

# File Metadata

file name, parent directory, date and time, access rights, file owner, and other

Metadata can be stored in

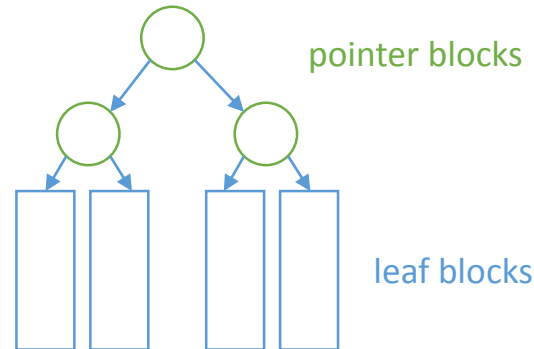
simple

complex

Tables  
(slow search)

Record 1
Record 2
Record N

B-trees  
(fast search)



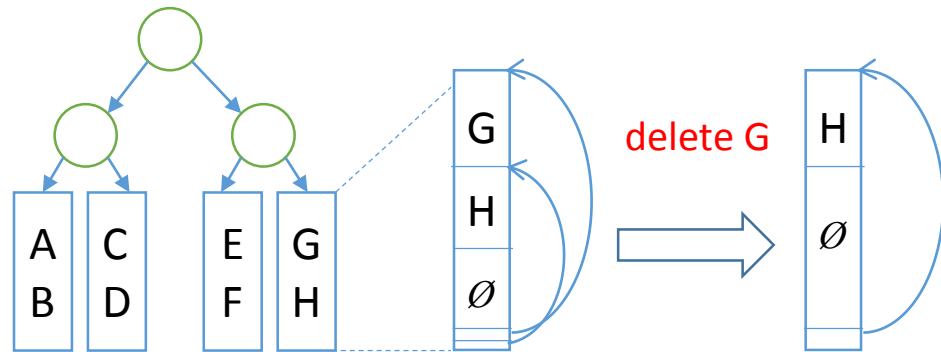
FAT – uses only tables

BTRFS and HFS – use only B-trees

NTFS and XFS use both tables and B-trees

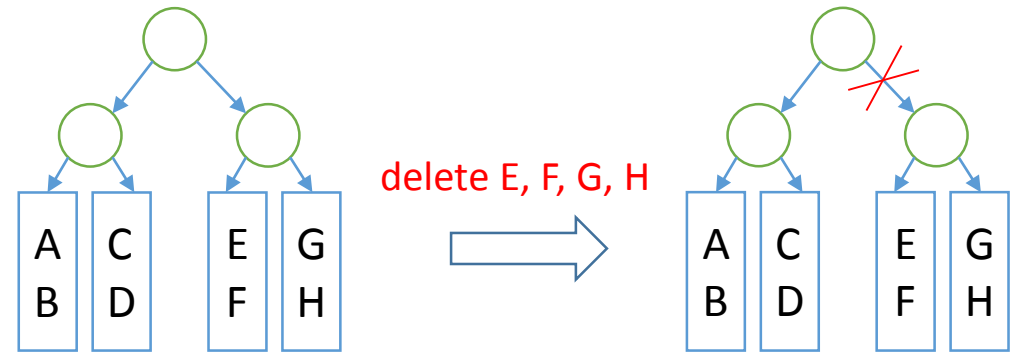
# File Deletion on a B-tree Filesystem

undelete is impossible



Entire leaf block is rebuilt

undelete is possible



Only a pointer is removed