



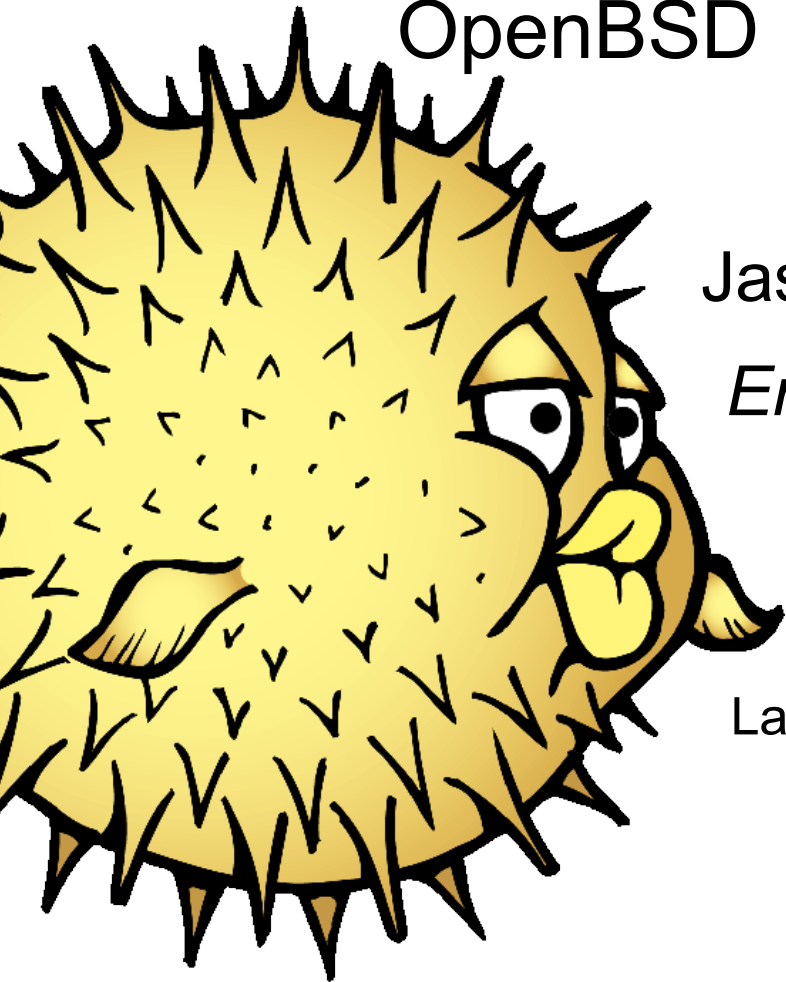
# Puffy Suits Up

OpenBSD in the corporate environment

Jasper Lievisse Adriaanse  
*Engineering team, m:tier*

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- Introduction
- m:tier
- OpenBSD
- Enterprise OpenBSD
- GNOME
- Closing



# Introduction



What?

**Because security is not an  
afterthought**



Why?

# The internet is a hostile environment





- Who am I?
  - Jasper Lievisse Adriaanse
    - OpenBSD
    - GNOME
    - Puppet
  - Involved in m:tier since it's founding in 2008





m:tier





- Who are we?
  - OpenBSD developers
  - Breathe open source
  - Secure system architects





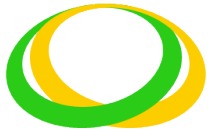
- What do we do?
  - OpenBSD
  - Puppet
  - Zabbix
  - Bacula
  - Open Source Software consultancy / implementation



- But also
  - OpenBSD Long Term Support
  - Thin Client
  - Binary patches
  - GNOME for OpenBSD
  - GNOME automounter for BSD
    - [opensource.mtier.org](http://opensource.mtier.org)



- “Talk is cheap, show me the code”
  - Intel KMS support
  - Radeon KMS support
  - Linux emulation improvements
  - Signed packages



# State of the world



Governments and companies are snooping...

...on a **massive** scale!



- Can you still trust closed source US software?
  - Cisco PIX
  - Checkpoint
  - Dropbox
  - iCloud
  - ...



- No, and why should you?
  - Because the US can be trusted.
  - Because the NSA would never spy on you.
  - Because we can trust the NSA will be held accountable

That's a good joke!





