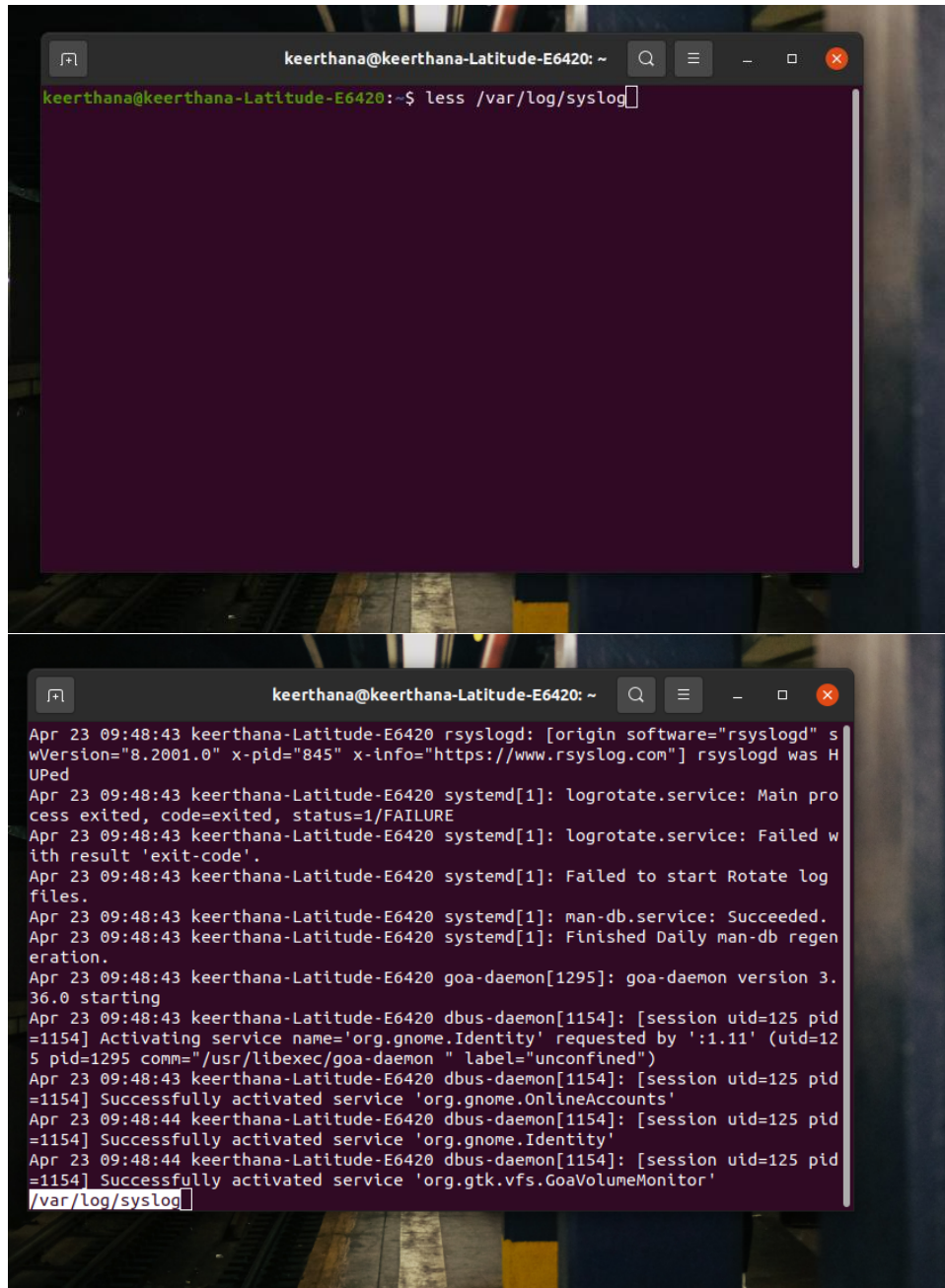


Using Logs to Help You Track Down an Issue in Linux

- using logs to troubleshoot and track down an issue



```
keerthana@keerthana-Latitude-E6420: ~  
keerthana@keerthana-Latitude-E6420:~$ less /var/log/syslog  
  
Apr 23 09:48:43 keerthana-Latitude-E6420 rsyslogd: [origin software="rsyslogd" swVersion="8.2001.0" x-pid="845" x-info="https://www.rsyslog.com"] rsyslogd was HUPed  
Apr 23 09:48:43 keerthana-Latitude-E6420 systemd[1]: logrotate.service: Main process exited, code=exited, status=1/FAILURE  
Apr 23 09:48:43 keerthana-Latitude-E6420 systemd[1]: logrotate.service: Failed with result 'exit-code'.  
Apr 23 09:48:43 keerthana-Latitude-E6420 systemd[1]: Failed to start Rotate log files.  
Apr 23 09:48:43 keerthana-Latitude-E6420 systemd[1]: man-db.service: Succeeded.  
Apr 23 09:48:43 keerthana-Latitude-E6420 systemd[1]: Finished Daily man-db regeneration.  
Apr 23 09:48:43 keerthana-Latitude-E6420 goa-daemon[1295]: goa-daemon version 3.36.0 starting  
Apr 23 09:48:43 keerthana-Latitude-E6420 dbus-daemon[1154]: [session uid=125 pid=1154] Activating service name='org.gnome.Identity' requested by ':1.11' (uid=125 pid=1295 comm="/usr/libexec/goa-daemon" label="unconfined")  
Apr 23 09:48:43 keerthana-Latitude-E6420 dbus-daemon[1154]: [session uid=125 pid=1154] Successfully activated service 'org.gnome.OnlineAccounts'  
Apr 23 09:48:44 keerthana-Latitude-E6420 dbus-daemon[1154]: [session uid=125 pid=1154] Successfully activated service 'org.gnome.Identity'  
Apr 23 09:48:44 keerthana-Latitude-E6420 dbus-daemon[1154]: [session uid=125 pid=1154] Successfully activated service 'org.gtk.vfs.GoaVolumeMonitor'  
/var/log/syslog
```

```
keerthana@keerthana-Latitude-E6420: ~  
keerthana@keerthana-Latitude-E6420:~$ less /var/log/syslog  
keerthana@keerthana-Latitude-E6420:~$ less /var/log/syslog |grep error
```

```
keerthana@keerthana-Latitude-E6420: ~  
action with reduced feature level UDP.  
Apr 26 16:33:39 keerthana-Latitude-E6420 systemd-resolved[776]: Server returned  
error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retrying trans  
action with reduced feature level UDP.  
Apr 26 16:34:11 keerthana-Latitude-E6420 systemd-resolved[776]: Server returned  
error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retrying trans  
action with reduced feature level UDP.  
Apr 26 16:47:01 keerthana-Latitude-E6420 systemd-resolved[776]: message repeated  
8 times: [ Server returned error NXDOMAIN, mitigating potential DNS violation D  
VE-2018-0001, retrying transaction with reduced feature level UDP.]  
Apr 26 16:51:39 keerthana-Latitude-E6420 systemd-resolved[776]: Server returned  
error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retrying trans  
action with reduced feature level UDP.  
Apr 26 17:02:01 keerthana-Latitude-E6420 systemd-resolved[776]: message repeated  
5 times: [ Server returned error NXDOMAIN, mitigating potential DNS violation D  
VE-2018-0001, retrying transaction with reduced feature level UDP.]  
Apr 26 17:02:46 keerthana-Latitude-E6420 systemd-resolved[776]: Server returned  
error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retrying trans  
action with reduced feature level UDP.  
Apr 29 07:57:22 keerthana-Latitude-E6420 gnome-shell[37565]: [37557:37580:0429/0  
75722.560729:ERROR:connection_factory_impl.cc(428)] Failed to connect to MCS end  
point with error -105  
Binary file (standard input) matches  
keerthana@keerthana-Latitude-E6420:~$
```

```
keerthana@keerthana-Latitude-E6420: ~  
