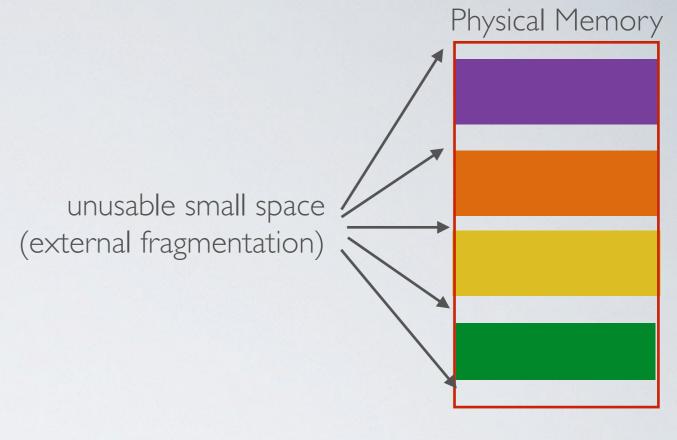


Each virtual address indicates

- a segment index in the table (top bits)
- and an offset (low bits)
- → x86 stores segment #s in registers (CS, DS, SS, ES, FS, GS)

Segmentation Trade-offs



Advantages

- ✓ Multiple segments per process (sparse memory)
- √ Can easily share memory
- ✓ Do not need entire process in memory (swap)

Disadvantages

- Requires translation, which could limit performance
- Makes external fragmentation a real problem