# FreeBSD is not a Linux Distro

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# $ whoami

Benedict Reuschling, M.Sc.

Sysadmin for the Big Data Cluster at CS department of h_da

FreeBSD Committer since 2009

Vice President FreeBSD Foundation

Elected to 2nd term on FreeBSD Core Team

Weekly podcast BSDNow.tv together with Allan Jude

FreeBSD Journal Editorial Board member

# What is FreeBSD?

It's not a Linux distribution!

One of the oldest (1993), largest, and most successful open source projects in the world

Complete operating system including kernel, userland, documentation, and tools

Over 37,000 3rd party Open Source packages

A worldwide, highly technical and committed Open Source community

Works on Intel / AMD x86 32- and 64-bit, 32- and 64-bit ARM, RISC-V, PowerPC, Sparc64, MIPS, AWS, Azure, GCP, …

# The FreeBSD World

FreeBSD is an open source Unix-like **operating system** descended from the Unix developed at the University of California, Berkeley in the 1970s.





The FreeBSD Project is an active open source **community** since 1993 with hundreds of committers and thousands of contributors around the world.

The FreeBSD Foundation is a **non-profit organization** registered in Colorado, USA in 2000 dedicated to supporting the FreeBSD Project, its development and its community.
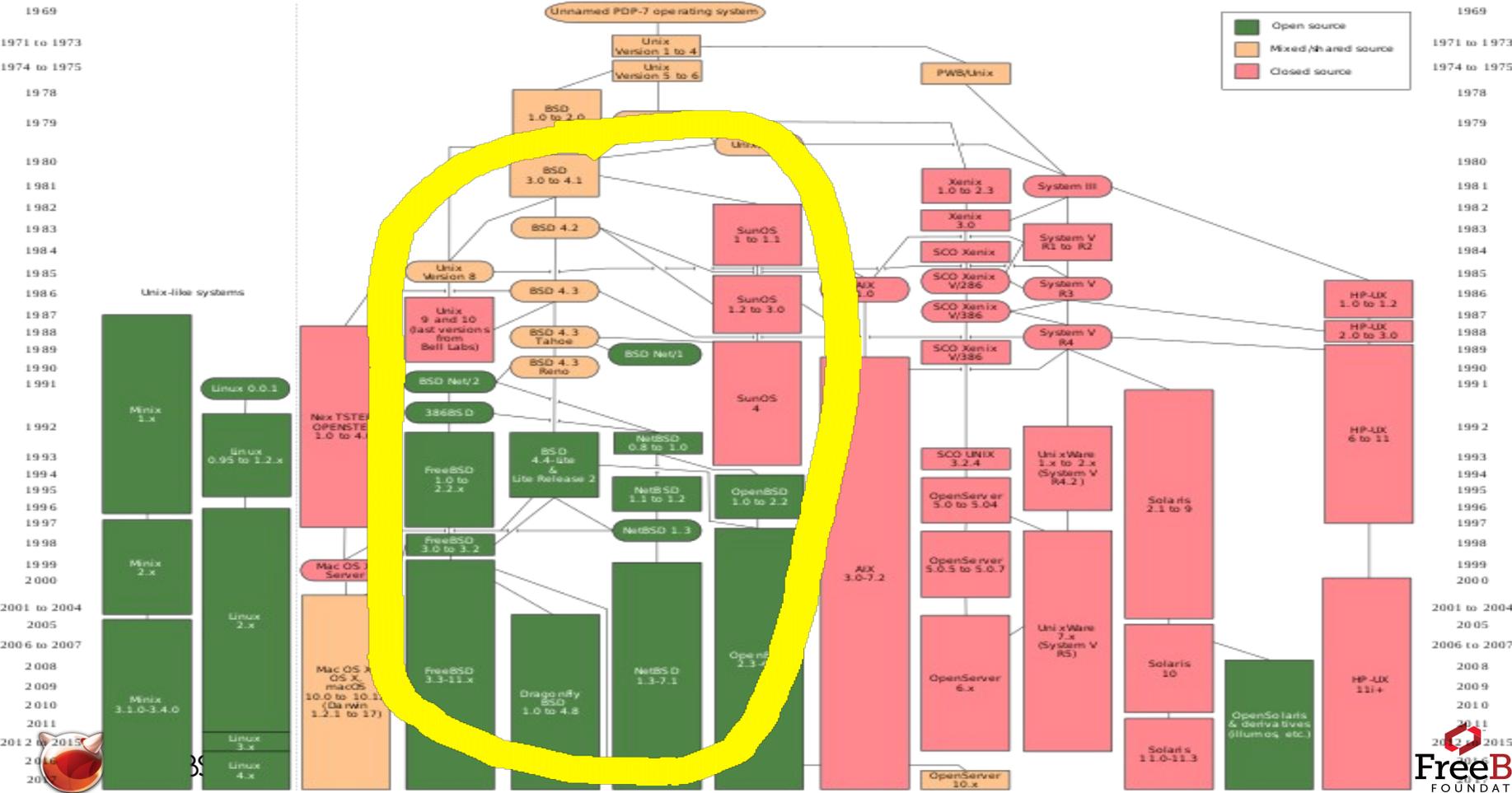
# Produce a Whole System

