

arch/riscv maintenance guidelines for developers

Overview

The RISC-V instruction set architecture is developed in the open: in-progress drafts are available for all to review and to experiment with implementations. New module or extension drafts can change during the development process - sometimes in ways that are incompatible with previous drafts. This flexibility can present a challenge for RISC-V Linux maintenance. Linux maintainers disapprove of churn, and the Linux development process prefers well-reviewed and tested code over experimental code. We wish to extend these same principles to the RISC-V-related code that will be accepted for inclusion in the kernel.

Submit Checklist Addendum

We'll only accept patches for new modules or extensions if the specifications for those modules or extensions are listed as being "Frozen" or "Ratified" by the RISC-V Foundation. (Developers may, of course, maintain their own Linux kernel trees that contain code for any draft extensions that they wish.)

Additionally, the RISC-V specification allows implementors to create their own custom extensions. These custom extensions aren't required to go through any review or ratification process by the RISC-V Foundation. To avoid the maintenance complexity and potential performance impact of adding kernel code for implementor-specific RISC-V extensions, we'll only to accept patches for extensions that have been officially frozen or ratified by the RISC-V Foundation. (Implementors, may, of course, maintain their own Linux kernel trees containing code for any custom extensions that they wish.)