

## **LAB 3**

- **STEP-1:** Create users called itiusuer1, itiusuer2

### Commands

- `sudo adduser itiusuer1`
- `sudo adduser itiusuer2`

### For itiusuer1

```
hager@hager-VirtualBox:~$ sudo adduser itiusuer1
[sudo] password for hager:
Adding user `itiusuer1' ...
Adding new group `itiusuer1' (1001) ...
Adding new user `itiusuer1' (1001) with group `itiusuer1' ...
Creating home directory `/home/itiusuer1' ...
Copying files from `/etc/skel' ...
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for itiusuer1
Enter the new value, or press ENTER for the default
    Full Name []: itiusuer1
    Room Number []:
    Work Phone []:
    Home Phone []:
    Other []:
Is the information correct? [Y/n] Y
hager@hager-VirtualBox:~$
```

### For itiusuer2

```
hager@hager-VirtualBox:~$ sudo adduser itiusuer2
Adding user `itiusuer2' ...
Adding new group `itiusuer2' (1002) ...
Adding new user `itiusuer2' (1002) with group `itiusuer2' ...
Creating home directory `/home/itiusuer2' ...
Copying files from `/etc/skel' ...
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for itiusuer2
Enter the new value, or press ENTER for the default
    Full Name []: itiusuer2
    Room Number []:
    Work Phone []:
    Home Phone []:
    Other []:
Is the information correct? [Y/n] Y
hager@hager-VirtualBox:~$
```

- **STEP-2:** Create group called os\_team

#### Commands

- sudo groupadd os\_team

```
hager@hager-VirtualBox:~$ sudo groupadd os_team
hager@hager-VirtualBox:~$
```

- **STEP-3:** Create directory called os\_team\_workspace

#### Commands

- mkdir os\_team\_workspace

```
hager@hager-VirtualBox:~$ mkdir os_team_workspace
hager@hager-VirtualBox:~$
```

- **STEP-4:** Assign os\_team group to the directory os\_team\_workspace and change mode to setgid (hint use sudo)

#### Commands

- sudo chgrp os\_team os\_team\_workspace
- ls -lg
- sudo chmod g+s os\_team\_workspace/
- ls -lg

```
hager@hager-VirtualBox:~$ sudo chgrp os_team os_team_workspace
hager@hager-VirtualBox:~$ ls -lg
total 52
drwxr-xr-x 2 hager 4096 17:29 Desktop
drwxr-xr-x 2 hager 4096 17:29 Documents
drwxr-xr-x 2 hager 4096 17:29 Downloads
-rw-r--r-- 1 hager 8980 15:37 examples.desktop
drwxrwxr-x 2 hager 4096 14:36 lti-0
drwxr-xr-x 2 hager 4096 17:29 Music
drwxrwxr-x 2 os_team 4096 14:16 os_team_workspace
drwxr-xr-x 2 hager 4096 14:17 Pictures
drwxr-xr-x 2 hager 4096 17:29 Public
drwxr-xr-x 2 hager 4096 17:29 Templates
drwxr-xr-x 2 hager 4096 17:29 Videos
```

```
hager@hager-VirtualBox:~$ sudo chmod g+s os_team_workspace/
hager@hager-VirtualBox:~$ ls -lg
total 52
drwxr-xr-x 2 hager 4096 17:29 Desktop
drwxr-xr-x 2 hager 4096 17:29 Documents
drwxr-xr-x 2 hager 4096 17:29 Downloads
-rw-r--r-- 1 hager 8980 15:37 examples.desktop
drwxrwxr-x 2 hager 4096 14:36 lti-0
drwxr-xr-x 2 hager 4096 17:29 Music
drwxrwsr-x 2 os_team 4096 14:16 os_team_workspace
drwxr-xr-x 2 hager 4096 14:27 Pictures
drwxr-xr-x 2 hager 4096 17:29 Public
drwxr-xr-x 2 hager 4096 17:29 Templates
drwxr-xr-x 2 hager 4096 17:29 Videos
hager@hager-VirtualBox:~$
```

- **STEP-5:** Add users itituser1 and itituser2 to os\_teamgroup

#### Commands

- Sudo usermod -G os\_team itituser1
- Sudo usermod -G os\_team itituser2
- Getent group os\_team

```
hager@hager-VirtualBox:~$ sudo usermod -G os_team itituser1
hager@hager-VirtualBox:~$ sudo usermod -G os_team itituser2
hager@hager-VirtualBox:~$ getent group os_team
os_team:x:1003:itituser1,itituser2
hager@hager-VirtualBox:~$
```

