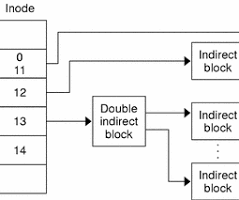
OVER THE WIRE  
30 sept   
  
whats inode ? [Grab your reader’s attention with a great quote from the document or use this space to emphasize a key point. To place this text box anywhere on the page, just drag it.]



find . -inum 123456

(inum = inode num)

An inode, or **index node**, is a data structure in a Unix-style file system that stores information about a file system object, such as a file or directory. It contains all the metadata for a file, except for the file's actual name and its content.

**What is stored in an inode?**

Each inode is identified by a unique inode number within its file system. This inode stores the following crucial metadata:

* **File type**: For example, is it a regular file, directory, or symbolic link?
* **Permissions**: Defines who can read, write, or execute the file.
* **Ownership**: The User ID (UID) and Group ID (GID) of the file's owner.
* **File size**: The size of the file in bytes.
* **Timestamps**: The last time the file was accessed (atime), modified (mtime), and the inode itself was changed (ctime).
* **Link count**: The number of hard links pointing to the inode.
* **Data block pointers**: Pointers to the physical data blocks on the disk that contain the file's actual content.

**Inode vs. file name**

A key concept in file systems is the separation of the file name and the inode.

* **The directory** is what links a human-readable **file name** to its corresponding **inode number**.
* **The inode** itself does not contain the file name.

“-“ Filename?

and "-" filename?

In the context of the command line, a single dash

- is not a filename but a special character that often refers to standard input or standard output, depending on the command. This provides a flexible way to pipe data between commands without creating temporary files.

**Standard input**

When a command expects input from a file, using - as the filename tells the command to read its input from the standard input stream instead.

**Example:**  
To pass text directly from the keyboard to the cat command, you can use cat -.

bash

$ cat -

Hello, world!

This is standard input.

(Press Ctrl+D to send an end-of-file signal)

Level 4:

USE THE FILE ./\* COMMAND TO CHECK THE DETALIS OF FILES OF ALL FILES IN SAME DIR

Level 5   
  
I used ls -ilR , to find all the files and their sub file’s name , size , inode nums

Level2