



chmod []

```

: (permissions)
:
-c, --changes :
-f, --silent, --quiet : chmod
--help :
-R, --recursive : /
--reference = filename :
-v, --verbose :
--version :

```

```

chmod
chmod
chmod / 8
가
ls

```

```
hanblt@linux:~$ ls -l
drwxrwxrw- 1 songsari fish 46 JAN 21 18:23 dir
-rw-r----x 1 songsari fish 46 JAN 21 18:23 test.txt
```

		8
d-----	/ (:-, :d)	
-r-----	/ 가	400
--w-----	/ 가	200
---x-----	/ 가	100
----r-----	/	40
-----w----	/	20
-----x---	/	10
-----r--	가	4
-----w-	가	2
-----x	가	1

```

/
. /
.
.
. test.txt
.
가
.

```

```
# chmod o+r test.txt
```

test.txt

```
# chmod ug+rw,o-r test.txt
```

(,)



644

(nobody)
other

u	user	/
g	group	/
o	other	
a	all	, , ()

r	read	/
w	write	/
x	execute	/
s	set user(group) ID	
t	sticky bit	Sticky
u	user	
g	group	
o	other	
l	locking	

+	가	가 .
-		.
=		가 .

8

8 / . 8

test.txt

```
#chmod 754 test.txt
```

(4), (2), (1) 7 . (4),
(1) 5 4 .

8

/

0400	/
0200	/
0100	/

/

0040	/
0020	/
0010	/

0004	
0002	
0001	
4000	
2000	
1000	Sticky



SetUID(4000),
SetGID(2000)

가

가

ls

```
hanbit@linux:~$ ls -al
drwxr-xr-x  5 root root   4096 26 10:52 .
drwxr-xr-x  5 root root   4096 26 10:53 ..
-rwxr-xr-x  5 root root 37772251 30 10:53 test1.bmp
drwxr-xr-x  5 root fish   4096  1 10:53 songsari
```

test1.bmp

“ ” “ ” “ ”

가

(u) (x) , (w) : u-x+w
(o) (r) : o-r

```
# chmod u-x+w,o-r test1.bmp
```

8

(400) (200) (100) (40) (20)

(1)

: 400+200+100 : 700

: 40+20 : 60

: 1 : 1

```
# chmod 761 test1.bmp
```

```
chfn
chgrp
chown
chsh
```

SetUID SetGID

inode 16

1-12

ID				
16 15 14 13	12 11 10	9 8 7 6	6 5 4	3 2 1

10-12

setuid(4000), setgid(2000), stiky(1000)

UID GID

• RUID, RGID : (really) .

• EUID, EGID, SGID : . 가
가 .

가 .

EUID/EGID .

EUID/EGID RUID/RGID .

EUID가 가 , EGID가

. , passwd

. , 가

가

가





```
chown[ ...] :[ ... ] ...
chown[ ...].
```

```
-f, --silent, --quiet :chown
-R, --recursive : /
-v, --verbose :
--help :
--version :
```

```
chown
      index
/var/www/html 가 index.html
admin
```

```
hanbit@linux:~$ # ls -al /var/www/html/index.html
-rw-r--r-- 1 admin admin 408 12  3 09:34 /var/www/html/index.html
```

```
index.html      webmaster
```

```
# chown webmaster:webmaster /var/www/html/index.html
```

```
index.html      webmaster
```



```
hanbit@linux:~$ ls -al /var/www/html/index.html
-rw-r--r-- 1 webmaster webmaster 408 12  3 09:36/var/www/html/
index.html
```

```
# chown admin index.html
```

```
hanbit@linux:~$ ls -al /var/www/html/index.html
-rw-r--r-- 1 admin webmaster 408 12  3 09:36/var/www/html/
index.html
```

```
hanbit@linux:~$ ls -al /var/www/html/index.html
-rw-r--r-- 1 admin webmaster 408 12  3 09:36/var/www/html/
index.html
```



