File and Directory in Linux

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- Wildcard

- Difference with Hard link and Soft link

The commands for working with files and directories

The following commands are used to word with files and directories

- cp : Copy files and directories

- mv : Move/rename files and directories

- mkdir : Create directories

- rm : Remove files and directories

- ln : Create hard and symbolic links

The commands for working with files and directories

cp - Copy files and directories

cp item1 item2

Copy the single file or directory "item1" to file and directory "item2". If item2 doesn't exist, it is created

or

cp item… directory

Copy the multiple item (either files or directories) into the directory . Directory must already exist.

The commands for working with files and directories

cp - Copy files and directories

Option	Meaning
-a, --archive	Copy the files and directories and all of their attributes, including ownerships and permissions.
-i, --interactive	Before overwriting an existing file, prompt the user for confirmation.
-r, --recursive	Recursively copy directories and their contents. This option (or the –a option) is required when copying directories
-u, --update	When copying files from one directory to another, only copy files that either don't exist, or are newer than the existing corresponding files, in the destination directory
-v, --verbose	Display informative messages as the copy is performed.

The commands for working with files and directories

mv - Move and rename files

mv item1 item2

or

mv item... directory

Option
-i,   --interactive
-u,   --update
-v,   --verbose

The commands for working with files and directories

mkdir – Create directories

mkdir directory….

Example
mkdir dir
mkdir dir1 dir2 dir3

The commands for working with files and directories

rm – Remove files and directories

rm item....

Option
-i, --interactive
-r, --recursive
-f, --force
-v, --verbose

The commands for working with files and directories

ln – Create links

ln file link

Create a hard link

or

ln – s file link

Create a symbolic link

Wildcard

Since the shell uses filenames so much, it provides special characters to help rapidly specify groups of filenames (*Wildcards*)

Using wildcards allow to select filenames based on patterns of characters.
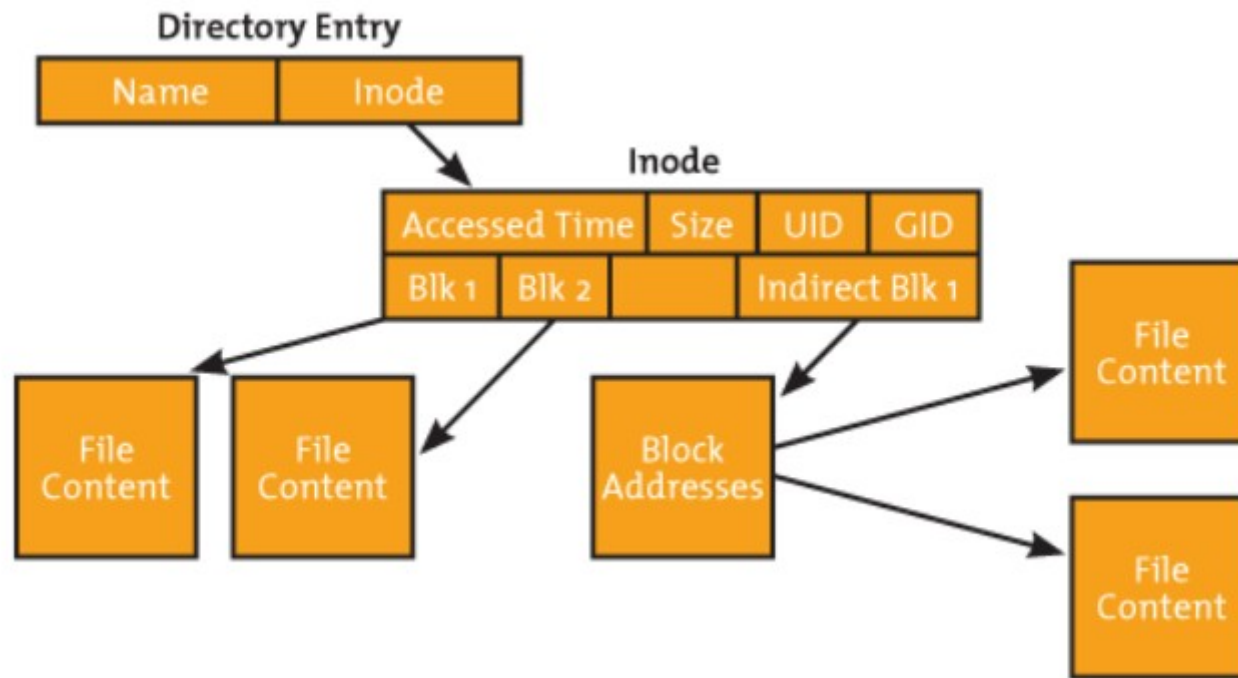
Wildcard

Wildcard	Meaning
*	Matches any characters
?	Matches any single character
[characters]	Matches any character that is a member of the set characters
[!characters]	Matches any character that is not a member of the set characters
[[:class:]]	Matches any character that is a member of the specified class

Wildcard

Character Class	Meaning
[:alnum:]	Matches any alphanumeric character
[:alpha:]	Matches any alphabetic character
[:digit:]	Matches any numeral
[:lower:]	Matches any lowercase letter
[:upper:]	Matches any uppercase letter

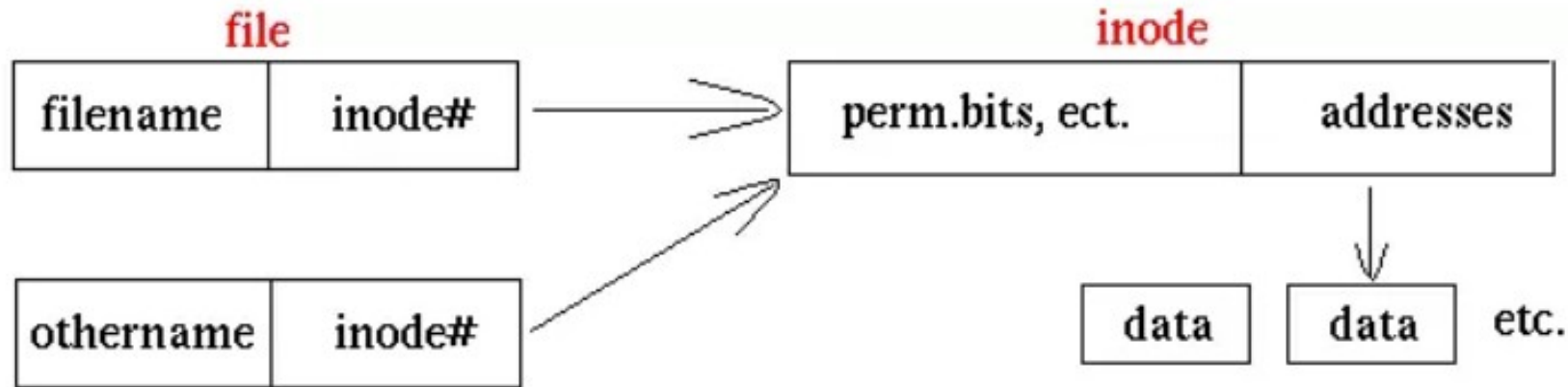# Difference with Hard link and Soft link

Inode

Inode xác định file và thuộc tính của nó. Mỗi Inode được xác định bởi 1 con số duy nhất trong hệ thống tệp tin.

Difference with Hard link and Soft link

Hard link

Difference with Hard link and Soft link

Soft link