Operating Systems (Fall/Winter 2018)



Linux Paging: x86-64

Yajin Zhou (http://yajin.org)

Zhejiang University

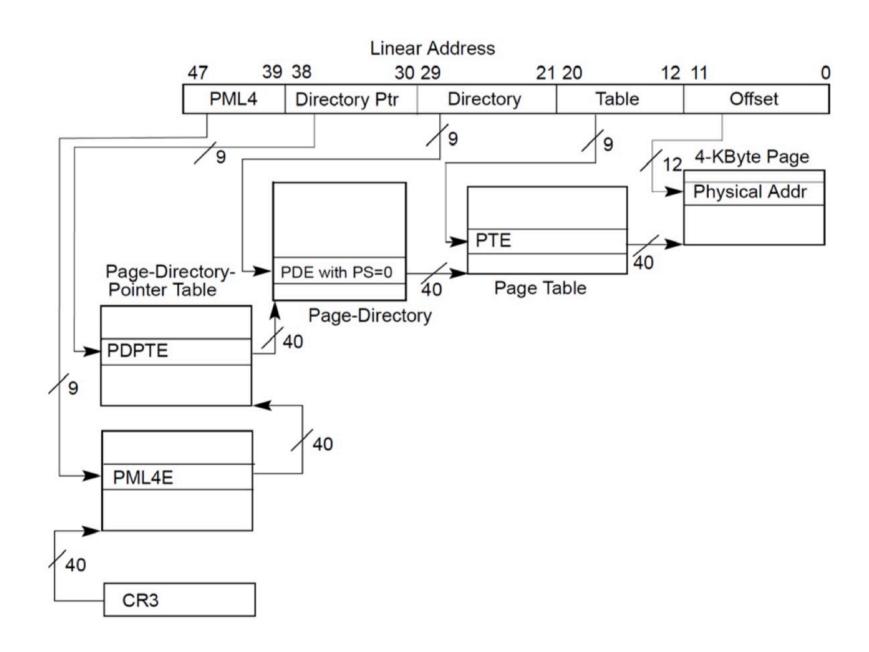


Segment

Segment in x86-64 is same with x86



Paging



1891 RES

Paging

- 64 bit pointer, but linear address is 48 bits
- 52 bits physical address, but memory bus is 40 bits
- 48 bits linear address: 9 9 9 9 12
- Each entry in the table is 8 bytes