Apr 23 09:48:43 keerthana-Latitude-E6420 rsyslogd: [origin software="rsyslogd" swVersion="8.2001.0" x-pid="845"  
" x-info="https://www.rsyslog.com"] rsyslogd was HUPed  
Apr 23 09:48:43 keerthana-Latitude-E6420 systemd[1]: logrotate.service: Main process exited, code=exited, stat  
us=1/FAILURE  
Apr 23 09:48:43 keerthana-Latitude-E6420 systemd[1]: logrotate.service: Failed with result 'exit-code'.  
Apr 23 09:48:43 keerthana-Latitude-E6420 systemd[1]: Failed to start Rotate log files.  
Apr 23 09:48:43 keerthana-Latitude-E6420 systemd[1]: man-db.service: Succeeded.  
Apr 23 09:48:43 keerthana-Latitude-E6420 systemd[1]: Finished Daily man-db regeneration.  
Apr 23 09:48:43 keerthana-Latitude-E6420 goa-daemon[1295]: goa-daemon version 3.36.0 starting  
Apr 23 09:48:43 keerthana-Latitude-E6420 dbus-daemon[1154]: [session uid=125 pid=1154] Activating service name  
='org.gnome.Identity' requested by ':1.11' (uid=125 pid=1295 comm="/usr/libexec/goa-daemon " label="unconfined  
")  
Apr 23 09:48:43 keerthana-Latitude-E6420 dbus-daemon[1154]: [session uid=125 pid=1154] Successfully activated  
service 'org.gnome.OnlineAccounts'  
Apr 23 09:48:44 keerthana-Latitude-E6420 dbus-daemon[1154]: [session uid=125 pid=1154] Successfully activated  
service 'org.gnome.Identity'  
Apr 23 09:48:44 keerthana-Latitude-E6420 dbus-daemon[1154]: [session uid=125 pid=1154] Successfully activated  
service 'org.gtk.vfs.GoaVolumeMonitor'  
Apr 23 09:48:44 keerthana-Latitude-E6420 systemd[1118]: Started Virtual filesystem service - GNOME Online Acco  
unts monitor.  
Apr 23 09:48:44 keerthana-Latitude-E6420 dbus-daemon[1154]: [session uid=125 pid=1154] Activating via systemd:  
service name='org.gtk.vfs.GPhoto2VolumeMonitor' unit='gvfs-gphoto2-volume-monitor.service' requested by ':1.3  
' (uid=125 pid=1144 comm="/usr/libexec/tracker-miner-fs " label="unconfined")  
:
```

```
keerthana@keerthana-Latitude-E6420: ~  
keerthana@keerthana-Latitude-E6420:~$ less /var/log/syslog  
keerthana@keerthana-Latitude-E6420:~$ tail -f /var/log/syslog  
May 25 18:53:23 keerthana-Latitude-E6420 tracker-store[4312]: OK  
May 25 18:53:23 keerthana-Latitude-E6420 systemd[1619]: tracker-store.service: Succeeded.  
May 25 18:53:23 keerthana-Latitude-E6420 whoopsie[2335]: [18:53:23] online  
May 25 18:53:24 keerthana-Latitude-E6420 systemd[1]: systemd-rfkill.service: Succeeded.  
May 25 18:53:28 keerthana-Latitude-E6420 org.kde.kdeconnect.daemon.desktop[2070]: kdeconnect.core: Broadcastin  
g identity packet  
May 25 18:53:29 keerthana-Latitude-E6420 wpa_supplicant[857]: wlp2s0b1: CTRL-EVENT-SIGNAL-CHANGE above=1 signa  
l=-17 noise=9999 txrate=43300  
May 25 18:53:30 keerthana-Latitude-E6420 systemd-resolved[772]: Server returned error NXDOMAIN, mitigating pot  
ential DNS violation DVE-2018-0001, retrying transaction with reduced feature level UDP.  
May 25 18:53:31 keerthana-Latitude-E6420 systemd-resolved[772]: message repeated 6 times: [ Server returned er  
ror NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retrying transaction with reduced feature leve  
l UDP.]  
May 25 18:53:31 keerthana-Latitude-E6420 systemd[1]: NetworkManager-dispatcher.service: Succeeded.  
May 25 18:53:37 keerthana-Latitude-E6420 systemd-timesyncd[775]: Initial synchronization to time server 91.189  
.89.198:123 (ntp.ubuntu.com).  
:
```

```
keerthana@keerthana-Latitude-E6420: ~
: service name='org.freedesktop.Tracker1' unit='tracker-store.service' requested by ':1.1' (uid=1000 pid=1627 comm="/usr/libexec/tracker-miner-fs " label="unconfined")
