

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

Borrowed from NYU CS202:
<https://cs.nyu.edu/~mwaldfish/classes/21sp/lectures/handout13.pdf>

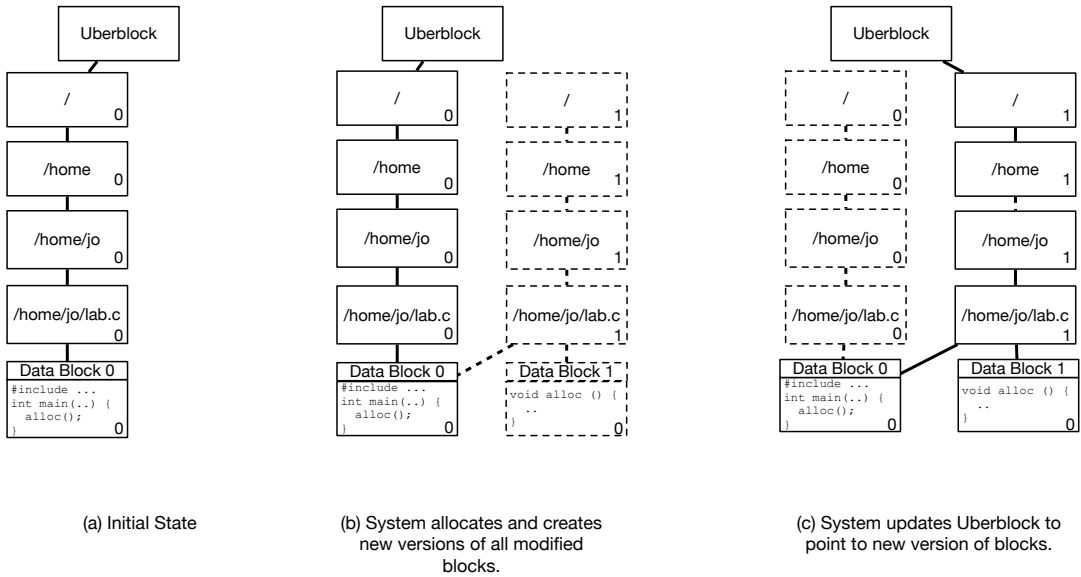
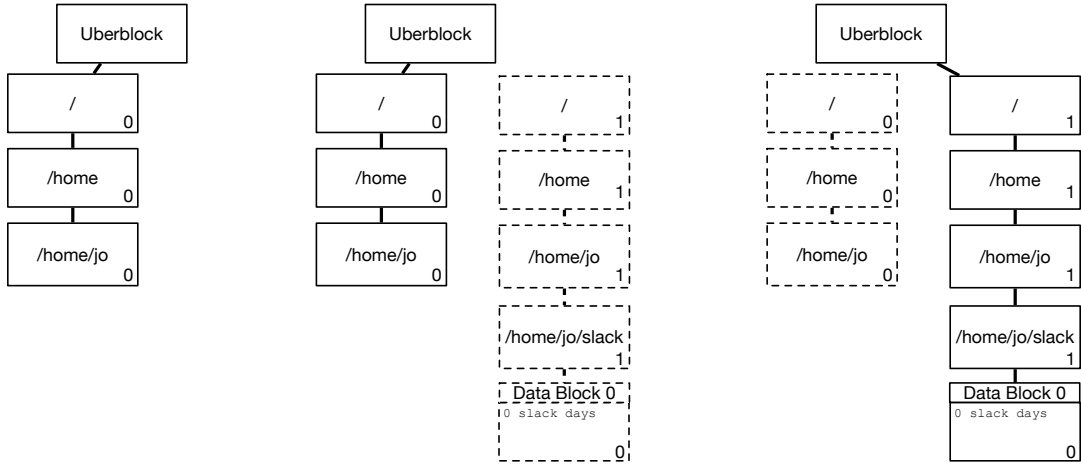


Figure 2: Copy-on-write filesystem: adding a data block



(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



ext3 disk layout

ext3 journal layout

Figure 4: Redo logging in a filesystem