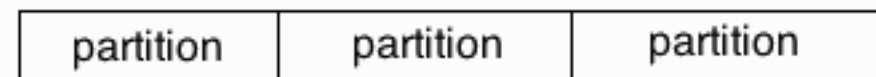


UNIX File System Layout

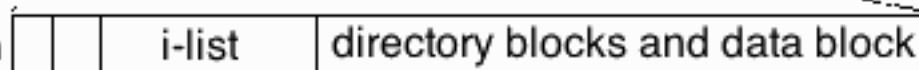
- ◆ boot block contains bootstrap code that is read into the machine to boot the operating system
- ◆ super block describes the state of a file system, how large it is, how many files it can store, where to find free space on the file system, etc
- ◆ inode list is a list of inodes (explained later)
- ◆ data blocks store file data and administrative data

boot block	super block	inode list	data blocks
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disk drive

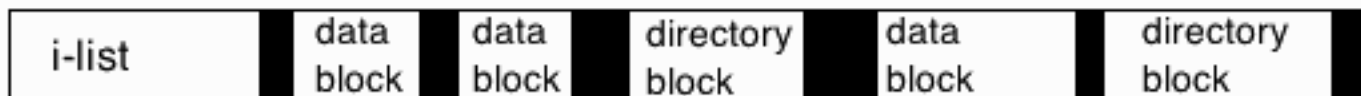
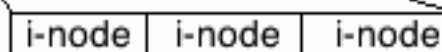


file system

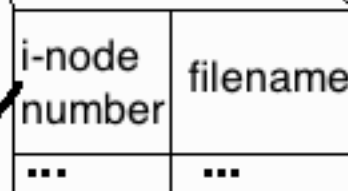
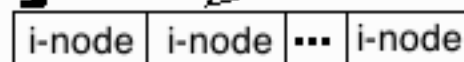