May 25 18:53:49 keerthana-Latitude-E6420 systemd[1619]: Starting Tracker metadata database store and lookup manager...
May 25 18:53:49 keerthana-Latitude-E6420 dbus-daemon[1630]: [session uid=1000 pid=1630] Successfully activated service 'org.freedesktop.Tracker1'
May 25 18:53:49 keerthana-Latitude-E6420 systemd[1619]: Started Tracker metadata database store and lookup manager.
May 25 18:53:49 keerthana-Latitude-E6420 dbus-daemon[1630]: [session uid=1000 pid=1630] Activating via systemd: service name='org.freedesktop.Tracker1.Miner.Extract' unit='tracker-extract.service' requested by ':1.1' (uid=1000 pid=1627 comm="/usr/libexec/tracker-miner-fs " label="unconfined")
May 25 18:53:49 keerthana-Latitude-E6420 systemd[1619]: Starting Tracker metadata extractor...
May 25 18:53:49 keerthana-Latitude-E6420 tracker-extract[4410]: Set scheduler policy to SCHED_IDLE
May 25 18:53:49 keerthana-Latitude-E6420 tracker-extract[4410]: Setting priority nice level to 19
May 25 18:53:49 keerthana-Latitude-E6420 dbus-daemon[1630]: [session uid=1000 pid=1630] Successfully activated service 'org.freedesktop.Tracker1.Miner.Extract'
May 25 18:53:49 keerthana-Latitude-E6420 systemd[1619]: Started Tracker metadata extractor.
May 25 18:53:55 keerthana-Latitude-E6420 gnome-shell[1872]: ../clutter/clutter/clutter-actor.c:10558: The clutter_actor_set_allocation() function can only be called from within the implementation of the ClutterActor::allocate() virtual function.
May 25 18:53:58 keerthana-Latitude-E6420 systemd[1]: Starting Load/Save RF Kill Switch Status...
May 25 18:53:58 keerthana-Latitude-E6420 systemd[1]: Started Load/Save RF Kill Switch Status.
May 25 18:53:59 keerthana-Latitude-E6420 systemd[1619]: tracker-extract.service: Succeeded.
```

```
keerthana@keerthana-Latitude-E6420: ~
May 25 18:54:10 keerthana-Latitude-E6420 avahi-daemon[831]: Withdrawing address record for fe80::614:d27e:dfdd:3bd7 on wlp2s0b1.
May 25 18:54:10 keerthana-Latitude-E6420 avahi-daemon[831]: Withdrawing address record for 192.168.0.112 on wlp2s0b1.
May 25 18:54:10 keerthana-Latitude-E6420 whoopsie[2335]: [18:54:10] Cannot reach: https://daisy.ubuntu.com
May 25 18:54:10 keerthana-Latitude-E6420 whoopsie[2335]: [18:54:10] offline
May 25 18:54:10 keerthana-Latitude-E6420 whoopsie[2335]: [18:54:10] Cannot reach: https://daisy.ubuntu.com
May 25 18:54:10 keerthana-Latitude-E6420 gnome-shell[1872]: An active wireless connection, in infrastructure mode, involves no access point?
May 25 18:54:10 keerthana-Latitude-E6420 NetworkManager[838]: <info> [1621949050.1400] manager: NetworkManager state is now CONNECTED_LOCAL
May 25 18:54:10 keerthana-Latitude-E6420 dbus-daemon[836]: [system] Activating via systemd: service name='org.freedesktop.nm_dispatcher' unit='dbus-org.freedesktop.nm-dispatcher.service' requested by ':1.13' (uid=0 pid=838 comm="/usr/sbin/NetworkManager --no-daemon " label="unconfined")
May 25 18:54:10 keerthana-Latitude-E6420 systemd[1]: Starting Network Manager Script Dispatcher Service...
May 25 18:54:10 keerthana-Latitude-E6420 dbus-daemon[836]: [system] Successfully activated service 'org.freedesktop.nm_dispatcher'
May 25 18:54:10 keerthana-Latitude-E6420 systemd[1]: Started Network Manager Script Dispatcher Service.
May 25 18:54:10 keerthana-Latitude-E6420 nm-dispatcher[4486]: run-parts: failed to stat component /etc/network/if-post-down.d/avahi-daemon: No such file or directory
May 25 18:54:10 keerthana-Latitude-E6420 wpa_supplicant[857]: nl80211: deinit ifname=wlp2s0b1 disabled_11b_rates=0
May 25 18:54:11 keerthana-Latitude-E6420 systemd[1619]: tracker-extract.service: Succeeded.
```


