CS202 Handout 12

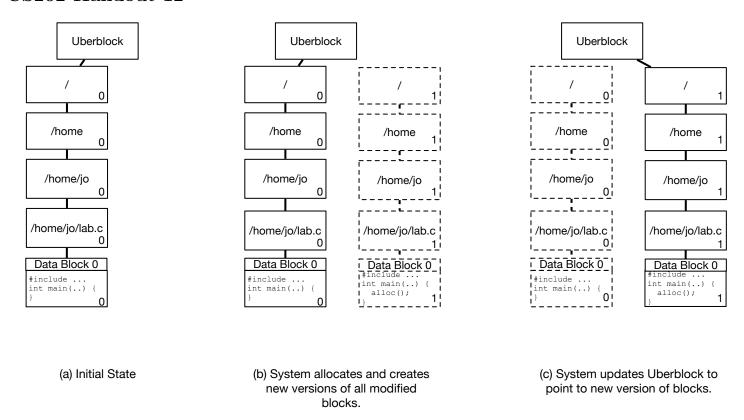


Figure 1: Copy-on-write filesystem: modifying a data block

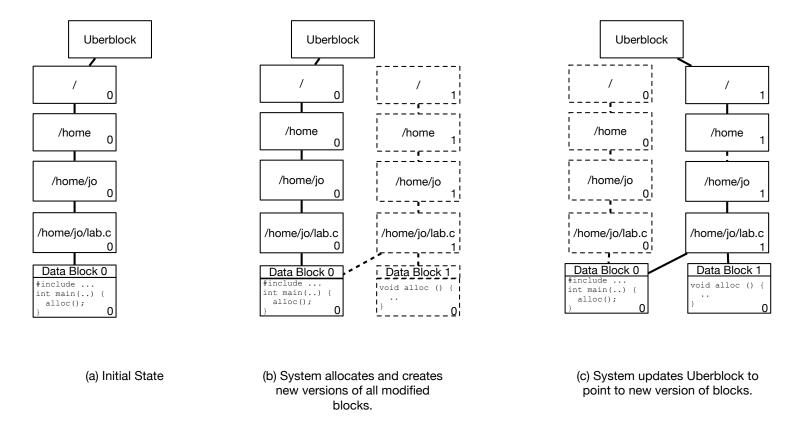
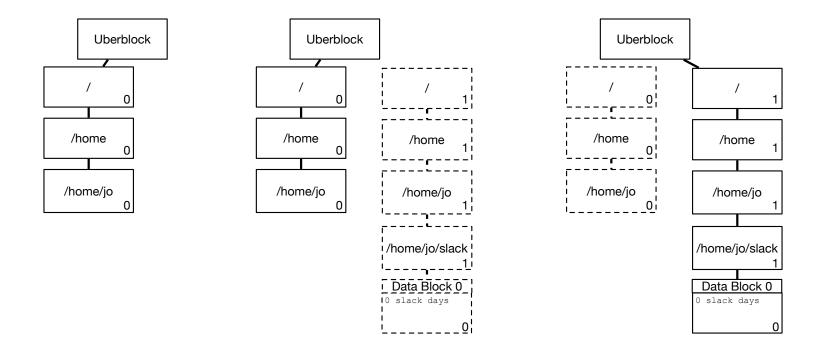


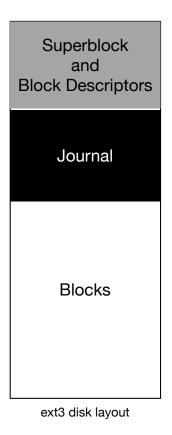
Figure 2: Copy-on-write filesystem: adding a data block



(a) Initial State

(b) System allocates and creates new versions of all modified blocks. (c) System updates Uberblock to point to new version of blocks.

Figure 3: Copy-on-write filesystem: creating a file



Inode updates

Data Bitmap updates

New data block

TxnEnd: TID

Figure 4: Redo logging in a filesystem