

The FreeBSD - Primer



Martin Wilke <miwi@FreeBSD.org>

Muhammad Moinur Rahman <bofh@FreeBSD.org>

Who uses FreeBSD

SOPHOS

Panasonic



NGINX

ixsystems™



EMC²



JUNIPER
NETWORKS



QNAP®



~/miwi

- Name : Martin Wilke
- Started with Linux 2.4(2001)
- Happy FreeBSD user since RELEASE 5.0 (2003).
- FreeBSD developer since 2006.
- Working on Ports, Docs and Ports Security Team.



~/bofh

- Name : Muhammad Moinur Rahman
- Started with Linux 2.0(1997) till 2.2.0(1999)
- Happy FreeBSD user since RELEASE 4.1 (1999).
- FreeBSD developer since 2006(as contributor) and 2014(as Committer).
- Working on Ports.



Introduction

- What we expect from an open source project?
- What is FreeBSD?
- Who uses FreeBSD?
- What is the FreeBSD project?
- How the project works?



What we expect from an open source project?

The attributes that attract a business/users to an open source project are:

- **Stability:** Safe that the next incremental step in development won't be torpedoed by some unforeseen change.
- **Maturity:** How well established is the project? Nobody wants a project unexpectedly shift focus or disband altogether.
- **Longevity:** How long will the open source project survive?
- **Flexibility:** How well will the open source project respond to your needs?
- **Community:** How is the interaction with developers and with users?



How the FreeBSD project compares

- FreeBSD has proved along the years, with its release engineering process; how well established and mature is the project.
- FreeBSD has been producing releases for over fifteen years and we can track the codes upto 22 years ago from now
- This stability and reliability has been achieved by the careful selection and promotion of an effective set of processes.
- Users can directly interact with developers through forums, irc, slack and mailing lists to discuss problems and requesting new features



What is FreeBSD?

- Freely available Unix-like operating system.
- Complete Operating System(Kernel and Applications)
- Tools and sources for development.
- Powerful Internet solutions.
- Advanced Embedded Platform.
- Huge number of applications: over 27,000.(27005 as of yesterday)
- Complete documentation.
- An Open Source Community.



Linux(Kernel) vs FreeBSD

- Linux is not Linux, it's actually GNU/Linux
 - Linux is Kernel(Developed by Linus Torvald lead and Community)
 - Applications added by the The GNU Project(Richard Stallman)
 - Both of it blended in blenders by Red Hat, Fedora, Ubuntu, Debian, Gentoo etc.
- FreeBSD is FreeBSD
 - Derived from an UNIX System(AT&T Bell Labs Version 5 Unix)
 - FreeBSD Kernel
 - FreeBSD Applications
 - FreeBSD = FreeBSD kernel + FreeBSD applications



Who uses FreeBSD?

- Root name servers
- major web hosts
- search engines
- routing infrastructure
- foundation for major commercial operating systems
- hardware appliances



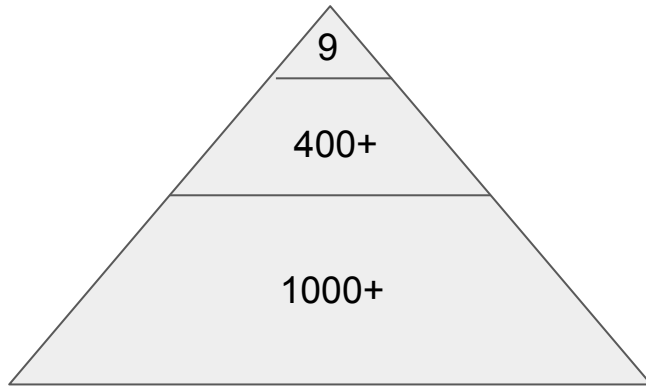
What is the FreeBSD Project?

- It is a large community that has continually developed FreeBSD for more than thirty years.
- It has well founded development process.
- A democratic community, that has never been owned or controlled by a single individual or company.
- More than 400 active developers.
- Thousands of contributors.



How the Project works?

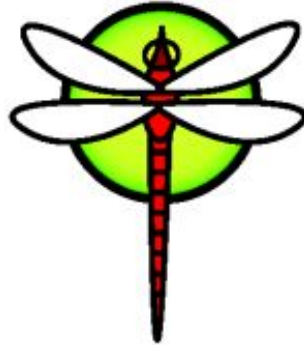
- Basically 2 layers: committers and everybody else.
- Committers have write access to the source tree.
- Individuals who submit many patches are invited to become a committer.
- 9 committers elected every 2 years to be part of the “core team”.



