

# A Personal FreeBSD Deployment

*“Things I wish had known before starting a FreeBSD  
deployment”*

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[@notmycommit](#)





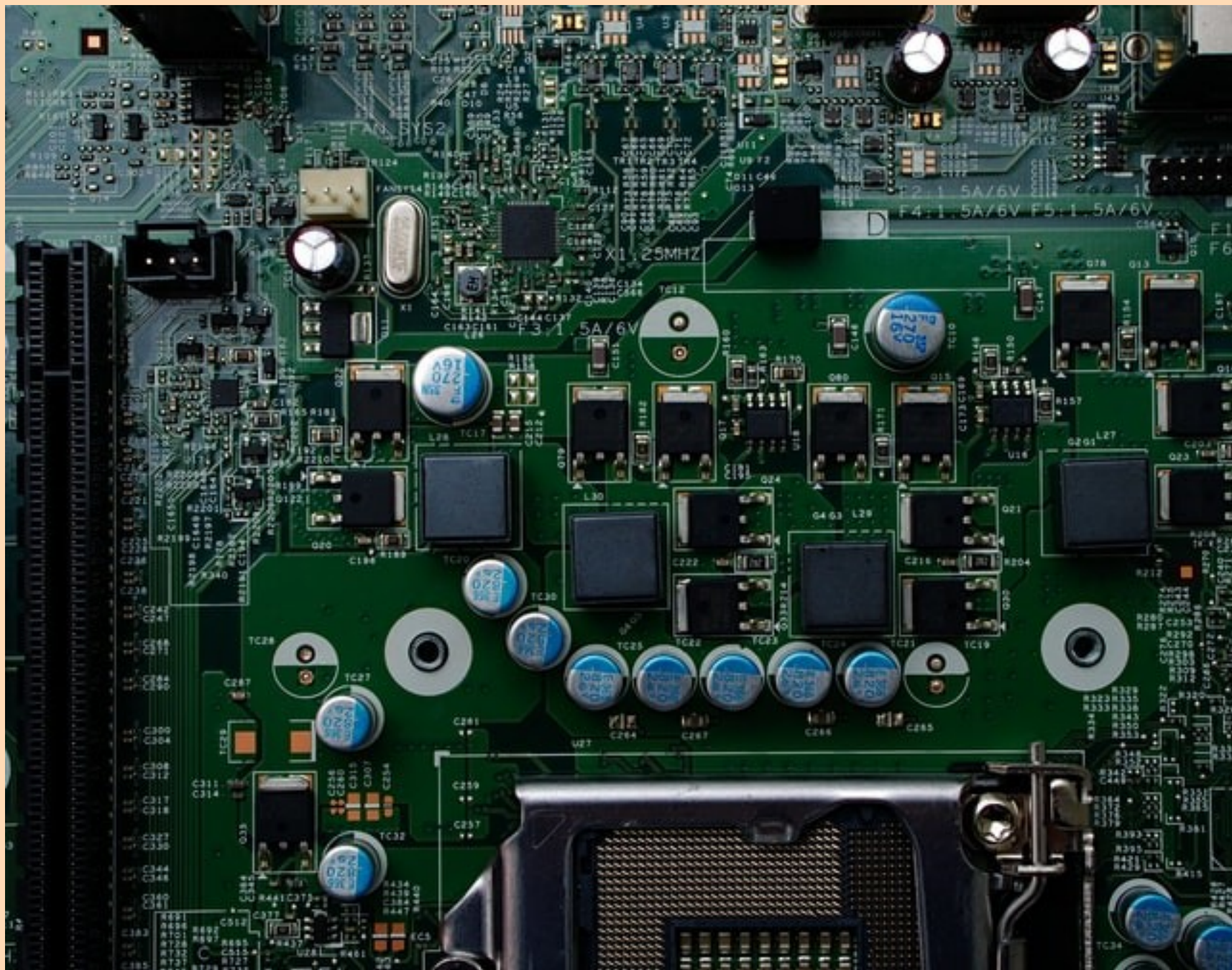
PORT ZERO

<https://port-zero.com>

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- Laptop and a handful of Servers
- Caters to personal needs, sometimes friends.
- Minimal automation

