

Linux Forensics

Task 3 OS and account information

Which two users are the members of the group audio?

Use `cat /etc/group | grep audio`

```
root@Linux4n6:/home/ubuntu# cat /etc/group | grep audio
audio:x:29:ubuntu,pulse
root@Linux4n6:/home/ubuntu#
```

ubuntu,pulse

In the attached VM, there is a user account named tryhackme. What is the uid of this account?

Run the command `cat /etc/passwd | grep tryhackme`

```
root@Linux4n6:/home/ubuntu# cat /etc/passwd | grep tryhackme
tryhackme:x:1001:1001:tryhackme,,,:/home/tryhackme:/bin/bash
root@Linux4n6:/home/ubuntu#
```

1001

A session was started on this machine on Sat Apr 16 20:10. How long did this session last?

`last | grep "Sat Apr 16 20:10"`

```
root@Linux4n6:/home/ubuntu# last | grep "Sat Apr 16 20:10"
reboot    system boot  5.4.0-1029-aws   Sat Apr 16 20:10 - 21:43   (01:32)
wtmp begins Sat Apr 16 20:10:29 2022
root@Linux4n6:/home/ubuntu#
```

01:32

Task 4 System Configuration

What is the hostname of the attached VM?

```
root@Linux4n6:/home/ubuntu# hostname
Linux4n6
root@Linux4n6:/home/ubuntu# cat /etc/hostname
Linux4n6
root@Linux4n6:/home/ubuntu#
```

Linux4n6

What is the timezone of the attached VM?

```
root@Linux4n6:/home/ubuntu# cat /etc/timezone
Asia/Karachi
root@Linux4n6:/home/ubuntu#
```

Asia/Karachi

What program is listening on the address 127.0.0.1:5901?

```
root@Linux4n6:/home/ubuntu# netstat -lnp | grep "127.0.0.1:5901"
tcp        0      0 127.0.0.1:5901        0.0.0.0:*               LISTEN
           895/Xtigervnc
```

Xtigervnc

What is the full path of this program?

```
root@Linux4n6:/home/ubuntu# which Xtigervnc
/usr/bin/Xtigervnc
root@Linux4n6:/home/ubuntu#
```

/usr/bin/Xtigervnc

Task 5 Persistence mechanisms

In the `bashrc` file, the size of the history file is defined. What is the size of the history file that is set for the user Ubuntu in the attached machine?

```
# for setting history length see HISTSIZE and HISTFILESIZE in bash(1)
HISTSIZE=1000
HISTFILESIZE=2000
```

2000

Task 6 Evidence of Execution

The user tryhackme used apt-get to install a package. What was the command that was issued?

```
ubuntu@Linux4n6:~$ sudo cat /home/tryhackme/.bash_history | grep apt-get
sudo apt-get install apache2
ubuntu@Linux4n6:~$
```

sudo apt-get install apache2

What was the current working directory when the command to install net-tools was issued?

/home/ubuntu

Task 7 Log files

Though the machine's current hostname is the one we identified in Task 4. The machine earlier had a different hostname. What was the previous hostname of the machine?

After executing the command `cat /var/log/syslog* | grep hostname` I didn't find the answer later I found the some archive files in /var/log

syslog.2.gz and syslog.3.gz

Extract them and try again using `gzip -d filename` or `gunzip filename`

```
Apr 16 15:25:33 tryhackme dbus-daemon[607]: [system] Successfully activated service 'org.freedesktop.hostname1'
Apr 16 15:25:33 tryhackme systemd-hostnamed[4003]: Changed host name to 'ip-10-10-51-7'
Apr 16 15:25:33 tryhackme systemd-resolved[3991]: Using system hostname 'tryhackme'.
Apr 16 15:26:03 tryhackme systemd[1]: systemd-hostnamed.service: Succeeded.
```

tryhackme