Virtual File System

Superblock

Superblock is metadata about the filesystem. It define the name of the file system (ext4, ext2/3, FAT32). It defines their size, the status, and the structures of some other metadata.

Superblock is vital to file system since they tell the OS how the file system looks like, otherwise, OS can't understand the file system at all.

Superblock is replicated with multiple redundant copies.

It is used by OS to understand how to mount to a file system, say to mount the */var* directory. If the superblock is corrupted then you cannot mount the */var* directory.

Inode

Indext node represents metadata about a file. It has information about the ownership, the access permission, the file type.

What it doesn't have is the file name as it is stored in another data structure

Dentry

Dentry is the data structure that holds the name of the efile. It associate an inode to the file names.

It also contain the parent directory names and is used to do path lookups.

Revision #1
Created 2022-11-25 19:53:24 UTC by Tamarine
Updated 2022-11-25 22:02:37 UTC by Tamarine