

create user: `sudo useradd itiuser1`

`sudo useradd itiuser1`

create group: `sudo groupadd os_team`

create directory: `mkdir os_team_workspace`

assign grp to dir: `sudo chgrp os_team os_team workspace`

```
ubuntu@ubuntu:~$ useradd itiuser1
useradd: Permission denied.
useradd: cannot lock /etc/passwd; try again later.
ubuntu@ubuntu:~$ sudo useradd itiuser1
ubuntu@ubuntu:~$ sudo useradd itiuser2
ubuntu@ubuntu:~$ sudo groupadd os_team
Thunderbird Mail $ mkdir os_team_workspace
$ chgrp os_team os_team_workspace
chgrp: changing group of 'os_team_workspace': Operation not permitted
ubuntu@ubuntu:~$ sudo chgrp os_team os_team_workspace
ubuntu@ubuntu:~$ ls -l
total 0
drwxr-xr-x 2 ubuntu ubuntu 60 Feb 15 22:48 Desktop
drwxr-xr-x 2 ubuntu ubuntu 40 Feb 15 22:55 Documents
drwxr-xr-x 2 ubuntu ubuntu 40 Feb 15 22:55 Downloads
drwxr-xr-x 2 ubuntu ubuntu 40 Feb 15 22:55 Music
drwxrwxr-x 2 ubuntu os_team 40 Feb 15 23:49 os_team_workspace
drwxr-xr-x 2 ubuntu ubuntu 40 Feb 15 22:55 Pictures
drwxr-xr-x 2 ubuntu ubuntu 40 Feb 15 22:55 Public
drwx----- 3 ubuntu ubuntu 60 Feb 15 22:54 snap
drwxr-xr-x 2 ubuntu ubuntu 40 Feb 15 22:55 Templates
drwxr-xr-x 2 ubuntu ubuntu 40 Feb 15 22:55 Videos
```

change mod to setgid: `sudo chmod g+s os_team workspace`

add user to group:

`sudo usermod -a -G os_team itiuser1`

`sudo usermod -a -G os_team itiuser2`

change ownership:

sudo chown itiuser1 mydir1

sudo chown itiuser2 mydir2

```
ubuntu@ubuntu:~$ mkdir mydir1 mydir2
ubuntu@ubuntu:~$ chown itiuser1 mydir1
chown: changing ownership of 'mydir1': Operation not permitted
ubuntu@ubuntu:~$ sudo chown itiuser1 mydir1
ubuntu@ubuntu:~$ sudo chown itiuser2 mydir2
ubuntu@ubuntu:~$ ls -l
total 0
drwxr-xr-x 2 ubuntu ubuntu 60 Feb 15 22:48 Desktop
drwxr-xr-x 2 ubuntu ubuntu 40 Feb 15 22:55 Documents
drwxr-xr-x 2 ubuntu ubuntu 40 Feb 15 22:55 Downloads
drwxr-xr-x 2 ubuntu ubuntu 40 Feb 15 22:55 Music
drwxrwxr-x 2 itiuser1 ubuntu 40 Feb 16 01:01 mydir1
drwxrwxr-x 2 itiuser2 ubuntu 40 Feb 16 01:01 mydir2
drwxrwsr-x 2 ubuntu os_team 40 Feb 15 23:49 os_team_workspace
drwxr-xr-x 2 ubuntu ubuntu 40 Feb 15 22:55 Pictures
drwxr-xr-x 2 ubuntu ubuntu 40 Feb 15 22:55 Public
drwx----- 3 ubuntu ubuntu 60 Feb 15 22:54 snap
drwxr-xr-x 2 ubuntu ubuntu 40 Feb 15 22:55 Templates
drwxr-xr-x 2 ubuntu ubuntu 40 Feb 15 22:55 Videos
ubuntu@ubuntu:~$ groups os_team
groups: 'os_team': no such user
ubuntu@ubuntu:~$ groups itiuser1
itiuser1 : itiuser1 os_team
ubuntu@ubuntu:~$
```