- Dealing with low disk space

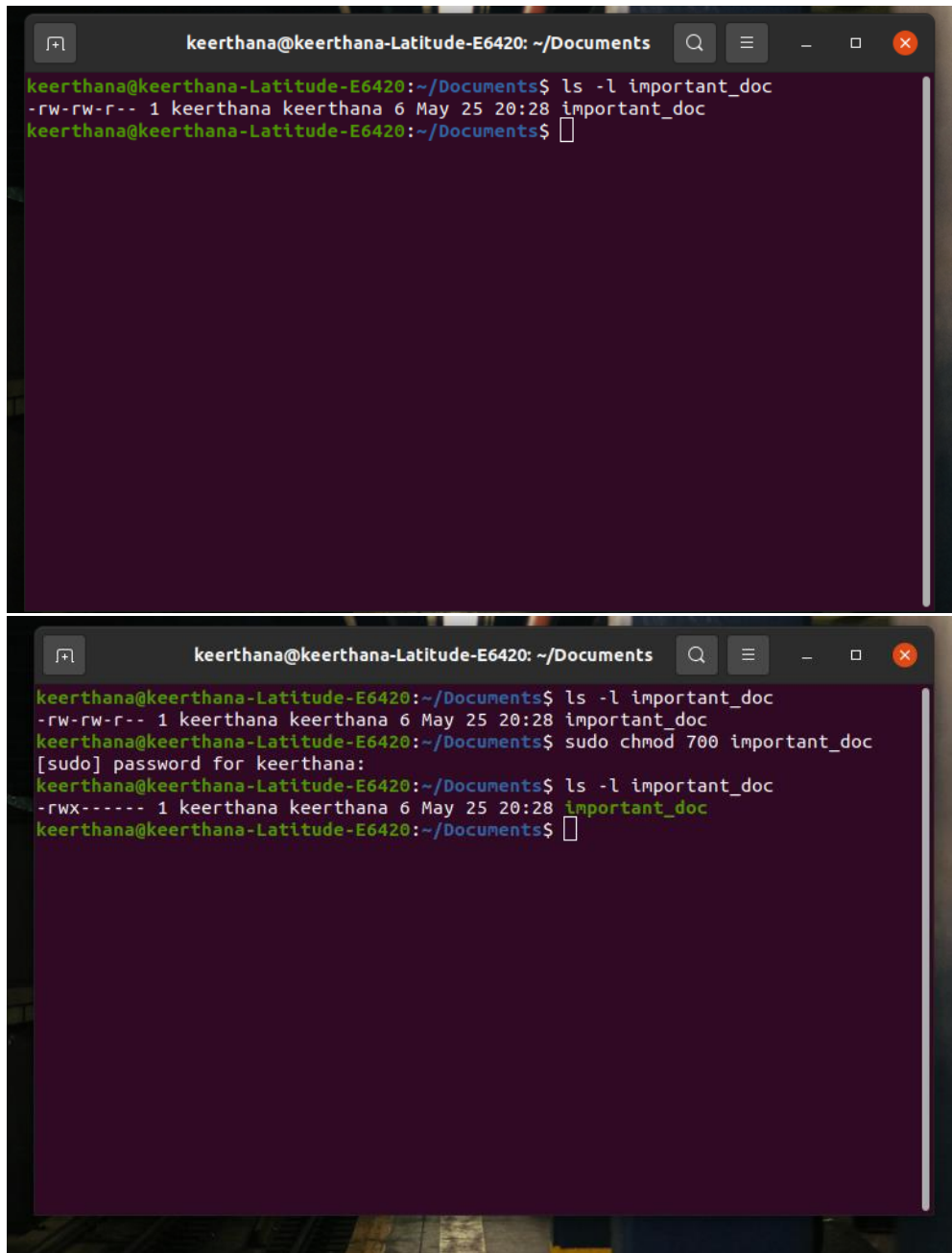
```
keerthana@keerthana-Latitude-E6420: ~  
r: NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retrying transaction with reduced feature level UDP.]  
Apr 26 16:33:23 keerthana-Latitude-E6420 systemd-resolved[776]: Server returned error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retrying transaction with reduced feature level UDP.  
Apr 26 16:33:39 keerthana-Latitude-E6420 systemd-resolved[776]: Server returned error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retrying transaction with reduced feature level UDP.  
Apr 26 16:34:11 keerthana-Latitude-E6420 systemd-resolved[776]: Server returned error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retrying transaction with reduced feature level UDP.  
Apr 26 16:47:01 keerthana-Latitude-E6420 systemd-resolved[776]: message repeated 8 times: [ Server returned error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retrying transaction with reduced feature level UDP.]  
Apr 26 16:51:39 keerthana-Latitude-E6420 systemd-resolved[776]: Server returned error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retrying transaction with reduced feature level UDP.  
Apr 26 17:02:01 keerthana-Latitude-E6420 systemd-resolved[776]: message repeated 5 times: [ Server returned error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retrying transaction with reduced feature level UDP.]  
Apr 26 17:02:46 keerthana-Latitude-E6420 systemd-resolved[776]: Server returned error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retrying transaction with reduced feature level UDP.  
Apr 29 07:57:22 keerthana-Latitude-E6420 gnome-shell[37565]: [37557:37580:0429/075722.560729:ERROR:connection_factory_impl.cc(428)] Failed to connect to MCS endpoint with error -105  
Binary file (standard input) matches  
keerthana@keerthana-Latitude-E6420:~$ sudo du -a /home | sort -n -r | head -n 5  
[sudo] password for keerthana:  
[
```

```
keerthana@keerthana-Latitude-E6420: ~  
ential DNS violation DVE-2018-0001, retrying transaction with reduced feature level UDP.  
Apr 26 16:34:11 keerthana-Latitude-E6420 systemd-resolved[776]: Server returned error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retrying transaction with reduced feature level UDP.  
Apr 26 16:47:01 keerthana-Latitude-E6420 systemd-resolved[776]: message repeated 8 times: [ Server returned error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retrying transaction with reduced feature level UDP.]  
Apr 26 16:51:39 keerthana-Latitude-E6420 systemd-resolved[776]: Server returned error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retrying transaction with reduced feature level UDP.  
Apr 26 17:02:01 keerthana-Latitude-E6420 systemd-resolved[776]: message repeated 5 times: [ Server returned error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retrying transaction with reduced feature level UDP.]  