- Email
- Storage
- Notes
- Blog
- Some meta things - ldap,  
monitoring

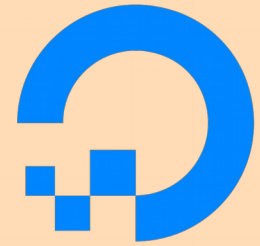


# Physical VS Cloud



*Expensive*

*Extensive managed services*



DigitalOcean



VULTR

*First class cloud support*

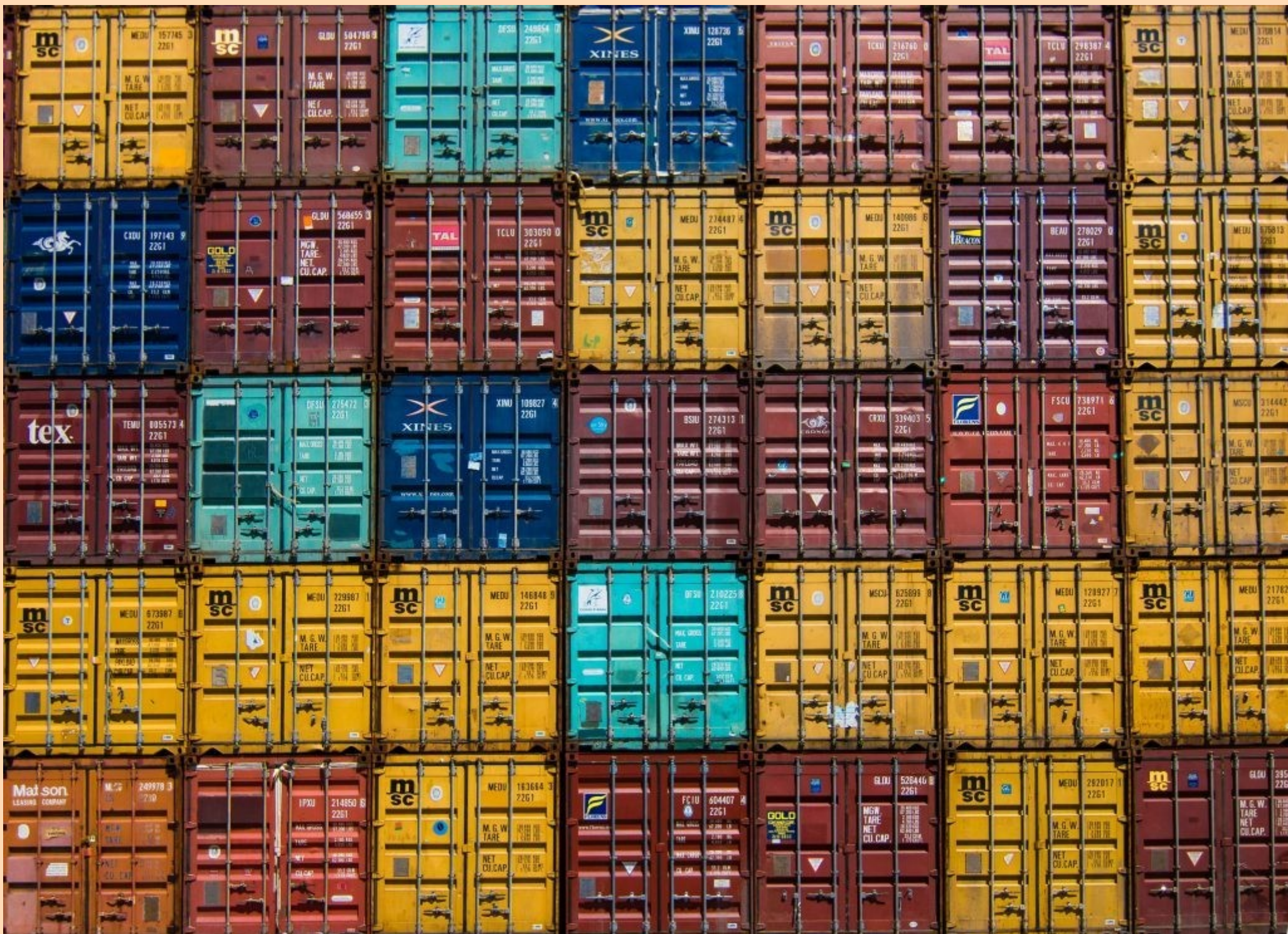
# HETZNER

*FreeBSD on cloud is a second class citizen*

*Cheap*

*Physical machines*







*Jails is not a feature in isolation; rather a piece of  
the puzzle.*

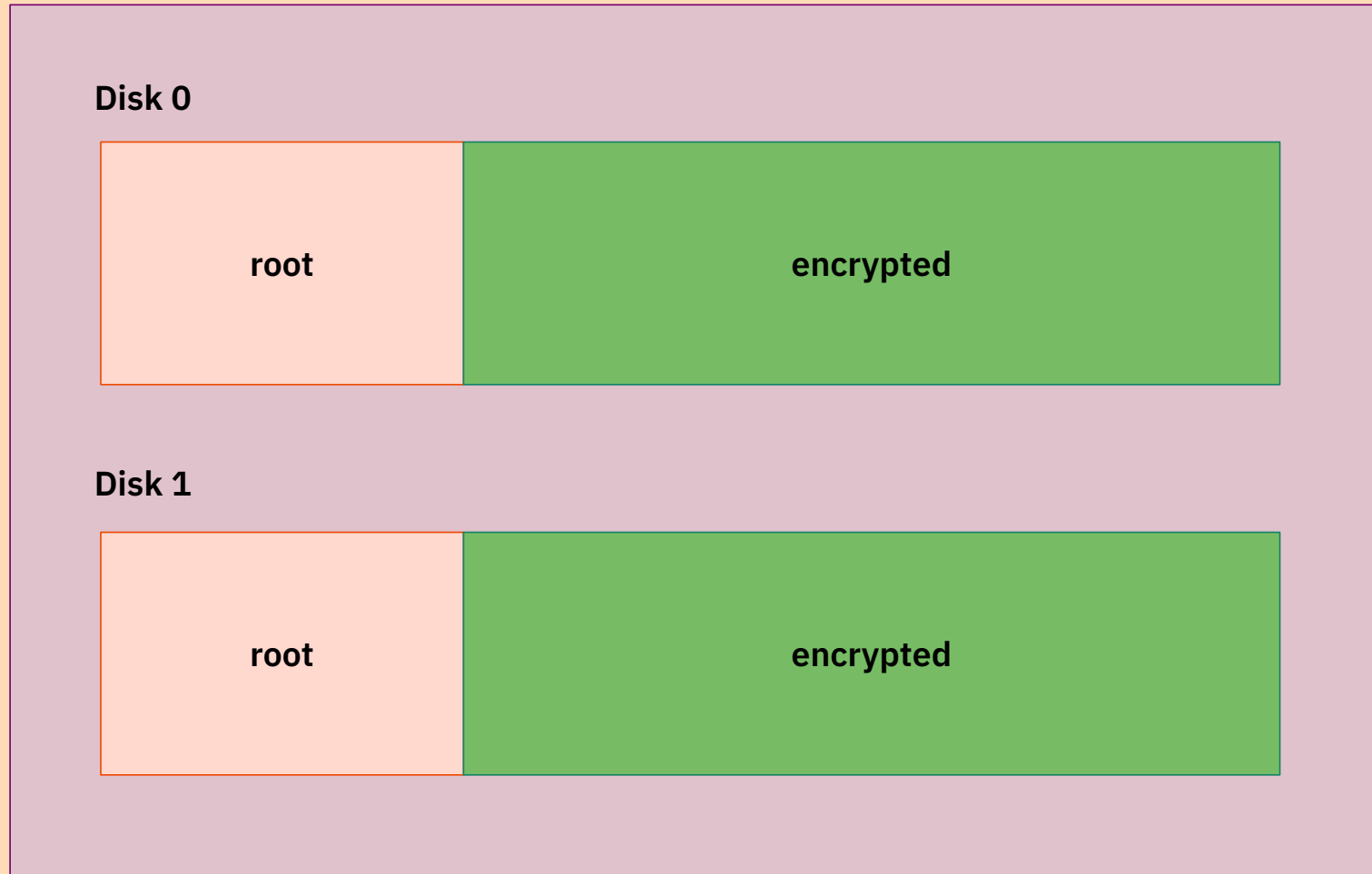
# learn.txt

- Jails, duh
- Networking, pf
- pkg

# Securing data

- Specific to my situation

## RAID 1





```
1 # PROVIDE: geli0
2 # BEFORE: disks
3 # REQUIRE: initrandom
4 # KEYWORD: nojail
```

```
1 geli0_start()
2 {
3     zfs mount -av
4     /etc/rc.d/hostid start
5     /etc/rc.d/hostname start
6     /etc/rc.d/netif start
7     /etc/rc.d/routing start
8     /etc/rc.d/sshd start
9
10    echo -n "Waiting for zpool:encrypted to become available, "
11    echo -n "press enter to continue..."
12    echo
13
14    while true; do
15        if [ -e /dev/ada0p4.eli -a -e /dev/ada1p4.eli ]; then
16            break
17        fi
18        read -t 5 dummy && break
19    done
20    /etc/rc.d/sshd stop
21    pkill sshd
22    /etc/rc.d/routing stop
23    /etc/rc.d/netif stop