The FreeBSD Foundation

- Non-profit organization.
- Sponsored development:
 - Intellectual property, contracts, licensing, legal.
 - Developer travel grants.
 - Event sponsorship.
 - Hardware purchase.
 - Collaborative R&D agreements.
 - Promote the project.

FreeBSD based Distributions



Branches

FreeBSD has mainly 2 branches

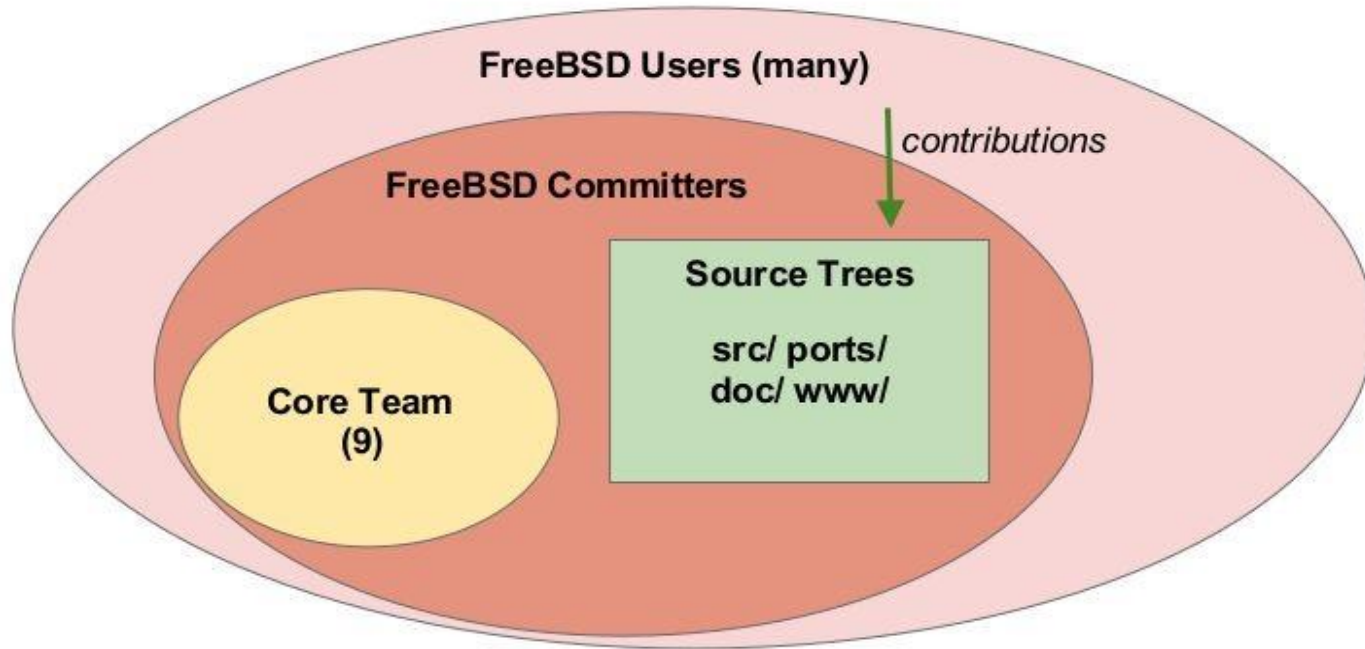
- HEAD and STABLE
 - HEAD is for post-test commit and to mature the code
 - STABLE is where we make minor release

Groups

- Committers with interest in the same area organize themselves in groups.
 - Ports Team.
 - FreeBSD GNOME Project.
 - FreeBSD KDE Project.
 - Python Team.
 - Perl Team
 - Ruby Team
 - X11 Team
 - XFCE Team
- ... and much more.



Where does the Contributors stand?



Main direct contribution areas

| DOCS | PORTS | SRC |
|---------------|---------------|------------|
| FAQ | 63 Categories | kernel |
| Handbook | Framework | userland |
| Man pages | | |
| Web Resources | | |

Who can contribute to the project?

Everybody ..

How can someone contribute?

- Get involved
- Contribution to groups, help testing and bug reporting
- Respect to all individuals in the community
- If you have development background you can submit patches, if possible with test results/logs



AsiaBSD

- *BSD
- Open to all but more targeted to Asian Community
- Build up a community
- Engage more people
- Widespread *BSD uses

Thank you

If you like the talk or the project please consider donating

<https://www.freebsdoundation.org/donate/>