Tree mod:

```
ubuntu@ubuntu:~$ pstree
systemd--ModemManager--2*[{ModemManager}]
        --NetworkManager--2*[{NetworkManager}]
        --accounts-daemon--2*[{accounts-daemon}]
        --acpid
        --avahi-daemon--avahi-daemon
        --colord--2*[{colord}]
        --cron
        --cups-browsed--2*[{cups-browsed}]
        --cupsd
        --dbus-daemon
        --gdm3--gdm-session-wor--gdm-x-session--Xorg--{Xorg}
                --gnome-session-b--2*[{gnome+
                --2*[{gdm-x-session}]
                --2*[{gdm-session-wor}]
                --2*[{gdm3}]
        --gnome-keyring-d--3*[{gnome-keyring-d}]
        --2*[{kerneloops}]
        --networkd-dispat
        --packagekitd--2*[{packagekitd}]
        --polkitd--2*[{polkitd}]
        --power-profiles--2*[{power-profiles-}]
        --rsyslogd--3*[{rsyslogd}]
        --rtkit-daemon--2*[{rtkit-daemon}]
        --snapd--8*[{snapd}]
        --switcheroo-cont--2*[{switcheroo-cont}]
        --systemd--(sd-pam)
```

```
systemd--(sd-pam)
        --at-spi-bus-laun--dbus-daemon
                --3*[{at-spi-bus-laun}]
        --at-spi2-registr--2*[{at-spi2-registr}]
        --dbus-daemon
        --dconf-service--2*[{dconf-service}]
        --evolution-addre--5*[{evolution-addre}]
        --evolution-calen--8*[{evolution-calen}]
        --evolution-sourc--3*[{evolution-sourc}]
        --2*[{gjs}--4*[{gjs}]]
        --gnome-session-b--evolution-alarm--5*[{evolution-alarm}]
                --gsd-disk-utilit--2*[{gsd-disk-utilit}]
                --update-notifier--3*[{update-notifier}]
                --3*[{gnome-session-b}]
        --gnome-session-c--{gnome-session-c}
        --gnome-shell--gjs--5*[{gjs}]
                --7*[{gnome-shell}]
        --gnome-shell-cal--5*[{gnome-shell-cal}]
        --gnome-terminal--bash--pstree
                --4*[{gnome-terminal-}]
        --goa-daemon--3*[{goa-daemon}]
        --goa-identity-se--2*[{goa-identity-se}]
        --gsd-a11y-settin--3*[{gsd-a11y-settin}]
        --gsd-color--3*[{gsd-color}]
        --gsd-datetime--3*[{gsd-datetime}]
        --gsd-housekeepin--3*[{gsd-housekeepin}]
        --gsd-keyboard--3*[{gsd-keyboard}]
        --gsd-media-keys--3*[{gsd-media-keys}]
```



```

gsd-media-keys—3*[{gsd-media-keys}]
gsd-power—3*[{gsd-power}]
gsd-print-notif—2*[{gsd-print-notif}]
gsd-printer—2*[{gsd-printer}]
gsd-rfkill—2*[{gsd-rfkill}]
gsd-screensaver—2*[{gsd-screensaver}]
gsd-sharing—3*[{gsd-sharing}]
gsd-smartcard—3*[{gsd-smartcard}]
gsd-sound—3*[{gsd-sound}]
gsd-wacom—2*[{gsd-wacom}]
gsd-xsettings—3*[{gsd-xsettings}]
gvfs-afc-volume—3*[{gvfs-afc-volume}]
gvfs-goa-volume—2*[{gvfs-goa-volume}]
gvfs-gphoto2-vo—2*[{gvfs-gphoto2-vo}]
gvfs-mtp-volume—2*[{gvfs-mtp-volume}]
gvfs-udisks2-vo—3*[{gvfs-udisks2-vo}]
gvfsd—gvfsd-trash—2*[{gvfsd-trash}]
      2*[{gvfsd}]
gvfsd-fuse—5*[{gvfsd-fuse}]
gvfsd-metadata—2*[{gvfsd-metadata}]
ibus-portal—2*[{ibus-portal}]
ibus-x11—2*[{ibus-x11}]
pipewire—{pipewire}
pipewire-media-—{pipewire-media-}
pulseaudio—3*[{pulseaudio}]
sh—ibus-daemon—ibus-dconf—3*[{ibus-dconf}]
                    ibus-engine-sim—2*[{ibus-engine-sim}]
                    ibus-extension—3*[{ibus-extension-}]

