetd.conf
 - blacklistd.conf
 - everything not allowing includes





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► The good:

- admin utilities: *util, *ctl, *control
- statistical utilities: systat, top -m io
- man pages
- ▶ gpart!



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 - command options strictness (getopt)
 - lack of –help
- The ugly:
 - CSH (as default shell)
 - no good default shell in base





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► The good:

► freebsd-update upgrades



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► The good:

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- The bad:
 - ▶ Lack of out of box "cloud" image
 - local freebsd-update mirror



- The good:
 - freebsd-update upgrades
- The bad:
 - Lack of out of box "cloud" image
 - local freebsd-update mirror
- The ugly:
 - PXE booting (seamless installation)
 - PXE booting (ramdisk/diskless)
 - local freebsd-update server



Someone's else computer/Cloud



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Someone's else computer/Cloud

- The good:
 - Xen dom0 support



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Someone's else computer/Cloud

- The good:
 - Xen dom0 support
- The bad:
 - bhyve frontend
 - bhyve lack of features (live migration, passthrough)
 - lack of dynamic CPU



Storage



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Storage

- ► The good:
 - ZFS
 - ► ctl
 - utilities (geom, sesutil, mfiutil)



Storage

- ► The good:
 - ZFS
 - ► ctl
 - utilities (geom, sesutil, mfiutil)
- ► The ugly:
 - NFS performances
 - NFS v4+ compatibilities with Linux clients



Hacking



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Hacking

The good:

- multiple version of the toolchains available
- dtrace
- pmcstat



Hacking

The good:

- multiple version of the toolchains available
- dtrace
- pmcstat
- The bad:
 - pmcstat UI
 - lack of sanitizers
 - ▶ .4th
 - ▶ gdb 6.6





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► The good:

- not worse than elsewhere
- documentations/handbook



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- The bad:
 - mailing list is the best way to catch attention
 - Iocalised documentation (fr_FR.ISO8859-1 for example)



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- not worse than elsewhere
- documentations/handbook
- The bad:
 - mailing list is the best way to catch attention
 - Iocalised documentation (fr_FR.ISO8859-1 for example)
- The ugly:
 - bug report without a proxy





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- ► The good:
 - not worse than other OS



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- The good:
 - not worse than other OS
- The bad:
 - subversion
 - lack of documentation



- ► The good:
 - not worse than other OS
- The bad:
 - subversion
 - lack of documentation
- The ugly:
 - there is no official process



Desktops/laptops



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Desktops/laptops

- The good:usable
 - sound



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Desktops/laptops

- The good:
 - ► usable
 - sound
- ► The bad:
 - ► Wireless
 - GPU drivers
 - sound support (upstream)





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- Bad: We are not cool anymore, where are those wonderful swags?
- ▶ Ugly: CSH



Questions?

Thanks



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