

# Lab05# report

202283890036

Jiarui Huang

IoT

## Task1:

### Save user group data file & save user group password file

The command:

cat /etc/passwd:

```
jerry@jerry-virtual-machine: ~/Desktop$ cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin
```

cat /etc/gshadow

```
jerry@jerry-virtual-machine: ~/Desktop$ sudo cat /etc/gshadow
root:*:*
daemon:*:*
bin:*:*
sys:*:*
adm:*::syslog,jerry
tty:*:*
disk:*:*
lp:*:*
mail:*:*
news:*:*
uucp:*:*
man:*:*
proxy:*:*
kmem:*:*
dialout:*:*
fax:*:*
voice:*:*
cdrom:*::jerry
floppy:*:*
tape:*:*
sudo:*::jerry
audio:*::pulse
dip:*::jerry
```

## Task2: Command for managing users and user groups

### 1. userAdd

Use userAdd command to create new user:

```
jerry@jerry-virtual-machine:~/Desktop$ useradd Tom
useradd: Permission denied.
useradd: cannot lock /etc/passwd; try again later.
jerry@jerry-virtual-machine:~/Desktop$ sudo adduser Tom
adduser: Please enter a username matching the regular expression configured
via the NAME_REGEX[_SYSTEM] configuration variable. Use the '--force-badname'
option to relax this check or reconfigure NAME_REGEX.
jerry@jerry-virtual-machine:~/Desktop$ 2998126344h
2998126344h: command not found
jerry@jerry-virtual-machine:~/Desktop$ sudo adduser tom
Adding user `tom' ...
Adding new group `tom' (1001) ...
Adding new user `tom' (1001) with group `tom' ...
Creating home directory `/home/tom' ...
Copying files from `/etc/skel' ...
New password:
BAD PASSWORD: The password fails the dictionary check - it is too simplistic/systematic
Retype new password:
Sorry, passwords do not match.
New password:
BAD PASSWORD: The password fails the dictionary check - it is too simplistic/systematic
Retype new password:
Sorry, passwords do not match.
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for tom
Enter the new value, or press ENTER for the default
Full Name []:
Room Number []:
Work Phone []:
Home Phone []:
Other []:
Is the information correct? [Y/n] y
jerry@jerry-virtual-machine:~/Desktop$
```

### 2. Passwd command

Use passwd command to set password:

```
jerry@jerry-virtual-machine:~/Desktop$ passwd tom
passwd: You may not view or modify password information for tom.
jerry@jerry-virtual-machine:~/Desktop$ sudo passwd tom
New password:
Retype new password:
passwd: password updated successfully
```

### 3. Usermod command

Use usermod command to edit user information:

```

jerry@jerry-virtual-machine:~/Desktop$ sudo usermod tom
usermod: no options
Usage: usermod [options] LOGIN

Options:
  -b, --badnames          allow bad names
  -c, --comment COMMENT   new value of the GECOS field
  -d, --home HOME_DIR     new home directory for the user account
  -e, --expiredate EXPIRE_DATE set account expiration date to EXPIRE_DATE
  -f, --inactive INACTIVE set password inactive after expiration
                           to INACTIVE
  -g, --gid GROUP         force use GROUP as new primary group
  -G, --groups GROUPS     new list of supplementary GROUPS
  -a, --append            append the user to the supplemental GROUPS
                           mentioned by the -G option without removing
                           the user from other groups
  -h, --help             display this help message and exit
  -l, --login NEW_LOGIN   new value of the login name
  -L, --lock             lock the user account
  -m, --move-home        move contents of the home directory to the
                           new location (use only with -d)
  -o, --non-unique        allow using duplicate (non-unique) UID
  -p, --password PASSWORD use encrypted password for the new password
  -R, --root CHROOT_DIR   directory to chroot into
  -P, --prefix PREFIX_DIR prefix directory where are located the /etc/* files
  -s, --shell SHELL       new login shell for the user account
  -u, --uid UID           new UID for the user account
  -U, --unlock            unlock the user account

-v, --add-subuids FIRST-LAST add range of subordinate uids
-V, --del-subuids FIRST-LAST remove range of subordinate uids
-w, --add-subgids FIRST-LAST add range of subordinate gids
-W, --del-subgids FIRST-LAST remove range of subordinate gids
-Z, --selinux-user SEUSER   new SELinux user mapping for the user account

jerry@jerry-virtual-machine:~/Desktop$ sudo usermod -b tom
usermod: no changes

```

## 4. Userdel command

Use userdel command to delete user information

```

jerry@jerry-virtual-machine:~/Desktop$ sudo userdel tom
jerry@jerry-virtual-machine:~/Desktop$ sudo passwd tom
passwd: user 'tom' does not exist
jerry@jerry-virtual-machine:~/Desktop$

```

## 5. Groupadd command

```

jerry@jerry-virtual-machine:~/Documents/lab03_task1$ sudo addgroup group1
Adding group 'group1' (GID 1002) ...
Done.

```

## 6. gpasswd command

```

jerry@jerry-virtual-machine:~/Documents/lab03_task1$ sudo gpasswd group1
Changing the password for group group1
New Password:
Re-enter new password:
jerry@jerry-virtual-machine:~/Documents/lab03_task1$

```

## 7. groupmod command

```
jerry@jerry-virtual-machine:~/Documents/lab03_task1$ sudo usermod -g group1 tom
jerry@jerry-virtual-machine:~/Documents/lab03_task1$ id username
id: 'username': no such user
```

## Task3: Authority management

### 1. Chown command:

```
jerry@jerry-virtual-machine:~/Documents/lab03_task1$ ls -l
total 24
-rwxrwxr-x 1 jerry jerry 16096 5月 27 17:15 forkText
-rw-rw-r-- 1 jerry jerry 367 5月 27 17:15 forkText.c
-rw-rw-r-- 1 jerry jerry 2104 5月 27 17:15 forkText.o
jerry@jerry-virtual-machine:~/Documents/lab03_task1$ chown root:jerry forkText
chown: changing ownership of 'forkText': Operation not permitted
```

### 2. chgrp command

```
chown: changing ownership of 'forkText': Operation not permitted
jerry@jerry-virtual-machine:~/Documents/lab03_task1$ sudo chown tom:group1 forkText
[sudo] password for jerry:
jerry@jerry-virtual-machine:~/Documents/lab03_task1$ ls -l
total 24
-rwxrwxr-x 1 tom group1 16096 5月 27 17:15 forkText
-rw-rw-r-- 1 jerry jerry 367 5月 27 17:15 forkText.c
-rw-rw-r-- 1 jerry jerry 2104 5月 27 17:15 forkText.o
jerry@jerry-virtual-machine:~/Documents/lab03_task1$
```

### 3. Chmod command

```
jerry@jerry-virtual-machine:~/Documents/lab03_task1$ sudo chmod 644 forkText.c
jerry@jerry-virtual-machine:~/Documents/lab03_task1$ ls -l
total 24
-rwxrwxr-x 1 tom group1 16096 5月 27 17:15 forkText
-rw-r--r-- 1 jerry jerry 367 5月 27 17:15 forkText.c
-rw-rw-r-- 1 jerry jerry 2104 5月 27 17:15 forkText.o
jerry@jerry-virtual-machine:~/Documents/lab03_task1$
```