Operating system (Userland, APIs/ABIs, system calls, libraries)

Drivers

Compilers and associated tools

Debugging tools

Editors

Packaging system

Ready for coding when install is done

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# Who Uses FreeBSD?

NetApp · Apple · WhatsApp · NETFLIX · Mellanox Technologies · JUNIPER NETWORKS
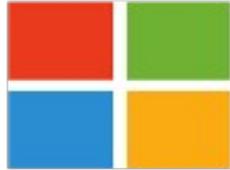
HUAWEI · Microsoft · intel · SONY · NGiNX · vmware · arm

trivago · GROUPON · FlightAware Live Flight Tracking · VERISIGN

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# Most Likely You Use FreeBSD!

iPhone or Apple computer

Streaming Netflix

**NETFLIX**

Messaging someone over Facebook's WhatsApp application

Sony PlayStation 3, 4

FlightAware

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# Why Companies Use FreeBSD?

- History of innovation
- Great tools
- ABI stability within major releases
- Mature release model
- Excellent documentation
- Business Friendly BSD License
- OpenZFS
- Open Community

# How the Project Works

Independent of the FreeBSD Foundation

Developer Elected Core Team every 2 years

Mentorship for Commit Bit

Functional Teams (core, release engineering, security, ports, documentation,…)

Worldwide Collaborative Development Environment



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# FreeBSD core team

Historically "key" developers but now…

…9-member elected management body
- Votes and candidates from the full set of active committers
- Co-opted non-voting core team secretary

Responsibilities
- Administrative (commit bits, hats, team charters)
- Strategic (project direction, coordination, cajoling)
- Rules, conflict resolution, enforcement

We have no "benevolent" dictators for life!

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# The FreeBSD Foundation

Founded in March 2000

501(c)3 (non-profit public charity)

Based in Boulder, Colorado

100% Funded by donations

# Who are the FreeBSD committers?

## Locations

° 34 countries

° 6 continents

## Ages

° Oldest (documented) committer born in 1948

° Youngest (documented) committer born in 1997

° Average age 39.5

° Data from circa Nov 2017

### Count vs. Age
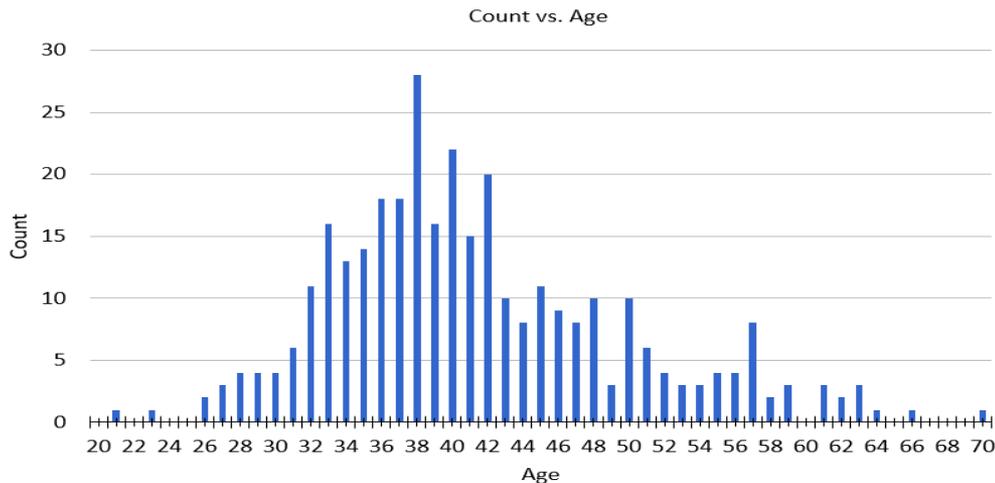


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# Why Get Involved in FreeBSD?

