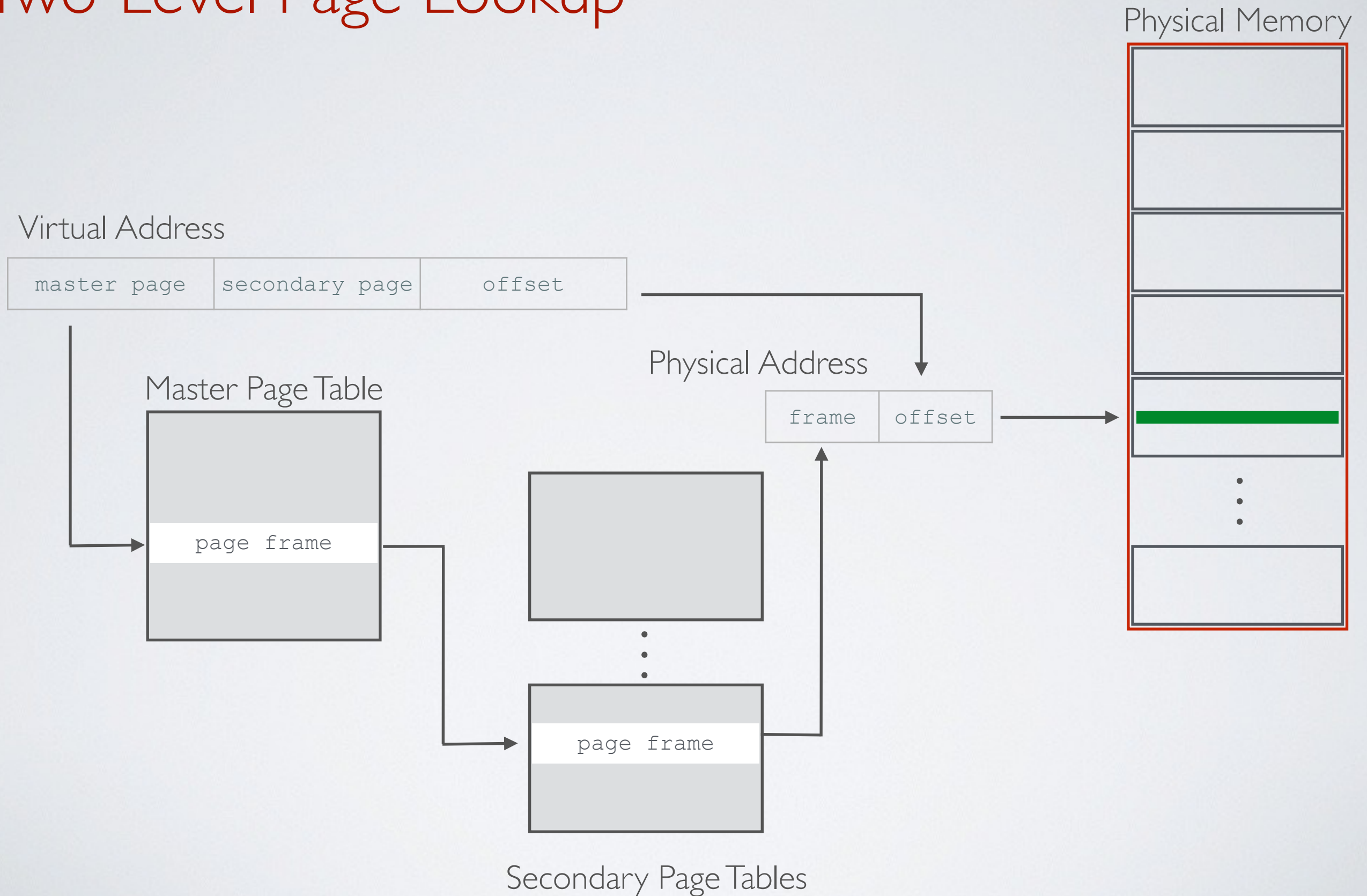


Two-Level Page Lookup



32 bits address space, 4K pages, 4 bytes/PTE

- How many bits in offset? 4K
so the virtual address requires **12 bits for the offset**
 - We want a master page table to fit in one page
 $4K / 4 \text{ bytes} = 1K$ possible entries
so the virtual address requires **10 bits for the master page index**
 - We also want a secondary page table to fit in one page
so the virtual address requires **10 bits for the secondary page index**
- ➔ $10 + 10 + 12 = 32$ bits address
This is why 4K page size is recommended