



PRIYDARSHANI COLLEGE OF ENGINEERING

DEPARTMENT NAME:- ELECTRONIC AND COMMUNICATION

ACTIVITY REPORT

Activity Topic:- Video Lecture On File Management System

Subject Name:-Operating System

Activity Date:-11/11/2022

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Guided By:-

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File-System Structure :

- File Structure
- Logical Storage Unit
- Collection Of Related Information

- File System Organized Into Layers
- File System Resides On Secondary Storage(Disks)
- Provides Efficient And Convenient Access To Disk By Allowing Data To Be Stored, Located Retrieved Easily

- File Control Block Storage Structure Consisting Of Information About A File
- Device Driver Controls The Physical Device

File System Implementation :

- Boot Control Block Contains Info Needed By System To Boot OS From That Volume
- Volume Control Block Contains Volume Details
- Directory Structure Organizes The Files
- Per-File File Control Block(FCB) Contains Many Details About The File

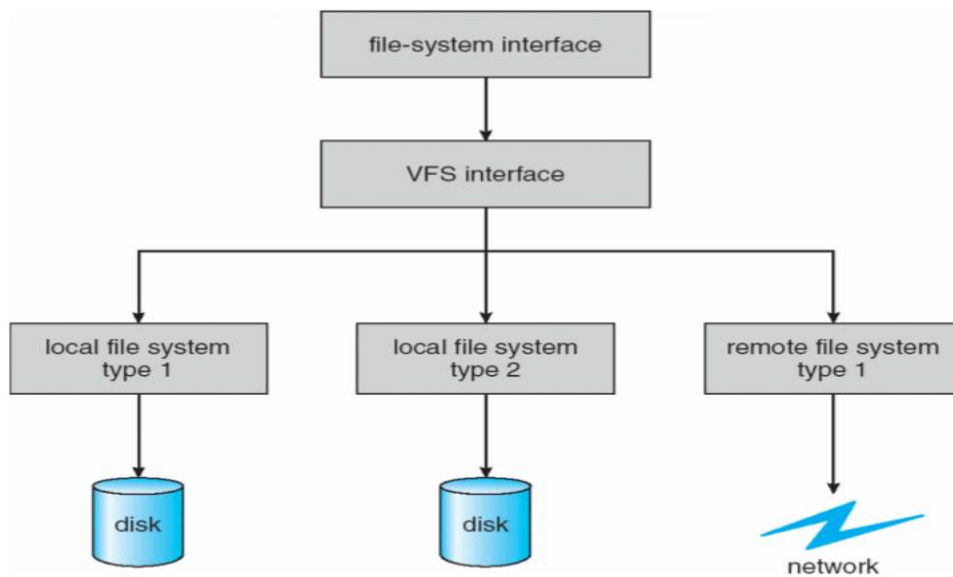
Virtual File System :

- Virtual File Systems(VFS) Provide An Object Oriented Way Of Implementing File System
- VFS Allows The Same System Call Interface(The API) To Be Used For Different Types Of File System

A Typical File Control Block

- ❖ File Permissions
- ❖ File Dates(Create, Access, Write
- ❖ File Owner, Group, ACL
- ❖ File Size
- ❖ File Data Blocks Or Pointers To File Data Blocks

Schematic View Of virtual File System



Directory Implementation :-

- *Linear list of the file name's with pointer to the data blocks.*
 - *Simple to program*
 - *Time consuming to execute*
- *Hash Table :- Linear list with hash data structure.*
 - *Decrease directory search time*
 - *Collisions - Situations where two files names hash to the some locations.*
 - *Fixed size*

Activity Pictures :-

