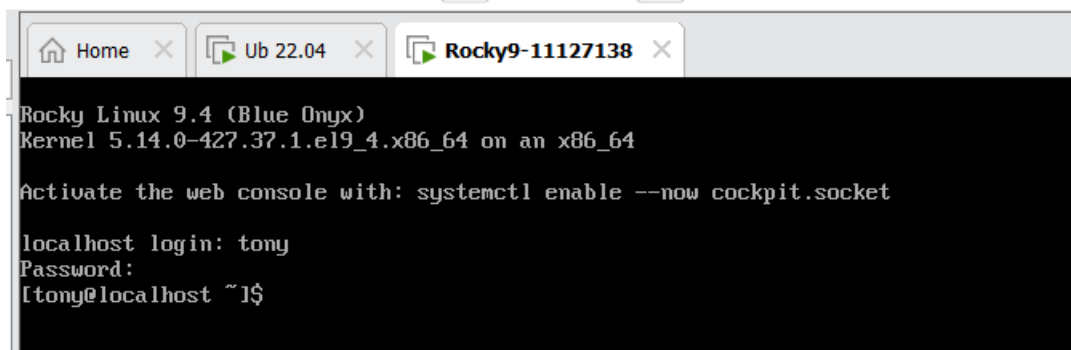第十週

11127138 林雨臻

1. 新增一個 group 名為 ICE， group id 為 3000。

```
[s11127138@localhost ~]$ sudo groupadd -g 3000 ICE
[sudo] password for s11127138:
[s11127138@localhost ~]$ tail /etc/group
setroubleshoot:x:983:
gdm:x:42:
gnome-initial-setup:x:982:
sshd:x:74:
slocate:x:21:
chrony:x:981:
dnsmasq:x:980:
tcpdump:x:72:
s11127138:x:1000:
ICE:x:3000:
[s11127138@localhost ~]$
```

2. 新增一個使用者帳號名為 tony, user id 為 5000，group 為 ICE，home directory 在 /tonyhome。

```
[s11127138@localhost ~]$ sudo useradd -u 5000 -g ICE -d /tonyhome tony
[s11127138@localhost ~]$ tail /etc/passwd
clevis:x:985:984:Clevis Decryption Framework unprivileged user:/var/cache/clevis:/usr/sbin/nologin
setroubleshoot:x:984:983:SELinux troubleshoot server:/var/lib/setroubleshoot:/usr/sbin/nologin
gdm:x:42:42::/var/lib/gdm:/sbin/nologin
gnome-initial-setup:x:983:982::/run/gnome-initial-setup/:/sbin/nologin
sshd:x:74:74:Privilege-separated SSH:/usr/share/empty.sshd:/usr/sbin/nologin
chrony:x:982:981:chrony system user:/var/lib/chrony:/sbin/nologin
dnsmasq:x:981:980:Dnsmasq DHCP and DNS server:/var/lib/dnsmasq:/usr/sbin/nologin
tcpdump:x:72:72::/:/sbin/nologin
s11127138:x:1000:1000:s11127138:/home/s11127138:/bin/bash
tony:x:5000:3000::/tonyhome:/bin/bash
[s11127138@localhost ~]$
```

3. 設定 tony 密碼，使用 tony 登入 text tty。

```
[s11127138@localhost ~]$ sudo passwd tony
Changing password for user tony.
New password:
BAD PASSWORD: The password contains the user name in some form
Retype new password:
passwd: all authentication tokens updated successfully.
[s11127138@localhost ~]$
```

```
⌂ Home ✕    ▣ Ub 22.04 ✕    ▣ Rocky9-11127138 ✕

Rocky Linux 9.4 (Blue Onyx)
Kernel 5.14.0-427.37.1.el9_4.x86_64 on an x86_64

Activate the web console with: systemctl enable --now cockpit.socket

localhost login: tony
Password:
[tony@localhost ~]$
```