chgrp

```
hanbit@linux:~$ ls -al /var/www/html/index.html
-rw-r--r-- 1 admin webmaster 408 12  3 09:36/var/www/html/
index.html
```

```
# chown .webmin index.html
```

```
hanbit@linux:~$ ls -al /var/www/html/index.html
-rw-r--r-- 1 admin webmin 408 12  3 09:36/var/www/html/
index.html
```

```
hanbit@linux:~$ ls -al /var/www/html/index.html
-rw-r--r-- 1 admin webmin 408 12  3 09:36/var/www/html/
index.html
```

```
hanbit@linux:~$ ls -al /var/www/html
-rw-r--r-- 1 admin webmin 408 12  3 09:36/var/www/html/
index.html
```

```
hanblt@linux:~$ ls -al /var/www/html
28
drwxr-xr-x  5 admin    admin    4096 2  4 15:06 .
drwxr-xr-x  9 admin    admin    4096 5  2 15:11 ..
lrwxrwxrwx  1 admin    admin    24 12  14 19:52 htdig ->
../../../../usr/share/htdig
-rw-r--r--  1 webmater  webmaster408 12  3 09:34 index.html
drwxr-xr-x  9 admin    admin    4096 2  4 15:06 manual
```

```
/var/www/html
webmaster          .      R      .
```

```
hanblt@linux:~$ chown -R webmaster:webmaster /var/www/html
28
drwxr-xr-x  5 webmaster webmaster4096 2  4 15:06 .
drwxr-xr-x  9 admin    admin    4096 5  2 15:11 ..
lrwxrwxrwx  1 webmaster webmaster24 12  14 19:52 htdig ->
../../../../usr/share/htdig
-rw-r--r--  1 webmater  webmaster408 12  3 09:34 index.html
drwxr-xr-x  9 webmater  webmaster4096 2  4 15:06 manual
```



```
newgrp
```



가



가

가



chroot []
chroot []

```
--help :  
--version :
```

가 / \$PATH

.chroot

가

가

/var/www/html / /
,chroot 가/

가



chsh[][]

- s, --shell :
- l, --list-shells : /etc/shells
- u, --help :
- v, --version :

chsh . /etc/shells
 . /etc/shells

```
handbook@handbook:~$ cat /etc/shells
/bin/sh
/bin/bash
/bin/bash2
/bin/ash
/bin/bsh
/bin/tcsh
/bin/csh
/bin/ksh
/bin/zsh
```

chsh -l /etc/shells

```
hand@hand:~$ # chsh -l
/bin/sh
/bin/bash
/bin/bash2
/bin/ash
/bin/bsh
/bin/tcsh
/bin/csh
/bin/ksh
/bin/zsh
```

,chsh /bin/csh

```
hand@hand:~$ # chsh
Changing shell for root.
New shell [/bin/bash]: /bin/csh
Shell changed.
```

-s

```
hand@hand:~$ # chsh -s /bin/bash
Changing shell for root.
Shell changed.
```

가

```
# echo $ SHELL
```

가

- Bourne shell (sh) : Steve Bourne가
- C shell (csh) : C
- TC shell (tcsh) : Freeware C
- Korn shell (ksh) : David Korn
- Bourne Again SHell (bash) : 가 Bourne shell
FSF IEEE Posix Shell

	Bourn	C	TC	Korn	BASH
	no	yes	yes	yes	yes
	no	yes	yes	yes	yes
	yes	yes	yes	yes	yes
	no	yes	yes	yes	yes
	no	no	yes	yes	no
job	no	yes	yes	yes	yes





. MS-DOS

cls



clear

clear

cls

ls -a

가

clear

```
hanblt@linux:~$ # ls -a
.                312.jpg
..               7monthpaper.pdf
.DCOPserver_pirania.hancom.com Desktop
.DCOPserver_pirania.hancom.com_:0 Mail
.ICEauthority    UpdateIP
.MCOP-random-seed UpdateIP2
.RealNetworks_RealMediaSDK_60 Word5Patch.sh
.RealNetworks_RealPlayer_60  Word5Patch.sh.tgz
.RealNetworks_RealShared_00  Work
.Xauthority       anaconda-ks.cfg
# clear
```