Apr 26 17:02:46 keerthana-Latitude-E6420 systemd-resolved[776]: Server returned error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retrying transaction with reduced feature level UDP.  
Apr 29 07:57:22 keerthana-Latitude-E6420 gnome-shell[37565]: [37557:37580:0429/075722.560729:ERROR:connection_factory_impl.cc(428)] Failed to connect to MCS endpoint with error -105  
Binary file (standard input) matches  
keerthana@keerthana-Latitude-E6420:~$ sudo du -a /home | sort -n -r | head -n 5  
[sudo] password for keerthana:  
49698816 /home  
49698796 /home/keerthana  
23221452 /home/keerthana/.local  
23221448 /home/keerthana/.local/share  
23217532 /home/keerthana/.local/share/Trash  
keerthana@keerthana-Latitude-E6420:~$
```

```
keerthana@keerthana-Latitude-E6420: ~
ential DNS violation DVE-2018-0001, retrying transaction with reduced feature level UDP.
Apr 26 16:34:11 keerthana-Latitude-E6420 systemd-resolved[776]: Server returned error NXDOMAIN, mitigating pot
ential DNS violation DVE-2018-0001, retrying transaction with reduced feature level UDP.
Apr 26 16:47:01 keerthana-Latitude-E6420 systemd-resolved[776]: Message repeated 8 times: [ Server returned er
ror NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retrying transaction with reduced feature leve
l UDP.]
Apr 26 16:51:39 keerthana-Latitude-E6420 systemd-resolved[776]: Server returned error NXDOMAIN, mitigating pot
ential DNS violation DVE-2018-0001, retrying transaction with reduced feature level UDP.
Apr 26 17:02:01 keerthana-Latitude-E6420 systemd-resolved[776]: Message repeated 5 times: [ Server returned er
ror NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retrying transaction with reduced feature leve
l UDP.]
Apr 26 17:02:46 keerthana-Latitude-E6420 systemd-resolved[776]: Server returned error NXDOMAIN, mitigating pot
ential DNS violation DVE-2018-0001, retrying transaction with reduced feature level UDP.
Apr 29 07:57:22 keerthana-Latitude-E6420 gnome-shell[37565]: [37557:37580:0429/075722.560729:ERROR:connection_
factory_impl.cc(428)] Failed to connect to MCS endpoint with error -105
Binary file (standard input) matches
keerthana@keerthana-Latitude-E6420:~$ sudo du -a /home | sort -n -r | head -n 5
[sudo] password for keerthana:
49698816      /home
49698796      /home/keerthana
23221452      /home/keerthana/.local
23221448      /home/keerthana/.local/share
23217532      /home/keerthana/.local/share/Trash
keerthana@keerthana-Latitude-E6420:~$ rm /home/keerthana/.local/share/Trash/*
```

```
keerthana@keerthana-Latitude-E6420: ~
keerthana@keerthana-Latitude-E6420:~$ sudo du -a /home | sort -n -r | head -n 5
[sudo] password for keerthana:
48873148      /home
48873128      /home/keerthana
22391600      /home/keerthana/.local
22391596      /home/keerthana/.local/share
22387672      /home/keerthana/.local/share/Trash
keerthana@keerthana-Latitude-E6420:~$
```