24    # /etc/rc.d/devd stop
25 }
```



# Automation

- Straightforward: updates, renewals
- Not so obvious – Building packages, tree



*You will end up building a lot of packages*

*Most difficult thing about Poudriere was learning to  
pronounce it.*

```
1 poudreire jail -c -n 12amd64 -v 12.1-RELEASE
2 poudreire ports -c -p dev -m svn
3 poudriere bulk -j 12amd64 -p local -z x230 -f laptop
```

*You will end up building tree, a lot!*



```
1 rsync server:/usr/src /usr/src
2 rsync server:/usr/obj /usr/ob
3
4 cd /usr/src && make installkernel
5 reboot
6 cd /usr/src && make installworld
7 mergemaster -Ui
8 reboot
```

*Upgrading always becomes a chore.*

# refs

- You don't need xts  
<https://sockpuppet.org/blog/2014/04/30/you-dont-want-xts/>
- Jails the hard way <https://clinta.github.io/freebsd-jails-the-hard-way/>
- Previous jail documentation: <https://web.archive.org/web/20170704072154/https://www.freebsd.org/doc/handbook/jails-build.html>
- Jails paper: <http://www.sane.nl/events/sane2000/papers/kamp.pdf>

# Thanks

- **fox@** for helping me figure jails.
- **philipp@** for the original disk encryption script.
- **freebsd-questions@** and **freebsd-current@** for trying to solve all of my issues and succeeding in most of them.