- **STEP-6:** Create directory mydir1 using itituser1 and mydir2 using itituser2 and List directory permissions and send screenshot

#### Commands

- Sudo login  
itituser1
- mkdir mydir1
- ls -lg

```
itituser1@hager-VirtualBox: ~
hager@hager-VirtualBox:~$ sudo login
[sudo] password for hager:
hager-VirtualBox login: itituser1
Password:
Welcome to Ubuntu 16.04.3 LTS (GNU/Linux 4.10.0-28-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

645 packages can be updated.
486 updates are security updates.

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

itituser1@hager-VirtualBox:~$ mkdir mydir1
itituser1@hager-VirtualBox:~$ ls -lg
total 16
-rw-r--r-- 1 os_team 8980 15 13:57 examples.desktop
drwxr-xr-x 2 os_team 4096 15 14:39 mydir1
```

### Commands

- sudo login  
itiuser2
- mkdir mydir2
- ls -ld

```
itiuser2@hager-VirtualBox: ~
hager@hager-VirtualBox:~$ sudo login
[sudo] password for hager:
hager-VirtualBox login: itiuser2
Password:
Welcome to Ubuntu 16.04.3 LTS (GNU/Linux 4.10.0-28-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

645 packages can be updated.
486 updates are security updates.

New release '18.04.6 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

itiuser2@hager-VirtualBox:~$ mkdir mydir2
itiuser2@hager-VirtualBox:~$ ls -ld
drwxr-xr-x 4 itiuser2 os_team 4096 ١٥ ١٤:٤٣ .
```

- **STEP-7:** Send screenshot of all processes in tree mod

### Commands

- pstree

```
hager@hager-VirtualBox: ~
hager@hager-VirtualBox:~$ pstree
systemd--ModemManager--(gdbus)
--(gmain)
--NetworkManager--dhcpcd
--dnsmasq
--(gdbus)
--(gmain)
--accounts-daemon--(gdbus)
--(gmain)
--acpid
--agetty
--apache2--2*[apache2--26*[{apache2}]]
--avahi-daemon--avahi-daemon
--colord--(gdbus)
--(gmain)
--cron
--cups-browsed--(gdbus)
--(gmain)
--dbus-daemon
--fwupd--3*[{GUsbEventThread}]
--(fwupd)
--(gdbus)
--(gmain)
--gnome-keyring-d--(gdbus)
```



- **STEP-8:** Execute command `tail -f /var/log/syslog`

#### Commands

- `tail -f /var/log/syslog`

```
hager@hager-VirtualBox:~$ tail -f /var/log/syslog
Feb 15 14:40:57 hager-VirtualBox systemd[1]: Started Hostname Service.
Feb 15 14:44:11 hager-VirtualBox dbus[716]: [system] Activating via systemd: service name='org.freedesktop.hostname1' unit='dbus-org.freedesktop.hostname1.service'
Feb 15 14:44:11 hager-VirtualBox systemd[1]: Starting Hostname Service...
Feb 15 14:44:11 hager-VirtualBox dbus[716]: [system] Successfully activated service 'org.freedesktop.hostname1'
Feb 15 14:44:11 hager-VirtualBox systemd[1]: Started Hostname Service.
Feb 15 14:50:23 hager-VirtualBox org.gnome.evolution.dataserver.Sources5[1426]:
** (evolution-source-registry:1691): WARNING **: secret_service_search_sync: must specify at least one attribute to match
Feb 15 14:51:04 hager-VirtualBox dbus[716]: [system] Activating via systemd: service name='org.freedesktop.hostname1' unit='dbus-org.freedesktop.hostname1.service'
Feb 15 14:51:04 hager-VirtualBox systemd[1]: Starting Hostname Service...
Feb 15 14:51:04 hager-VirtualBox dbus[716]: [system] Successfully activated service 'org.freedesktop.hostname1'
Feb 15 14:51:04 hager-VirtualBox systemd[1]: Started Hostname Service.
```

- **STEP-9:** Find the process id PID of tail process then kill it using kill command