- changing permissions within a file

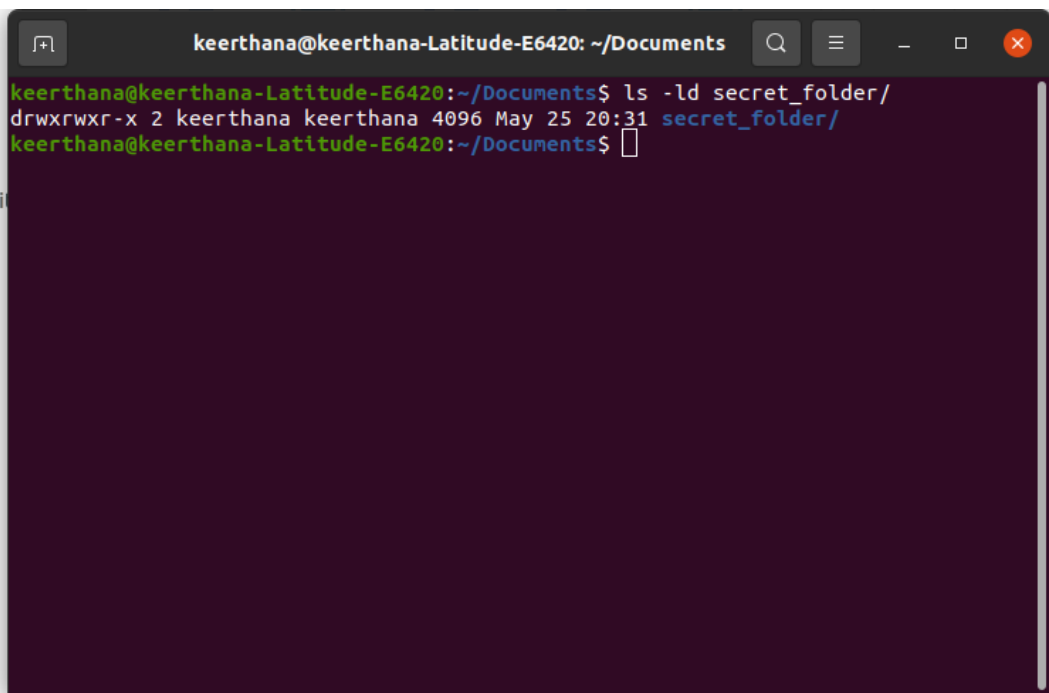


The image consists of two terminal window screenshots. The top screenshot shows a terminal window titled 'keerthana@keerthana-Latitude-E6420: ~/Documents'. The prompt is 'keerthana@keerthana-Latitude-E6420:~/Documents\$'. The user enters 'ls -l important_doc', and the output is '-rw-rw-r-- 1 keerthana keerthana 6 May 25 20:28 important_doc'. The bottom screenshot shows the same terminal window. The user enters 'ls -l important_doc' again, getting the same output. Then, the user enters 'sudo chmod 700 important_doc'. The terminal prompts '[sudo] password for keerthana:'. After the password is entered (indicated by a cursor), the user enters 'ls -l important_doc' again. The output is now '-rwx----- 1 keerthana keerthana 6 May 25 20:28 important_doc'.

