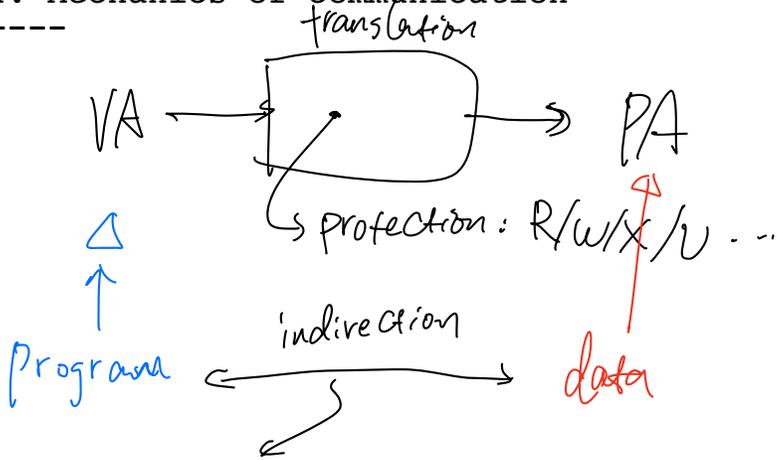
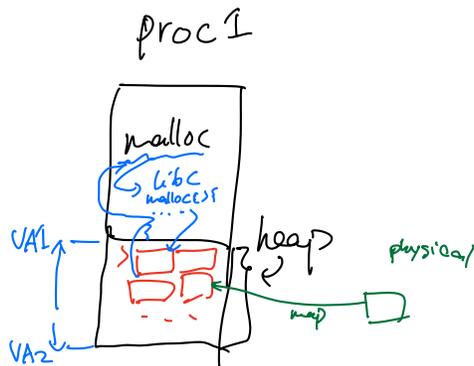


- ✓ 1. Page fault intro
- ✓ 2. Classic use cases for page fault
- 3. Device drivers
- 4. Mechanics of communication