#### Commands

In new terminal

- `Ps -aux`
- `Sudo kill -9 3322`

```
hager@hager-VirtualBox: ~
hager 1932 0.0 0.7 321556 16260 ?        SL   13:50 0:00 /usr/lib/x86_64
hager 1977 0.0 1.2 533440 25780 ?        SL   13:51 0:00 update-notifier
hager 2008 0.0 0.9 654052 19584 ?        SL   13:51 0:00 /usr/lib/x86_64
hager 2023 0.0 1.2 591636 24896 ?        SL   13:51 0:00 /usr/bin/unity-
hager 2025 0.0 0.6 637692 14048 ?        SL   13:51 0:00 /usr/lib/x86_64
hager 2382 0.0 0.4 448376 8724 ?         SL   13:52 0:00 /usr/lib/x86_64
hager 2423 0.0 0.4 444864 8432 ?         SL   13:55 0:00 /usr/lib/gvfs/g
hager 2449 0.0 0.3 368792 6844 ?         SL   13:55 0:00 /usr/lib/gvfs/g
root 2748 0.0 0.0 0 0 ?          S    14:28 0:00 [kworker/u4:1]
root 2844 0.0 0.0 0 0 ?          S    14:37 0:00 [kworker/1:1]
root 2889 0.0 0.0 0 0 ?          S    14:38 0:00 [kworker/0:1]
root 3142 0.0 0.0 0 0 ?          S    14:51 0:00 [kworker/1:2]
root 3168 0.0 0.0 0 0 ?          S    14:52 0:00 [kworker/0:2]
root 3178 0.0 0.0 0 0 ?          R    14:56 0:00 [kworker/u4:2]
root 3198 0.0 0.0 0 0 ?          S    14:59 0:00 [kworker/0:0]
hager 3215 2.9 10.1 1909524 208224 ?       SL   15:00 0:04 /usr/lib/firefo
hager 3250 0.0 0.2 68244 5448 ?          S    15:00 0:00 /usr/lib/x86_64
hager 3300 0.3 1.8 604908 38256 ?          RL   15:01 0:00 /usr/lib/gnome-
hager 3307 0.0 0.2 29460 4884 pts/4      Ss   15:01 0:00 bash
hager 3322 0.0 0.0 14396 708 pts/4      S+   15:02 0:00 tail -f /var/lo
hager 3334 0.0 0.2 29460 4916 pts/11     Ss   15:02 0:00 bash
root 3346 0.0 0.0 0 0 ?          R    15:03 0:00 [kworker/u4:0]
hager 3347 0.0 0.1 44436 3388 pts/11    R+   15:03 0:00 ps -aux
hager@hager-VirtualBox:~$ sudo kill -9 3322
```

```
hager@hager-VirtualBox: ~  
hager@hager-VirtualBox:~$ tail -f /var/log/syslog  
Feb 15 14:51:04 hager-VirtualBox dbus[716]: [system] Successfully activated service 'org.freedesktop.hostname1'  
Feb 15 14:51:04 hager-VirtualBox systemd[1]: Started Hostname Service.  
Feb 15 14:52:24 hager-VirtualBox dbus[716]: [system] Activating via systemd: service name='org.freedesktop.hostname1' unit='dbus-org.freedesktop.hostname1.service'  
Feb 15 14:52:24 hager-VirtualBox systemd[1]: Starting Hostname Service...  
Feb 15 14:52:24 hager-VirtualBox dbus[716]: [system] Successfully activated service 'org.freedesktop.hostname1'  
Feb 15 14:52:24 hager-VirtualBox systemd[1]: Started Hostname Service.  
Feb 15 14:58:38 hager-VirtualBox dbus[716]: [system] Activating via systemd: service name='org.freedesktop.hostname1' unit='dbus-org.freedesktop.hostname1.service'  
Feb 15 14:58:38 hager-VirtualBox systemd[1]: Starting Hostname Service...  
Feb 15 14:58:38 hager-VirtualBox dbus[716]: [system] Successfully activated service 'org.freedesktop.hostname1'  
Feb 15 14:58:38 hager-VirtualBox systemd[1]: Started Hostname Service.  
Feb 15 15:05:24 hager-VirtualBox dbus[716]: [system] Activating via systemd: service name='org.freedesktop.hostname1' unit='dbus-org.freedesktop.hostname1.service'  
Feb 15 15:05:24 hager-VirtualBox systemd[1]: Starting Hostname Service...  
Feb 15 15:05:24 hager-VirtualBox dbus[716]: [system] Successfully activated service 'org.freedesktop.hostname1'  
Feb 15 15:05:24 hager-VirtualBox systemd[1]: Started Hostname Service.  
Killed  
hager@hager-VirtualBox:~$
```