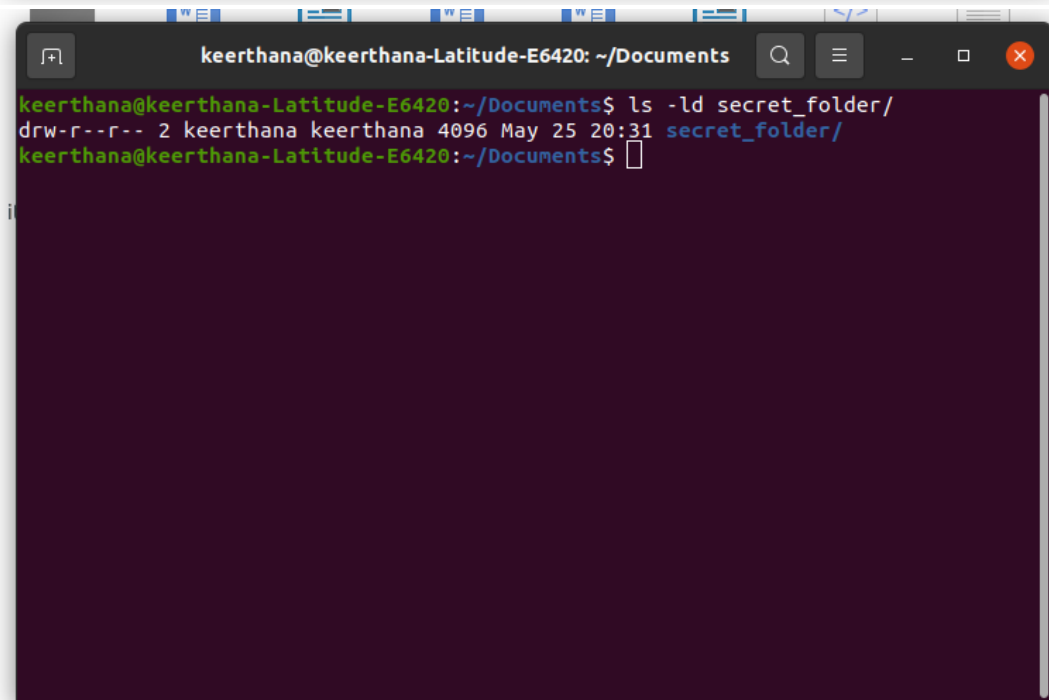
```
keerthana@keerthana-Latitude-E6420: ~/Documents
keerthana@keerthana-Latitude-E6420:~/Documents$ ls -l important_doc
-rw-rw-r-- 1 keerthana keerthana 6 May 25 20:28 important_doc
keerthana@keerthana-Latitude-E6420:~/Documents$

keerthana@keerthana-Latitude-E6420:~/Documents$ ls -l important_doc
-rw-rw-r-- 1 keerthana keerthana 6 May 25 20:28 important_doc
keerthana@keerthana-Latitude-E6420:~/Documents$ sudo chmod 700 important_doc
[sudo] password for keerthana:
keerthana@keerthana-Latitude-E6420:~/Documents$ ls -l important_doc
-rwx----- 1 keerthana keerthana 6 May 25 20:28 important_doc
keerthana@keerthana-Latitude-E6420:~/Documents$
```

- changing permissions within a folder



```
keerthana@keerthana-Latitude-E6420: ~/Documents
keerthana@keerthana-Latitude-E6420:~/Documents$ ls -ld secret_folder/
drwxrwxr-x 2 keerthana keerthana 4096 May 25 20:31 secret_folder/
keerthana@keerthana-Latitude-E6420:~/Documents$
```



```
keerthana@keerthana-Latitude-E6420: ~/Documents
keerthana@keerthana-Latitude-E6420:~/Documents$ ls -ld secret_folder/
drw-r--r-- 2 keerthana keerthana 4096 May 25 20:31 secret_folder/
keerthana@keerthana-Latitude-E6420:~/Documents$
```



```
keerthana@keerthana-Latitude-E6420: ~/Documents
keerthana@keerthana-Latitude-E6420:~/Documents$ ls -ld secret_folder/
drw-r--r-- 2 keerthana keerthana 4096 May 25 20:31 secret_folder/
keerthana@keerthana-Latitude-E6420:~/Documents$ sudo chmod u+x secret_folder/
keerthana@keerthana-Latitude-E6420:~/Documents$ ls -ld secret_folder/
drwxr--r-- 2 keerthana keerthana 4096 May 25 20:31 secret_folder/
keerthana@keerthana-Latitude-E6420:~/Documents$
```

