Client Side Emulation Library Summary

At this stage, we have solved most of the problems regarding the client side emulation library

- emulation runtime library sets up the TLS, IPC Buffer.
- seL4 IPC emulation implementation using UNIX Domain Sockets to pass the message registers as well as the emulated register set.
- the IPC emulation library distinguishes the seL4 IPCs and the emulation internal IPCs using two different protocols.
- memory mapping emulation implementation uses signal handlers to capture the vm fault and might do lazy mapping on-demand or halt the execution.
- one seL4 thread is mapped to one Linux process

However, we haven't discussed the rest of the problems in detail.

- How does the kernel emulator run?
- How does the kernel emulator start the roottask?
- How do we emulate physical memory?
- How does the kernel emulator start the roottask?
- How can kernel distinguish different seL4 applications?
- How to emulate the scheduling?

The following slides will focus on discussing those questions.