

chmod : To change the permissions of the files/dir

1) There 3 type permissions in Linux

- a) read(r) --4
- b) write(w) --2
- c) execute(x)--1

2) There are three types of people

- a) owner (user)
- b) group
- c) others

3) Three way to give permissions using chmod

- a) numbering
- b) Absolute
- c) adding/removing

4) Numbering: While giving permissions

we use three digit number ,

First digit is belongs to user

second digit is belong to group

3rd digit is belong to Others.

ex : chmod 777 file1

chmod 442 file2

chmod -R 560 d1

Note : In above type we cant give specific permissions

to specific person like group/user/others

5) To Avoid above problem we use Absolute permissions.

ex : assign "Read" permissions only to  
group,without change permissions to  
user and others.

ex :chmod g=r file1

6) To add/remove specific permissions without changing

exsiting permissions.

chmod u+rw file1

chmod o-x file1

chmod u+x,g-w file1

7) chmod -R : Tochange permissions to dir and file

which are inside the dir.

chmod -R d1

umask:

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This command is used to change/display umask value.

based on umask value default permissions will

be assigned at the of object creation.

ex: umask

display existing umask value.

To change umask value:

umask <value>

ex:umask 420

For files:

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i) umask value is subtracted from "666".

ii) we cant assign default execute permissions to files.

iii) if result of the umask is having any "execute" permissions combination value, it will add "+1" to specific position.

ex 1: umask 224

a) 666

-224

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442

Above value is not having any execute permissions combination. so umask doesn't add any +1 in any position.

user & group get default "read"

others get default "write" permissions.

b) create any file

touch test123

ls -l

ex2: umask 521

a) 666

-521

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145

In above result user and others are getting execute permissions. For user and others system will add +1.

b) 666

-521

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145

+101

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246

For Dir: umask value is subtracted from "777"

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blkid:

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