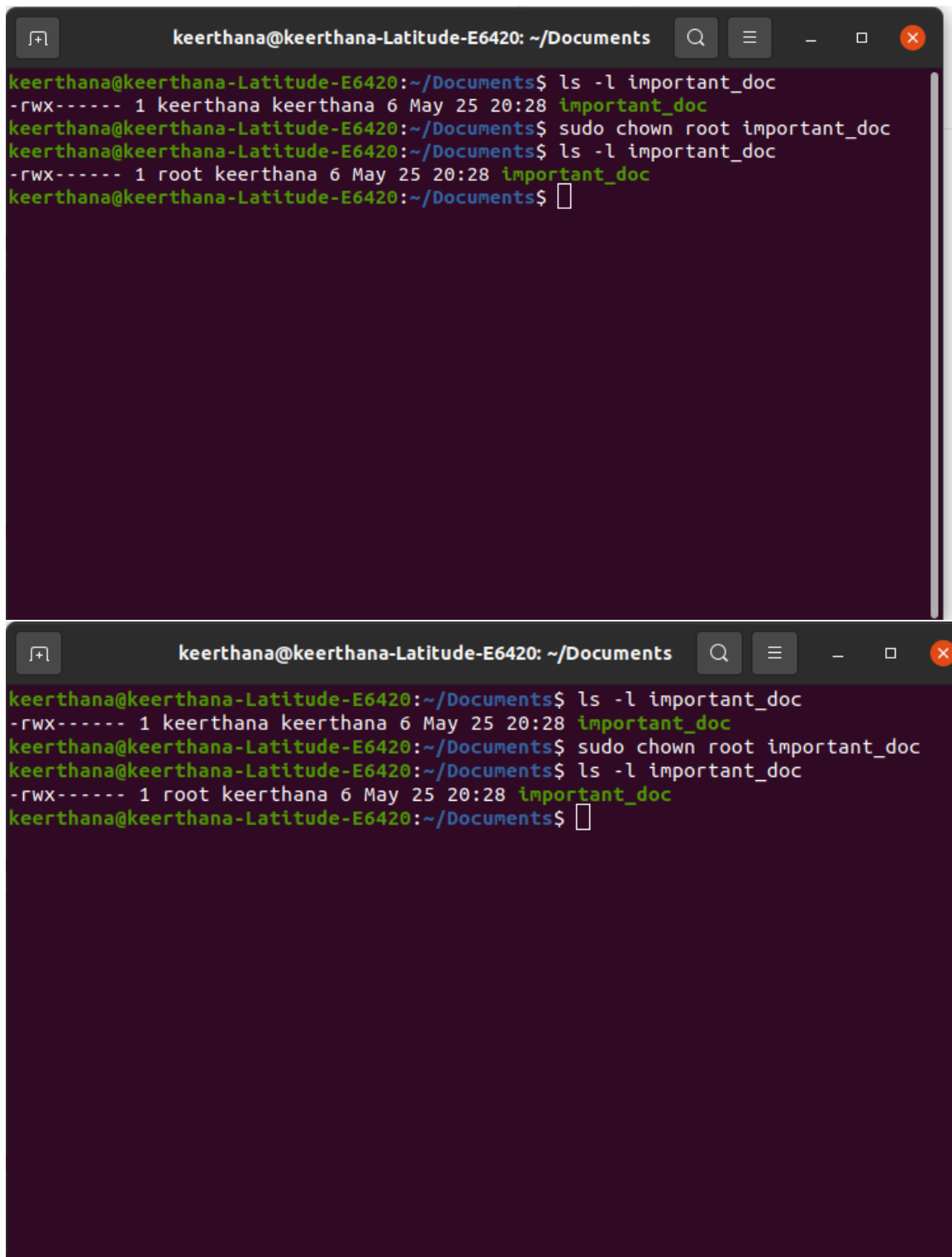
```
keerthana@keerthana-Latitude-E6420: ~/Documents
keerthana@keerthana-Latitude-E6420:~/Documents$ sudo chmod g+w secret_folder/
keerthana@keerthana-Latitude-E6420:~/Documents$ sudo chmod g-r secret_folder/
keerthana@keerthana-Latitude-E6420:~/Documents$ ls -ld secret_folder/
drwx-w-r-- 2 keerthana keerthana 4096 May 25 20:31 secret_folder/
keerthana@keerthana-Latitude-E6420:~/Documents$
```

```
keerthana@keerthana-Latitude-E6420: ~/Documents
keerthana@keerthana-Latitude-E6420:~/Documents$ sudo chmod g+w secret_folder/
keerthana@keerthana-Latitude-E6420:~/Documents$ sudo chmod g-r secret_folder/
keerthana@keerthana-Latitude-E6420:~/Documents$ ls -ld secret_folder/
drwx-w-r-- 2 keerthana keerthana 4096 May 25 20:31 secret_folder/
keerthana@keerthana-Latitude-E6420:~/Documents$ sudo chmod o-r secret_folder/
keerthana@keerthana-Latitude-E6420:~/Documents$ ls -ld secret_folder/
drwx-w---- 2 keerthana keerthana 4096 May 25 20:31 secret_folder/
keerthana@keerthana-Latitude-E6420:~/Documents$
```

The equivalent permission change in a single step:

```
keerthana@keerthana-Latitude-E6420: ~/Documents
keerthana@keerthana-Latitude-E6420:~/Documents$ ls -ld secret_folder/
drwxr--r-- 2 keerthana keerthana 4096 May 25 20:31 secret_folder/
keerthana@keerthana-Latitude-E6420:~/Documents$ sudo chmod 720 secret_folder/
keerthana@keerthana-Latitude-E6420:~/Documents$ ls -ld secret_folder/
drwx-w---- 2 keerthana keerthana 4096 May 25 20:31 secret_folder/
keerthana@keerthana-Latitude-E6420:~/Documents$
```

- Change the ownership of a specific file and folder



The image displays two terminal windows from a Linux system, demonstrating how to change the ownership of a file named 'important_doc'.

The top terminal window shows the following sequence of commands and output:

```
keerthana@keerthana-Latitude-E6420: ~/Documents
keerthana@keerthana-Latitude-E6420:~/Documents$ ls -l important_doc
-rwx----- 1 keerthana keerthana 6 May 25 20:28 important_doc
keerthana@keerthana-Latitude-E6420:~/Documents$ sudo chown root important_doc
keerthana@keerthana-Latitude-E6420:~/Documents$ ls -l important_doc
-rwx----- 1 root keerthana 6 May 25 20:28 important_doc
keerthana@keerthana-Latitude-E6420:~/Documents$
```

The bottom terminal window shows the same sequence of commands and output, confirming the ownership change:

```
keerthana@keerthana-Latitude-E6420: ~/Documents
keerthana@keerthana-Latitude-E6420:~/Documents$ ls -l important_doc
-rwx----- 1 keerthana keerthana 6 May 25 20:28 important_doc
keerthana@keerthana-Latitude-E6420:~/Documents$ sudo chown root important_doc
keerthana@keerthana-Latitude-E6420:~/Documents$ ls -l important_doc
-rwx----- 1 root keerthana 6 May 25 20:28 important_doc
keerthana@keerthana-Latitude-E6420:~/Documents$
```