

## seL4 Emulation Runtime Library Implementation

### Modification on seL4runtime

Emulation library **environment setup** before entering the **main** function.

- **Obtain the bootinfo**
  - Before kernel passes bootinfo as function arguments.
  - Now map bootinfo frame as shared memory to access.
- **Setup TLS**
  - Before kernel sets up the TLS region.
  - Now we set up by ourselves implicitly. (e.g. using **FSGSBASE** instruction family on x86 if available, otherwise use Linux process control syscalls)
- **Emulation library internal setup**
  - Before no such routine.
  - Now we initialize the emulation library. (Explain in the next slide)