```

```

ibus-engine-sim—2*[{ibus-engine-sim}]
ibus-extension—3*[{ibus-extension-}]
      2*[{ibus-daemon}]
tracker-miner-f—5*[{tracker-miner-f}]
xdg-desktop-por—5*[{xdg-desktop-por}]
xdg-desktop-por—4*[{xdg-desktop-por}]
xdg-desktop-por—3*[{xdg-desktop-por}]
xdg-document-po—fusermount3
                  5*[{xdg-document-po}]
xdg-permission-—2*[{xdg-permission-}]
systemd-journal
systemd-logind
systemd-oomd
systemd-resolve
systemd-timesyn—{systemd-timesyn}
systemd-udev
udisksd—4*[{udisksd}]
unattended-upgr—{unattended-upgr}
upowerd—2*[{upowerd}]
wpa_supplicant
zed—2*[{zed}]

```

ubuntu@ubuntu:~\$

Tail command:

```
ubuntu@ubuntu:~$ tail -f /var/log/syslog
Feb 16 00:55:14 ubuntu gnome-shell[5351]: Window manager warning: Overwriting existing binding of keysym 35 with keysym 35 (keycode e).
Feb 16 00:55:14 ubuntu dbus-daemon[4875]: [session uid=999 pid=4875] Successfully activated service 'org.gnome.ArchiveManager1'
Feb 16 00:55:15 ubuntu gnome-shell[5351]: DING: Detected async api for thumbnails
Feb 16 00:55:15 ubuntu gnome-shell[5351]: DING: GNOME nautilus 42.2
Feb 16 00:55:22 ubuntu nautilus[6442]: Could not delete '.meta.isrunning': No such file or directory
Feb 16 01:01:48 ubuntu dbus-daemon[4875]: [session uid=999 pid=4875] Activating via systemd: service name='org.freedesktop.Tracker3.Miner.Extract' unit='tracker-extract-3.service' requested by ':1.10' (uid=999 pid=4989 comm="/usr/libexec/tracker-miner-fs-3 " label="unconfined")
Feb 16 01:01:48 ubuntu systemd[4859]: Starting Tracker metadata extractor...
Feb 16 01:01:49 ubuntu dbus-daemon[4875]: [session uid=999 pid=4875] Successfully activated service 'org.freedesktop.Tracker3.Miner.Extract'
Feb 16 01:01:49 ubuntu systemd[4859]: Started Tracker metadata extractor.
Feb 16 01:17:01 ubuntu CRON[6536]: (root) CMD ( cd / && run-parts --report /etc/cron.hourly)
```

Kill tail:

```
ubuntu      5815  0.1  1.3 825480 53940 ?        Ssl  Feb15   0:10 /usr/libexec
ubuntu      5835  0.0  0.1 19664  5212 pts/0    Ss   Feb15   0:00 bash
root        6438  0.0  0.0      0      0 ?        I    00:51   0:00 [kworker/u2:
ubuntu      6450  0.0  1.4 2799612 57228 ?        Sl   00:55   0:01 gjs /usr/sha
root        6532  0.0  0.0      0      0 ?        I    01:08   0:00 [kworker/u2:
root        6541  0.0  0.0      0      0 ?        I    01:24   0:00 [kworker/u2:
ubuntu      6542  0.0  0.0 21324  1548 pts/0    R+   01:28   0:00 ps aux
ubuntu@ubuntu:~$ kill 6541
bash: kill: (6541) - Operation not permitted
ubuntu@ubuntu:~$ sudo kill 6541
ubuntu@ubuntu:~$
```