- Be part of an inclusive and welcoming community

- Learning opportunities from experts

- Opportunities to work in areas you're interested in

- Resume building - highlight skills in public forum

- Have fun working with like-minded individuals

- Learn from reading real operating system code!



Join the FreeBSD Project Today!!

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# Becoming a Committer

Join the mailing lists

Clone or Checkout the code
- svn.freebsd.org
- github/freebsd

Submit Patches
- reviews.freebsd.org

Get a mentor

Get proposed to core@

Granted a commit bit (all commits reviewed by mentor)

Be freed from mentorship

Find a mentee

# Learn more about FreeBSD

Website: www.freebsd.org

FreeBSD Foundation: www.freebsdfoundation.org

GitHub: github.com/freebsd

Mailing Lists

Forums

FreeBSD Handbook

IRC

# Resources



THE DESIGN AND IMPLEMENTATION OF THE FreeBSD OPERATING SYSTEM
SECOND EDITION
MARSHALL KIRK McKUSICK · GEORGE V. NEVILLE-NEIL · ROBERT N.M. WATSON
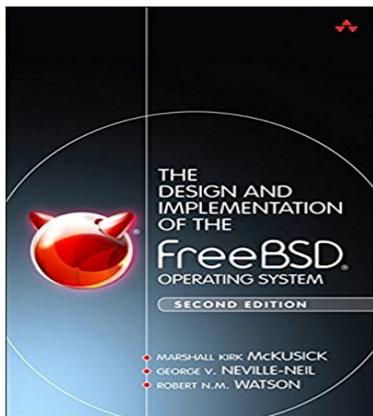
Amount Raised: $1,332,398
Goal: $1,250,000
Donors: 979
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## How-To Guides

FREEBSD.ORG    WHO USES FREEBSD    PRODUCTS FROM FREEBSD    HOW-TO GUIDES    INSTALLFEST
OCTOBER 2018 FREEBSD DEVELOPER SUMMIT    FREEBSD DAY    TIMELINE

### Getting Started with FreeBSD
As part of the FreeBSD Foundation's education initiative, we've worked with community members and new recruits to develop guides that make getting started with FreeBSD a straight forward process. For an overview, see our *FreeBSD Quickstart Guide*. Stay tuned for more how-tos as they become available.

### FreeBSD Installation Guides:
- Installing FreeBSD with VirtualBox (Mac/Windows)
- Installing a Desktop Environment on FreeBSD
- Installing FreeBSD for Raspberry Pi
- Installing PC-BSD as a Primary Operating System

3RD EDITION
ABSOLUTE FREEBSD
THE COMPLETE GUIDE TO FREEBSD
MICHAEL W. LUCAS
no starch press

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HOME    SERVICES    TEAM    CAREERS    CONTACT
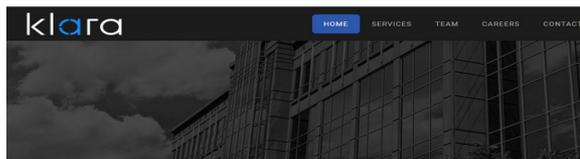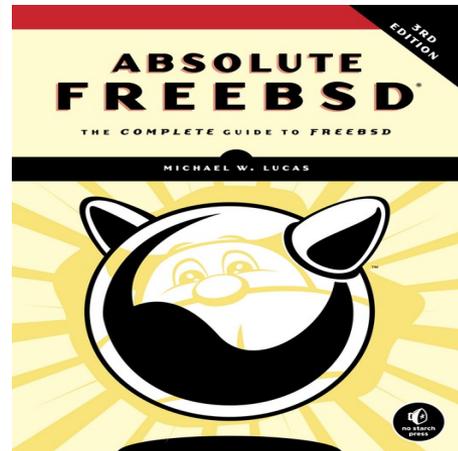
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https://www.mckusick.com/history/
https://www.freebsd.org/doc/handbook/

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# Thank you

Any questions?