



SW Overlay

Jun 23rd 2021

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Agenda

1. github issue status - one pending to be closed.
2. psABI meeting summary regarding overlay
3. Concerns regarding code-size-tg new instr: 'tblj' the table jump.
4. status and next steps: Fossi, LLVM, binutils patches

Github status

- Pending issues
 - Issue #13 -Behavior of overlay data – need to be closed

psABI updates

Last psABI meeting we decided to go with option 2

<https://github.com/riscv-admin-docs/psabi/blob/master/MINUTES/meeting-20210614.adoc>

Option 2

Propose a generic mechanism for specifying reserved registers

Need a way to specify this in the ABI string e.g. `-mabi=ilp32_x31_x30_x29_x28` to reserve x31-x28

Tblj - Table jump

- Table jump – do we see any usage overlap between overlay and opportunities for tblj use cases ?

Road map and status

- Submitting patches
 - Submit patches for llvm
 - Submit patches for binutils
 - Get approvals from psABI and Toolchain and runtime
- FOSSI as our new home for overlay standard
 - We got official approval.
 - Next step is to open github for the “generic standard” on Fossi
 - Overlay submissions to llvm/gnu will be referenced to the official Overlay-standard from Fossi
 - The RISC-V porting/implementation is attended to stay on riscv/Github for the time being

Round table

- Open issues
 - Shadow stack, any impact ?



Thank You