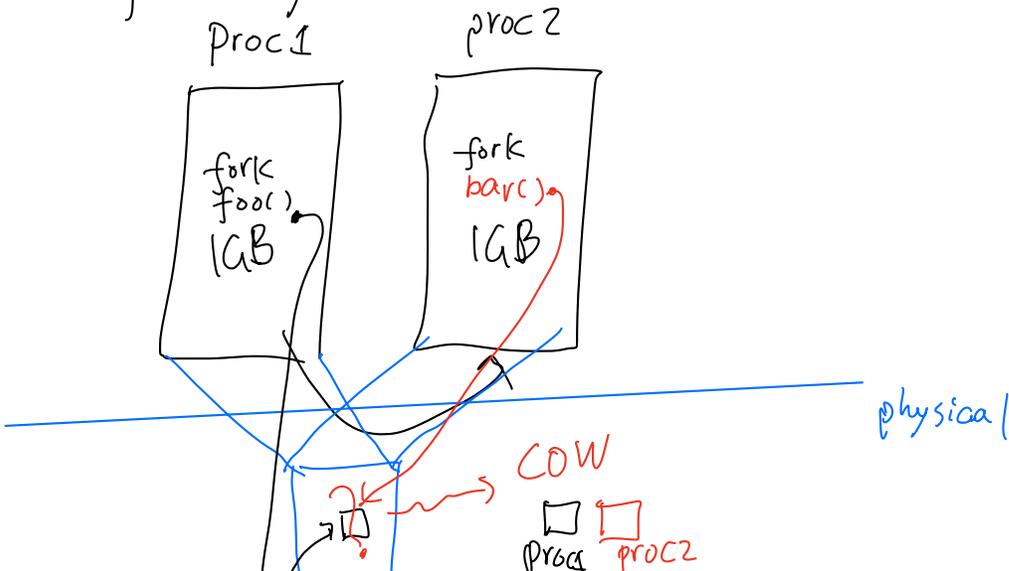


- page fault? exception
 - { ① invalid
 - { ② permission check

- on-demand memory allocation
- Copy-on-Write fork

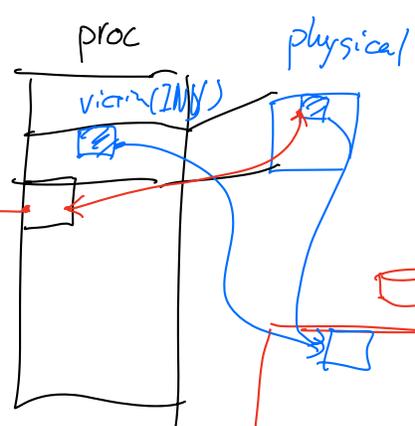


fork: syscall

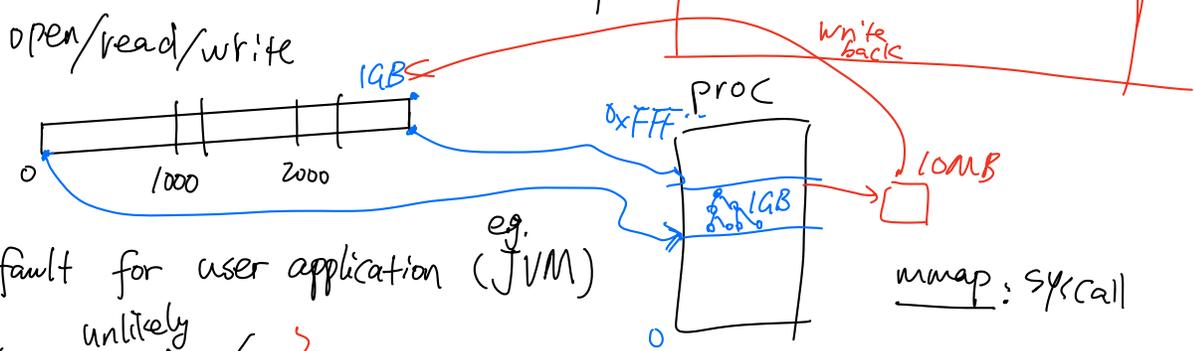


RO

• Overcommitting memory



• memory-mapped file



• pgfault for user application (JVM)

```

if (Cond) {
    // unlikely
    do sth
}
    
```

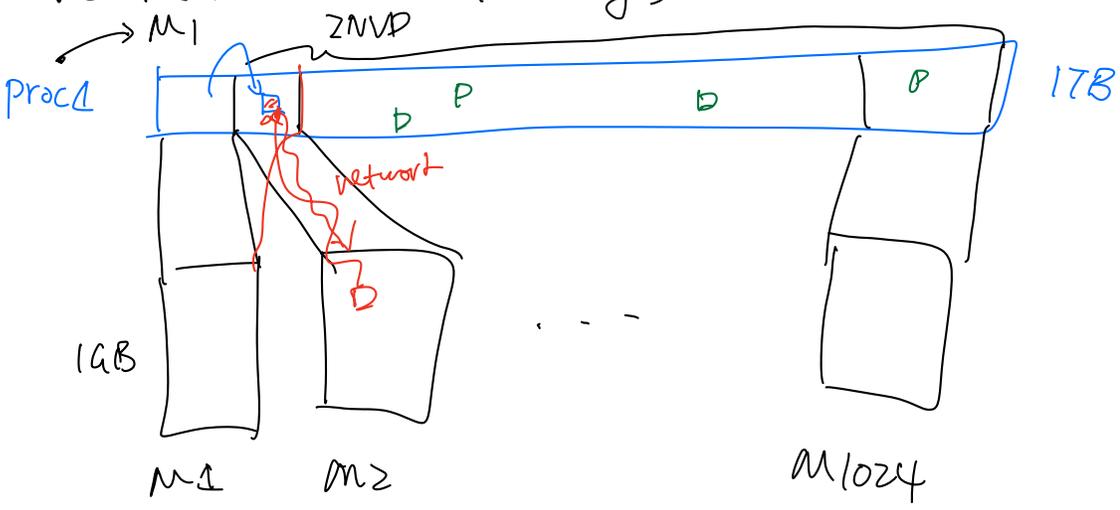
eg. `xptr = 0;` → // write to a place

handler() { do sth }

Cond → `unmap` → the page

`mmap: sys call`

• DSM (Distributed shared Memory)



• IO, Drivers

Q: can I use a GPU driver from NVIDIA for AMD's GPU?

NO

Q: can I use NVIDIA's Windows driver for Linux?

NO

