

## Physical Memory Emulation Implementation (cont)

With this approach, we only need to modify a few codes, then most of the kernel code will work automatically as they are manipulating data structures.

To implement this we are going to use the **shm\_open** syscall provided by Linux. This will create a shared memory file in **/dev/shm/** and returns us a file handle. This Implementation also solved the problem of passing boot info as well as setting up the IPC buffer for the seL4 application on the client side.

- to pass the boot info, we first locate the boot info frame by calculating the offset.
- pass the offset using emulation internal IPC to the seL4 application.
- seL4 application maps a page for the part of the file based on the offset.
- the same method makes mapping IPC buffer work as well.