

Straw Man : Contiguous Allocation

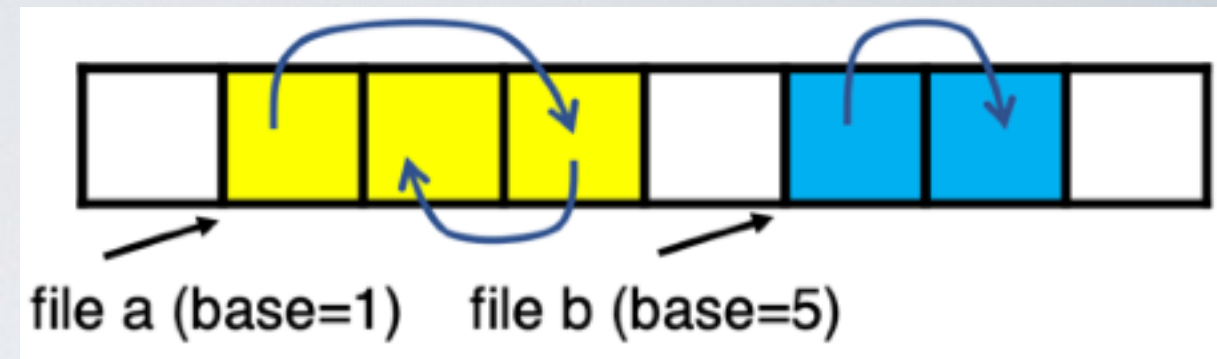
"Extent-based" - allocate files like segmented memory

- When creating a file, make the user pre-specify its length and allocate all space at once
- Inode contents : location and size



- ✓ Simple, fast access, both sequential and random
- External fragmentation (similar to VM)

Straw Man #2 : Linked Files



Basically a linked list on disk

- Keep a linked list of all free blocks
 - Inode contents : a pointer to file's first block
 - In each block, keep a pointer to the next one
- ✓ Easy dynamic growth & sequential access, no fragmentation
- Linked lists on disk a bad idea because of access times
Random very slow (e.g., traverse whole file to find last block)
Pointers take up room in block, skewing alignment