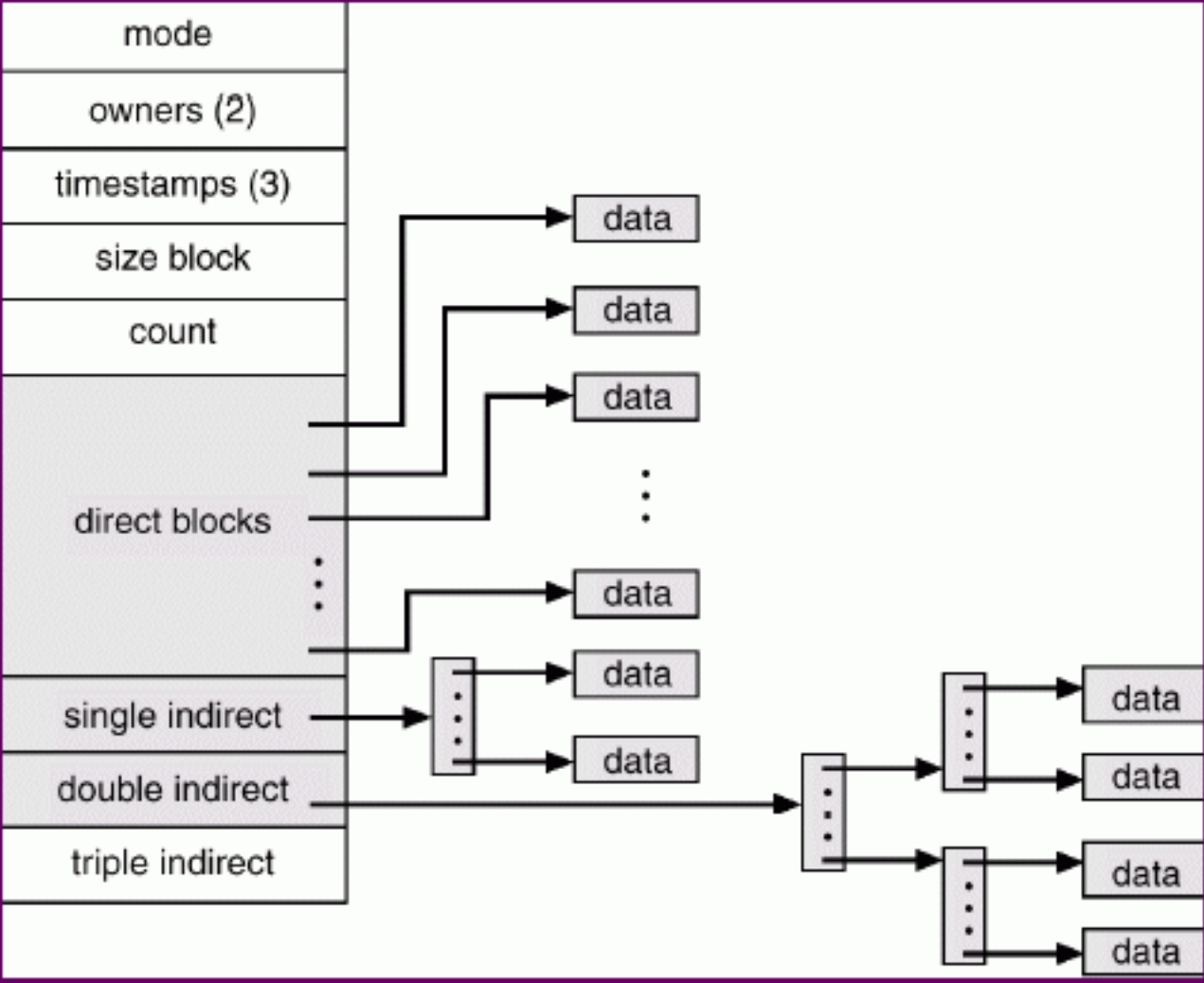
boot block

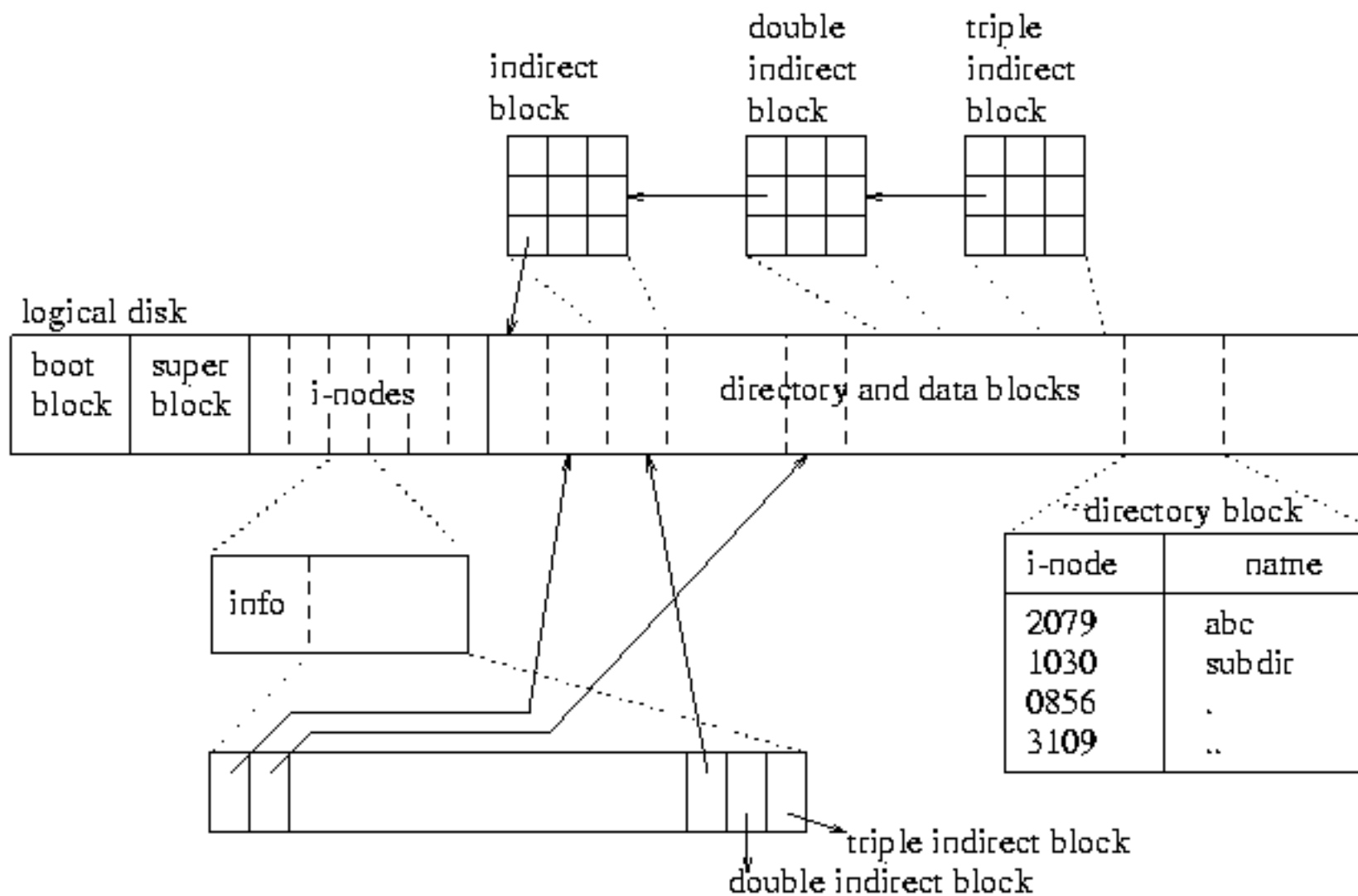
super block

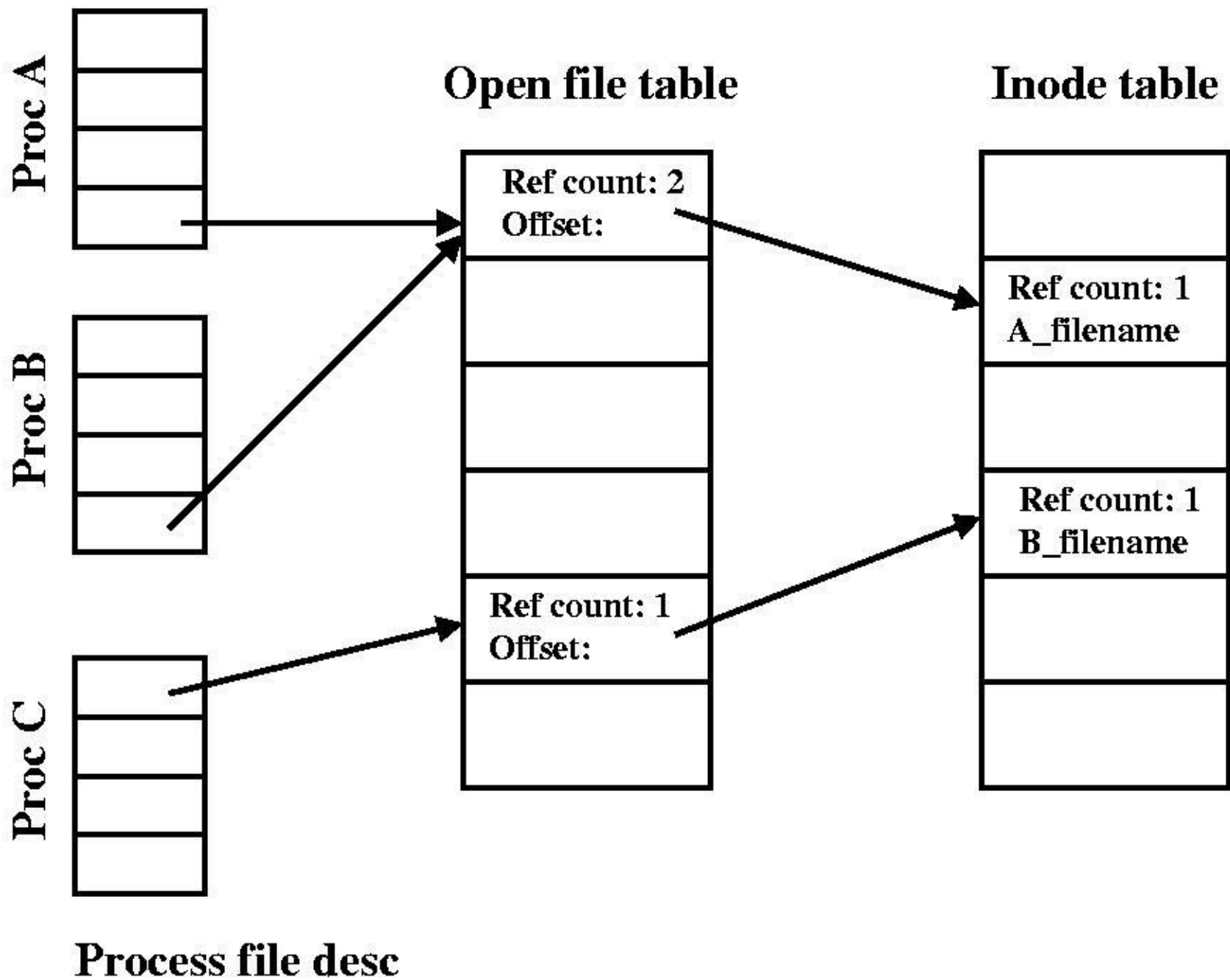


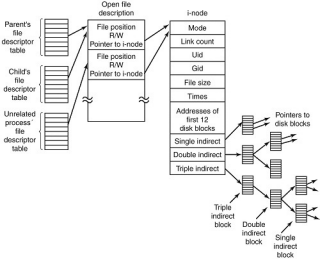
"directory file"











Process A

File descriptor table

	fd flags	file ptr
<i>fd 0</i>		→ 0
<i>fd 1</i>		→ 23
<i>fd 2</i>		→ 23
<i>fd 20</i>		

Open file table (system-wide)

file offset	status flags	inode ptr

Diagram illustrating the mapping of file offsets to inode pointers:

- File offset 224 maps to inode pointer 1976.
- File offset 5139 maps to inode pointer 1976.

I-node table (system-wide)

[illegible]

Relationship between file descriptors, open file descriptions, and i-nodes