

Virtual Memory

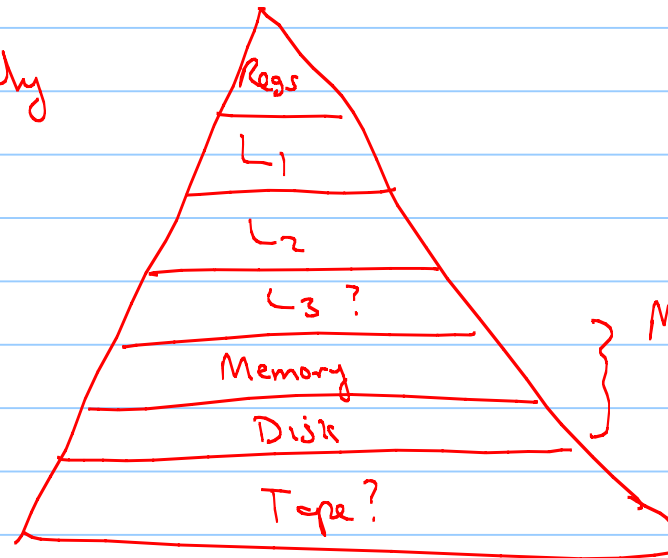
Note Title

11/10/2008

- Announcements

Mars
W & Fri

Memory Hierarchy



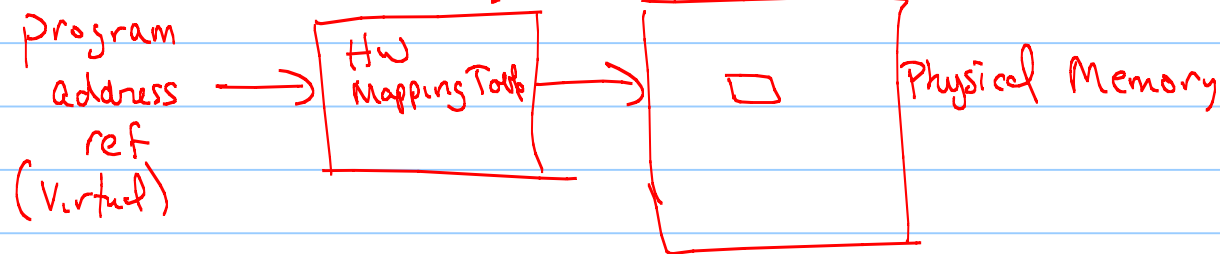
} Make Disk space act like memory.

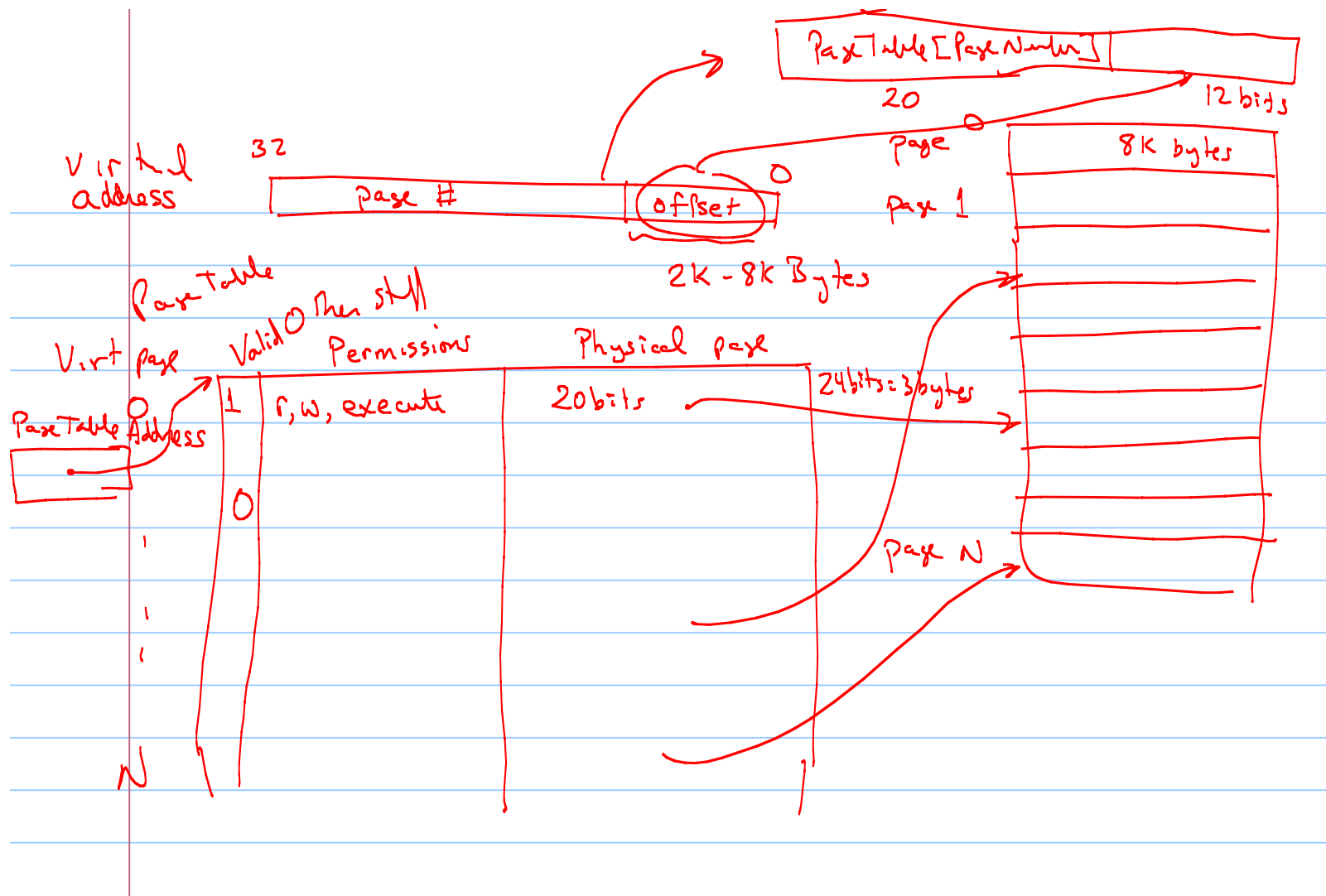
VM techniques also provide isolation between processes:

Technique₁: Give each process its own
address space: $0 - (2^{32} - 1)$: own copy of
each address.

Tech₂: Indirection

What's in this table?
How does it get there?





Each process has its own page table; maintained by the O.S.

What's a page file? The space on disk where pages are stored when not in physical memory.

Data Structures do we need to support this page file?

Page Fault Handler - kind of interrupt

- Make room in physical memory (evict a page)
- Bring in the desired page from disk - which page is it?

- update the page table w/ new mapping
- return to the instruction that caused the page fault.