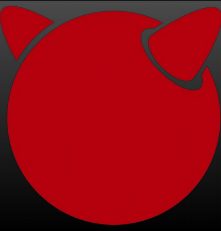




FreeBSD
is not Linux

Niclas Zeising

zeising@FreeBSD.org



JUNIPER[®]
NETWORKS



PS4[™]

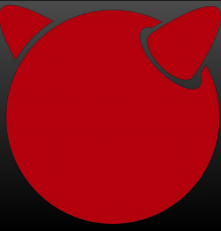


NetApp[™]

NETFLIX

what is
FreeBSD





complete operating system

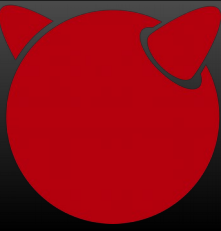
documentation

over 30 000 packages

a community

history

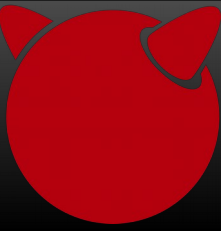




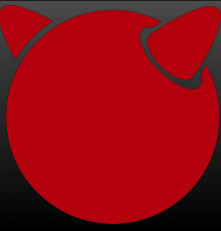
patches to v6 Unix

ex/vi, pascal

Berkely Software Distribution 1977



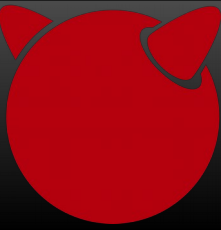
DARPA funding
removal of AT&T code
ported to i386



FreeBSD project started 1993

AT&T lawsuit

new release 1994



NetBSD – Portable OS (1993)

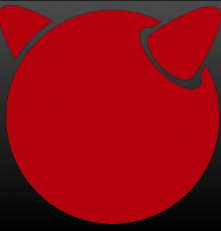
FreeBSD – Performance (1993)

OpenBSD – Security (1996)

Dragonfly BSD, TrueOS, FreeNAS, (macOS), ...

why use
FreeBSD



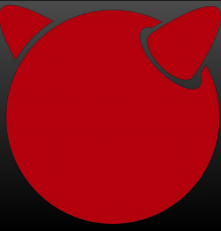


great tools

mature release model

business friendly license

open community



complete operating system

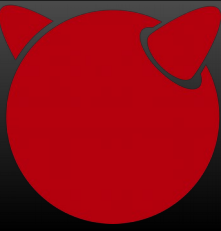
developer tools

packaging system

ready for development

FreeBSD features

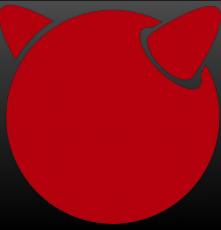




good hardware support

multiple cpu architectures

easy to configure

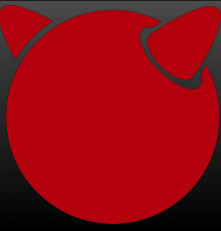


file systems

ufs

zfs

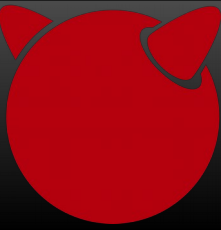
others (fat, fuse, ...)



Mandatory Access Control

audit

Capsicum

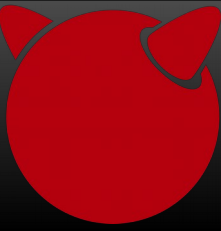


jails

original container platform

separate file system namespace

virtualized network stacks

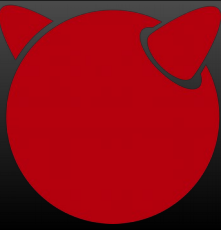


original TCP/IP implementation

full IPv4 and IPv6 support

pluggable TCP stacks

several firewalls

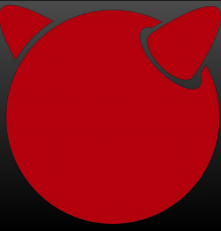


llvm toolchain

clang

lldb

lld

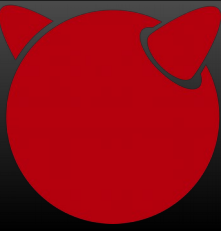


DTrace

dynamic tracing

see inside system calls

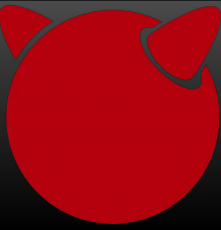
complete system transparency



bhyve

xen

linux system call emulation



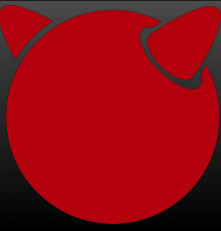
ports

packages and pkg

poudriere

gover-
nance

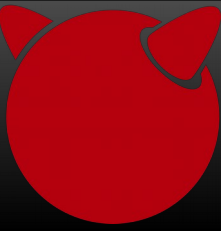




core team

election every 2 years

working groups



supports the FreeBSD project

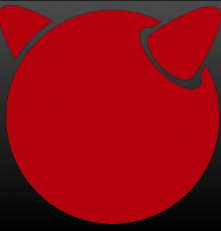
manages donations

legal entity



resources





www.freebsd.org

github.com/freebsd

mailing lists

FreeBSD handbook

zeising@daemonic.se

zeising@FreeBSD.org

@niclaszeising