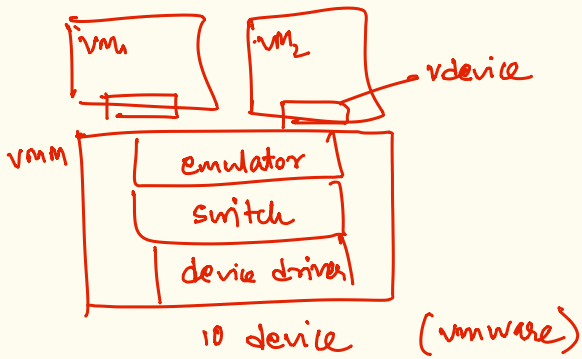


Lecture #9

CS695

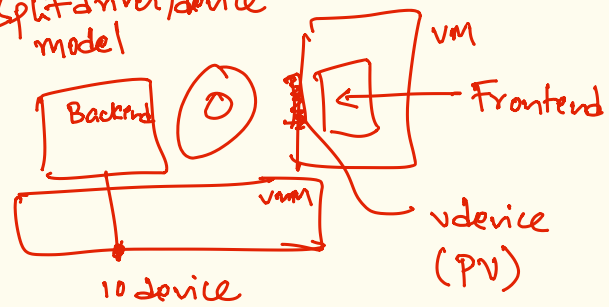
* 10 virtualization for VME.

① Full virtualization (Emulation)