What *can* we trust



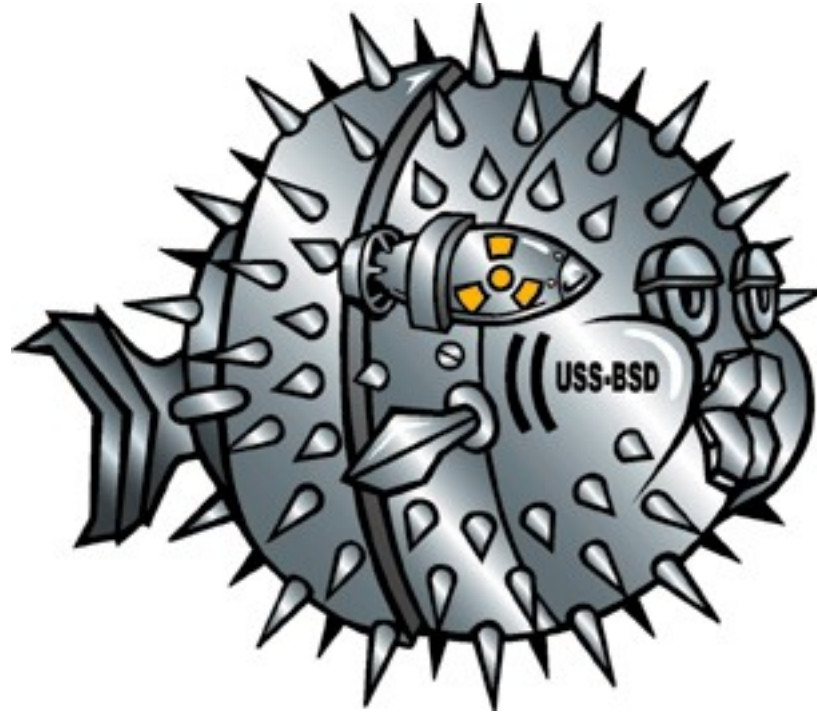


# OpenBSD





- OpenBSD?
  - Unix-like, multi-platform operating system.
  - Derived from 4.4BSD, NetBSD fork.
  - Kernel + userland + documentation maintained together.
  - 3rd party applications available via the ports system
  - Anoncvns, OpenSSH, OpenBGPD, strlcpy(3)/strlcat(3), etc
  - Most importantly...



...it is secure.



- Secure and correct
  - Complexity introduces bugs
  - Security and stability over features
    - Does not mean stagnation
  - No Americans allowed to work on crypto
  - No blobs



- “NSA-proof”
  - Everyone (capable and trusted) allowed to work on crypto
    - except Americans, sorry..
  - Continuous auditing of all sources
  - FBI + IPsec rumour
    - Publicly auditing the stack resulted in two unrelated bug fixes





- Who would use OpenBSD? (I)
  - Anyone who needs a super secure system.
  - Anyone who doesn't want to worry about exploits.



- Who would use OpenBSD? (II)
  - Home users
  - Small/medium businesses
  - Large corporations (Adobe, etc)
  - Power/gas/water companies
  - Research centers (NASA, etc)
  - Internet Exchanges
  - Secret services..





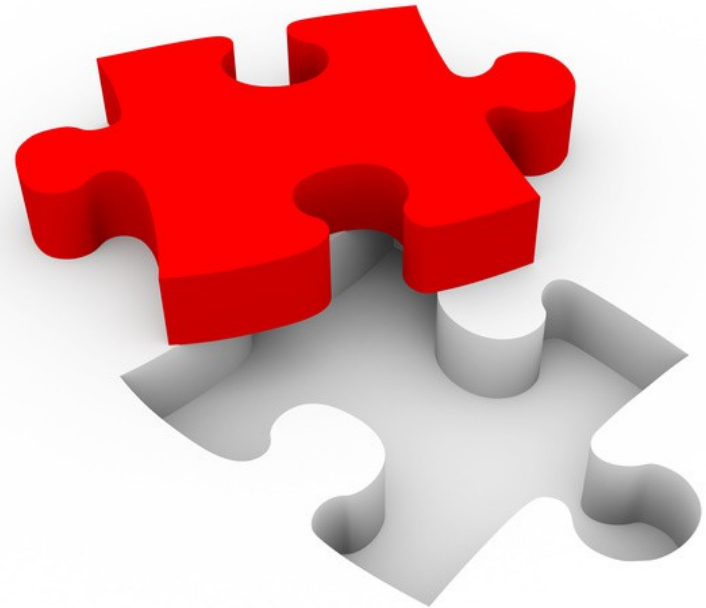
# Enterprise OpenBSD



- Enterprise setting
  - Constraints
    - Budgets
    - Deadlines
  - Protecting company assets
    - Business/trade secrets
    - Customer data



- What can OpenBSD offer?
  - Firewall
  - Routing
  - VPN
  - Mail
  - Desktop
  - ...much, much, more!





- Firewall
  - PF
  - Tightly coupled with anti-spam/greylisting
  - ramdisk



- Routing
  - OpenBGPD
  - OpenOSPFD
  - MPLS
  - DVMRP



- VPN
  - IPsec
  - OpenIKED
  - isakmpd
  - “Government problems”



- Mail (I)
  - OpenSMTPD
    - Started as sub-project
    - 15 Postfix server → 1 OpenSMTPD server



- Mail (II)
  - spamd
    - greylisting
    - tarpitting





- Mail (III)
  - Zarafa
    - groupware
      - calendar
      - addressbook
      - mail!



- Desktop (I)
  - Thin client
    - NX
    - VNC
    - SPICE
    - Puppet

# m:tier



OpenNX



Remmina



Chromium



2013-07-10





- Desktop (II)
  - Immune to virus infections
  - Own ACPI implementation
  - KMS for Intel and Radeon



- Desktop (III)
  - Free, but comes at a cost
    - no Flash
    - no minesweeper.exe



Computer



home



Functions Share



Private Share



Public Share



Trash





- Puppet
  - One master
  - Three continents
  - OpenBSD everywhere





# GNOME





- GNOME on OpenBSD
  - co-maintainer with [ajacoutot@](mailto:ajacoutot@)
  - Tremendous challenge
  - Tremendous progress





- Current status
  - OpenBSD lacks udev/systemd
  - GNOME 3.10 on OpenBSD [[video](#)]



# Thank you!

mail: [jasper@mtier.org](mailto:jasper@mtier.org) / [jasper@openbsd.org](mailto:jasper@openbsd.org)

www: [www.mtier.org](http://www.mtier.org)

twitter: [@jasper\\_la](https://twitter.com/jasper_la) / [@mtierltd](https://twitter.com/mtierltd)