4. 設定 tony 90 天要改一次密碼，帳號使用期限到 2024/12/31。


```
-E, --expiredate EXPIRE DATE
    Set the date or number of days since January 1, 1970 on which the user's account
    will no longer be accessible. The date may also be expressed in the format
    YYYY-MM-DD (or the format more commonly used in your area). A user whose account
    is locked must contact the system administrator before being able to use the
    system again.

    For example the following can be used to set an account to expire in 180 days:

                chage -E $(date -d +180days +%Y-%m-%d)

    Passing the number -1 as the EXPIRE DATE will remove an account expiration date.

-m, --mindays MIN DAYS
    Set the minimum number of days between password changes to MIN DAYS. A value of
    zero for this field indicates that the user may change their password at any time.

-M, --maxdays MAX DAYS
    Set the maximum number of days during which a password is valid. When MAX DAYS
    plus LAST DAY is less than the current day, the user will be required to change
    their password before being able to use their account. This occurrence can be
    planned for in advance by use of the -W option, which provides the user with
    advance warning.

    Passing the number -1 as MAX DAYS will remove checking a password's validity.
```

```
[s11127138@localhost ~]$ sudo chage -l tony
[sudo] password for s11127138:
Last password change                                    : Nov 28, 2024
Password expires                                        : never
Password inactive                                       : never
Account expires                                         : never
Minimum number of days between password change          : 0
Maximum number of days between password change          : 99999
Number of days of warning before password expires       : 7
[s11127138@localhost ~]$ sudo chage -M 90 -E 2021-12-31 tony
[s11127138@localhost ~]$ sudo chage -l tony
Last password change                                    : Nov 28, 2024
Password expires                                        : Feb 26, 2025
Password inactive                                       : never
Account expires                                         : Dec 31, 2021
Minimum number of days between password change          : 0
Maximum number of days between password change          : 90
Number of days of warning before password expires       : 7
[s11127138@localhost ~]$
```

5. 設定 tony 為 wheel 群組成員。


```
                s11127138@localhost:~ — man gpasswd

    Except for the -A and -M options, the options cannot be combined.

    The options which apply to the gpasswd command are:

    -a, --add user
        Add the user to the named group.
```

```
[s11127138@localhost ~]$ sudo gpasswd -a tony wheel
[sudo] password for s11127138:
Adding user tony to group wheel
[s11127138@localhost ~]$ id tony
uid=5000(tony) gid=3000(ICE) groups=3000(ICE),10(wheel)
[s11127138@localhost ~]$
```

6. 設定 tony 為 ICE 群組的管理員，可以增刪 ICE 群組成員。

```
[s11127138@localhost ~]— man gpasswd                    ⊞  Q  ☰  ×

        group.

    -A, --administrators user,...
        Set the list of administrative users.

    -M, --members user,...
        Set the list of group members.
```

```
[s11127138@localhost ~]$ sudo gpasswd -A tony ICE
[s11127138@localhost ~]$ sudo tail /etc/gshadow
setroubleshoot:!::
gdm:!::
gnome-initial-setup:!::
sshd:!::
slocate:!::
chrony:!::
dnsmasq:!::
tcpdump:!::
s11127138:!::
ICE:!:tony:
[s11127138@localhost ~]$
```

7. 請將 tony user id 變更為 7000，tony home directory 仍要是屬於 tony 的。

```
[s11127138@localhost:/ — man usermod                    ⊞  Q  ☰  ×

        system to select the default login shell.

    -u, --uid UID
        The new numerical value of the user's ID.

        This value must be unique, unless the -o option is used. The value must be
        non-negative.

        The user's mailbox, and any files which the user owns and which are located in the
        user's home directory will have the file user ID changed automatically.

        The ownership of files outside of the user's home directory must be fixed
        manually.

        The change of the user ownership of files inside of the user's home directory is
        also not done if the home dir owner uid is different from the current or new user
        id. This is a safety measure for special home directories such as /.

        No checks will be performed with regard to the UID_MIN, UID_MAX, SYS_UID_MIN, or
        SYS_UID_MAX from /etc/login.defs.
```

```
[s11127138@localhost /]$ sudo usermod -u 7000 tony
[s11127138@localhost /]$ sudo chown -R tony /tonyhome
[s11127138@localhost /]$ id tony
uid=7000(tony) gid=3000(ICE) groups=3000(ICE),10(wheel)
[s11127138@localhost /]$ ls -la
total 24
dr-xr-xr-x.  19 root root  251 Nov 29 00:24 .
dr-xr-xr-x.  19 root root  251 Nov 29 00:24 ..
```

```
dr-xr-xr-x.  13 root root    0 Nov  9 00:18 sys
drwxrwxrwt.  16 root root 4096 Nov 29 00:49 tmp
drwx------.   3 tony ICE   99 Nov 29 00:29 tonyhome
drwxr-xr-x.  12 root root  144 Sep 16 00:24 usr
drwxr-xr-x.  20 root root 4096 Sep 16 00:39 var
[s11127138@localhost /]$
```