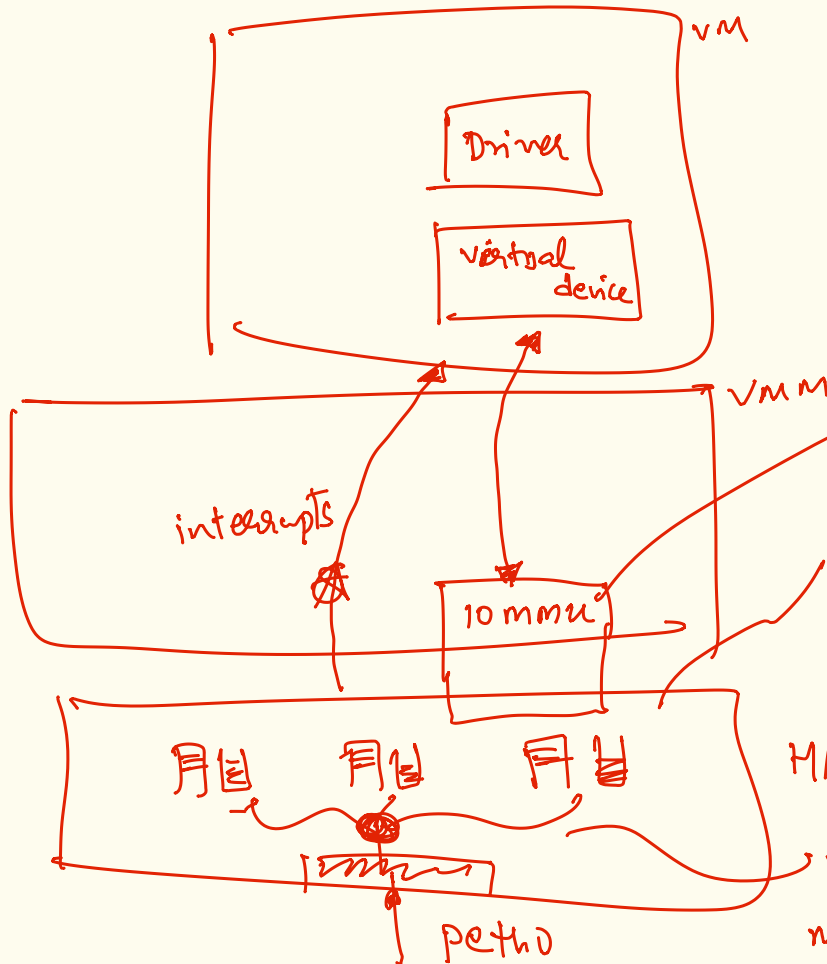
②

Split driver/device model



(virtio)/Xen

② H/w assisted mode. 10



Pass through
Direct assignment.
virtualized IO

which is DMAing
pkts. to/from
guest ppa

pg. table
of p2m

virtual function
device

H/w

MAC-level
MMU/demux in h/w

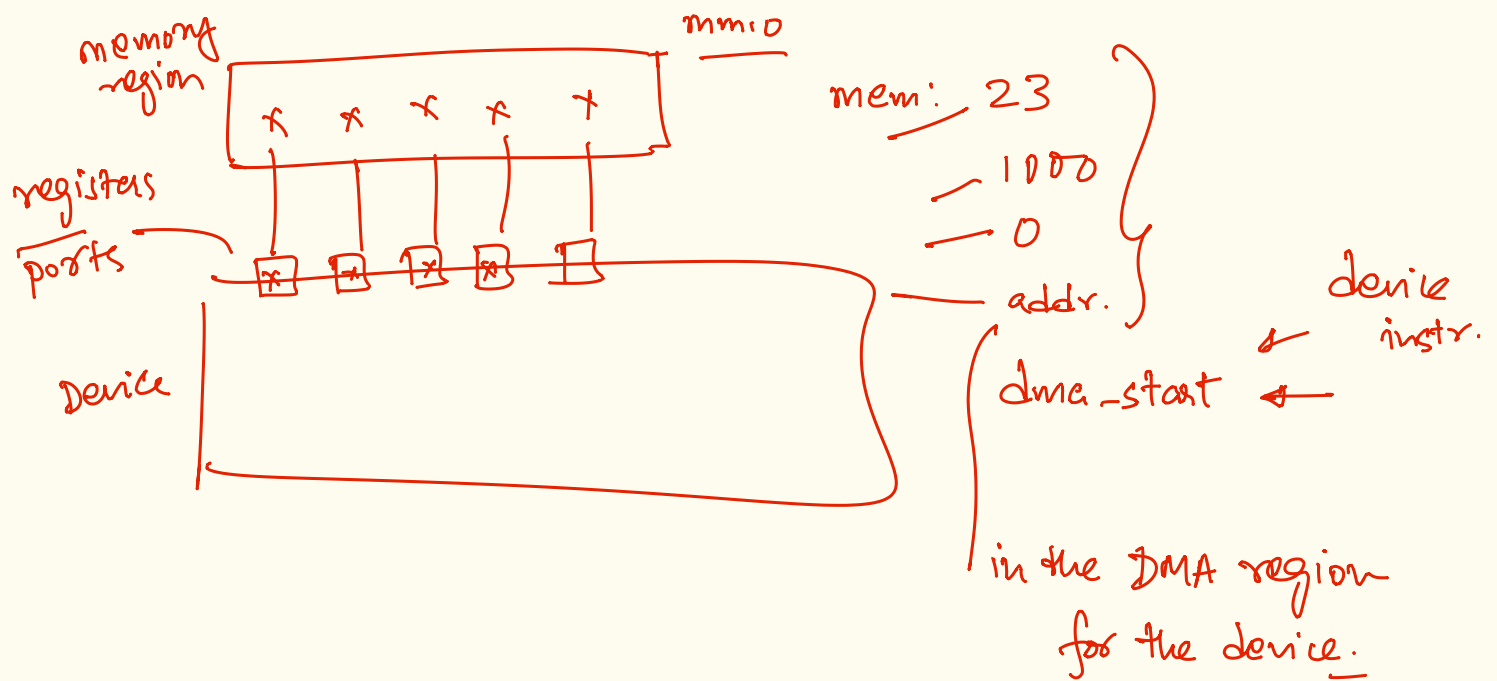
① A2 is active
due: 10th Feb.

* Quiz 1

date: 12th Feb. Wed.

time: ??

830 am



⑧ [memmgmt] [livemigration] [remus]

└ record & replay!
checkpointing.
availability

① OSD1 2002

~ Memory Resource Management in VMWARE ESX Server
Carl. Waldspurger

Keywords : overcommitment, server consolidation

⑧ manage memory? (provided to VMs)

- permissions (r/w/v/sl...)
- how much to allocate?
- ~ accounting & translation/mapping. ⑧
- failure handling
- ~ when to allocate?
- ~ reclamation
 - └ freeing ~~reclaim~~
 - └ swapping

managing
free
pages