Day 9

Soft link

Definition

Soft link is similar to the file shortcut in windows.soft link can be referred as symbolic link or symlink.It has different inode number and the file permission compared to the original file.It contains the path of the original file and not the contains.when the original file removed the link will be inaccessible because it points to non - existent.This is Called the hanging file.soft link can be Create the using following command ln -s source file name and link name

1.One file Create and insert to soft link excute command to views

```
[root@localhost ~]# touch myfile
[root@localhost ~]# ln -s myfile goa
[root@localhost ~]# cat > myfile
Hi
Today Topic is Softlink
Class also Completed
[root@localhost ~]# cat myfile
Hi
Today Topic is Softlink
Class also Completed
[root@localhost ~]# cat goa
Hi
Today Topic is Softlink
Class also Completed
```

2.inode has been differents os soft link

```
[root@localhost ~]# stat myfile
  File: myfile
  Size: 48            Blocks: 8          IO Block: 4096    regular file
Device: fd00h/64768d    Inode: 17946180    Links: 1
Access: (0644/-rw-r--r--)  Uid: (    0/    root)   Gid: (    0/    root)
Context: unconfined_u:object_r:admin_home_t:s0
Access: 2024-05-13 12:41:07.055252100 +0530
Modify: 2024-05-13 12:40:49.918334709 +0530
Change: 2024-05-13 12:40:49.918334709 +0530
 Birth: 2024-05-13 12:39:49.350623701 +0530
[root@localhost ~]# stat goa
  File: goa -> myfile
  Size: 6             Blocks: 0          IO Block: 4096    symbolic link
Device: fd00h/64768d    Inode: 17946182    Links: 1
Access: (0777/lrwxrwxrwx)  Uid: (    0/    root)   Gid: (    0/    root)
Context: unconfined_u:object_r:admin_home_t:s0
Access: 2024-05-13 12:41:15.850209552 +0530
Modify: 2024-05-13 12:40:02.322561808 +0530
Change: 2024-05-13 12:40:02.322561808 +0530
 Birth: 2024-05-13 12:40:02.322561808 +0530
```

3.Removing the status will be checking

```
[root@localhost ~]# rm -rf myfile
[root@localhost ~]# cat myfile
cat: myfile: No such file or directory
[root@localhost ~]# cat goa
cat: goa: No such file or directory
```

Hard link

Definition

Mirror copy of the orginal file.It has the same inode number and file permission.It contains the actual contens of the original file nothing happens when the original is removed.Hard link can be using command ln source file name and link file name.

1.One file Create and insert to hard link excute command to views

```
[root@localhost ~]# touch mango
[root@localhost ~]# ln mango apple
[root@localhost ~]# cat > mango
Hi
Today topic is hardlink
Class also completed
[root@localhost ~]# cat mango
Hi
Today topic is hardlink
Class also completed
[root@localhost ~]# cat apple
Hi
Today topic is hardlink
Class also completed
```

2.idone has been same for hard link

```
[root@localhost ~]# stat mango
  File: mango
  Size: 48           Blocks: 8         IO Block: 4096    regular file
Device: fd00h/64768d    Inode: 17946180    Links: 2
Access: (0644/-rw-r--r--)  Uid: (    0/    root)   Gid: (    0/    root)
Context: unconfined_u:object_r:admin_home_t:s0
Access: 2024-05-13 14:41:27.184477531 +0530
Modify: 2024-05-13 14:41:17.496532476 +0530
Change: 2024-05-13 14:41:17.496532476 +0530
 Birth: 2024-05-13 14:40:31.367794095 +0530
[root@localhost ~]# stat apple
  File: apple
  Size: 48           Blocks: 8         IO Block: 4096    regular file
Device: fd00h/64768d    Inode: 17946180    Links: 2
Access: (0644/-rw-r--r--)  Uid: (    0/    root)   Gid: (    0/    root)
Context: unconfined_u:object_r:admin_home_t:s0
Access: 2024-05-13 14:41:27.184477531 +0530
Modify: 2024-05-13 14:41:17.496532476 +0530
Change: 2024-05-13 14:41:17.496532476 +0530
 Birth: 2024-05-13 14:40:31.367794095 +0530
```

3.source file will be removing but contains is destination file

```
[root@localhost ~]# rm -rf mango
[root@localhost ~]# cat mango
cat: mango: No such file or directory
[root@localhost ~]# cat apple
Hi
Today topic is hardlink
Class also completed
```