Operating Systems

This page gives an overview of upstream projects. If you miss information or find mistakes, please edit.

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FreeBSD

- FreeBSD Homepage
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RISC-V Maintainers

FreeBSD has a weaker sense of maintainership than many open-source projects. However, the primary contributors are:

- John Baldwin (SRI International)
- Ruslan Bukin (University of Cambridge)
- Jessica Clarke (University of Cambridge)
- Mitchell Horne
- Kristof Provost

Releases

FreeBSD major releases are approximately every two years, with minor releases every year and interim security patches as needed.

Previous releases:

- FreeBSD 13.0 (2021-04-13) - RISC-V promoted to being a Tier 2 architecture
- FreeBSD 12.2 (2020-10-27)
- FreeBSD 12.1 (2019-11-4)
- FreeBSD 12.0 (2018-12-11) - RISC-V added as a Tier 3 architecture

RISC-V Status

RV64G is supported for several popular hardware, emulated and FPGA-based platforms as a Tier 2 platform. Various feature additions and performance optimisation opportunities exist. See the upstream wiki page linked above for more details.

FreeRTOS

RISC-V Status

RISC-V support has been merged in FreeRTOS. A couple of boards is directly supported.

Linux

RISC-V Maintainers

- Palmer Dabbelt
- Albert Ou
- Paul Walmsley
Releases

The Linux kernel has been merged mainline in the 4.15 merge window in November 2017.

Since then a range of Distributions have RISC-V ports. E.g.:

- Debian
- Fedora
- openSUSE
- Buildroot
- Yocto
- Arch Linux (Install on Unmatched)
- Gentoo Linux
- openEuler
- AOSP for RISC-V 10, AOSP 12 rebasing effort main repos, PLCT wip repos

RISC-V Status

The Linux kernel supports RV64G as well as RV32G.

OpenBSD

Releases

RISC-V Status

Work is in progress adding the port, with the first commit made on 23rd April 2021.