SW Overlay

Jan 26th 2022

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Agenda

1. Submission status update (llvm, binutils)
2. psABI status
3. Round table - q&a

Submission status update

- LLVM/Clang
  - Overlay patches match latest changes to the HLD
    - https://reviews.llvm.org/D109371
    - https://reviews.llvm.org/D109372
  - Patch submitted to add new reserved register ELF attribute
    - https://reviews.llvm.org/D113890
- GNU Binutils - work in progress
  - Extends BFD to build overlay tables during link and resolve overlay relocations
  - Currently refactoring changes to be separate from main RISC-V BFD
  - Needs handling of reserved register attribute
- GNU GDB - work in progress
  - Adding overlay manager class to allow different overlay systems to be
  - supported

psABI Status

- Request for Reserved registers Tag
  - psABI task group approved the change for adding a new elf attribute – Tag_RISCV_reserved_register
  - PR was created by @kito-cheng: New attribute: Tag_RISCV_reserved_register
- Overlay toolchain uses this Tag
  - To reserve register used by the RT-Engine

Round table – Q&A

- Open issues


Thank You
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