Using Logs to Help You Track Down an Issue in Linux

1. Cmd to view log files

2. Cmd to track down all the issues

3. Cmd which helps to track down errors

4. Now we will tail -f the syslog file and keep it in an open window

```
(base) srishti@srishti-Inspiron-5559:~$ tail -f /var/log/syslog
May 24 15:05:24 srishti-Inspiron-5559 systemd[1]: Started Network Manager Script Dispatcher Service.
May 24 15:05:24 srishti-Inspiron-5559 nm-dispatcher: req:1 'up' [wlp2s0]: new request (1 scripts)
May 24 15:05:24 srishti-Inspiron-5559 nm-dispatcher: req:1 'up' [wlp2s0]: start running ordered scripts...
May 24 15:05:25 srishti-Inspiron-5559 NetworkManager[1041]: <info>  [1621848925.9407] manager: NetworkManager state is now CONNECTED_G
LOBAL
May 24 15:05:25 srishti-Inspiron-5559 nm-dispatcher: req:2 'connectivity-change': new request (1 scripts)
May 24 15:05:25 srishti-Inspiron-5559 nm-dispatcher: req:2 'connectivity-change': start running ordered scripts...
May 24 15:05:25 srishti-Inspiron-5559 whoopsie[1158]: [15:05:25] The default IPv4 route is: /org/freedesktop/NetworkManager/ActiveConn
ection/6
May 24 15:05:25 srishti-Inspiron-5559 whoopsie[1158]: [15:05:25] Not a paid data plan: /org/freedesktop/NetworkManager/ActiveConnectio
n/6
May 24 15:05:25 srishti-Inspiron-5559 whoopsie[1158]: [15:05:25] Found usable connection: /org/freedesktop/NetworkManager/ActiveConnec
tion/6
May 24 15:05:26 srishti-Inspiron-5559 whoopsie[1158]: [15:05:26] online
```

5. Now if we turn of the wi-fi connection

```
May 24 15:05:02 srishti-Inspiron-5559 systemd[1]: Starting Network Manager Script Dispatcher Service...
May 24 15:05:02 srishti-Inspiron-5559 dbus-daemon[984]: [system] Successfully activated service 'org.free
May 24 15:05:02 srishti-Inspiron-5559 systemd[1]: Started Network Manager Script Dispatcher Service.
May 24 15:05:02 srishti-Inspiron-5559 nm-dispatcher: req:1 'connectivity-change': new request (1 scripts)
May 24 15:05:02 srishti-Inspiron-5559 nm-dispatcher: req:1 'connectivity-change': start running ordered s
May 24 15:05:02 srishti-Inspiron-5559 NetworkManager[1041]: <info>  [1621848902.9524] audit: op="radio-co
0" pid=1661 uid=1000 result="success"
May 24 15:05:02 srishti-Inspiron-5559 wpa_supplicant[1029]: nl80211: deinit ifname=p2p-dev-wlp2s0 disable
May 24 15:05:02 srishti-Inspiron-5559 NetworkManager[1041]: <info>  [1621848902.9528] manager: rfkill: Wi
switch
May 24 15:05:02 srishti-Inspiron-5559 nm-dispatcher: req:2 'down' [wlp2s0]: new request (1 scripts)
May 24 15:05:02 srishti-Inspiron-5559 nm-dispatcher: req:2 'down' [wlp2s0]: start running ordered scripts
May 24 15:05:02 srishti-Inspiron-5559 deja-dup-monito[2673]: Source ID 340 was not found when attempting
May 24 15:05:02 srishti-Inspiron-5559 gsd-sharing[1790]: Failed to StopUnit service: GDBus.Error:org.free
Unit gnome-user-share-webdav.service not loaded.
May 24 15:05:02 srishti-Inspiron-5559 gsd-sharing[1790]: Failed to StopUnit service: GDBus.Error:org.free
Unit rygel.service not loaded.
May 24 15:05:02 srishti-Inspiron-5559 gsd-sharing[1790]: Failed to StopUnit service: GDBus.Error:org.free
Unit gnome-remote-desktop.service not loaded.
May 24 15:05:03 srishti-Inspiron-5559 wpa_supplicant[1029]: nl80211: deinit ifname=wlp2s0 disabled_11b_rates=0
May 24 15:05:04 srishti-Inspiron-5559 org.gnome.Shell.desktop[1661]: [13616:13637:0524/150504.927244:ERROR:connection_factory_impl.cc(
428)] Failed to connect to MCS endpoint with error -106
^C
(base) srishti@srishti-Inspiron-5559:~$ tail -f /var/log/syslog
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May 24 15:05:24 srishti-Inspiron-5559 nm-dispatcher: req:1 'up' [wlp2s0]: start running ordered scripts...
May 24 15:05:25 srishti-Inspiron-5559 NetworkManager[1041]: <info>  [1621848925.9407] manager: NetworkManager state is now CONNECTED_G
LOBAL
May 24 15:05:25 srishti-Inspiron-5559 nm-dispatcher: req:2 'connectivity-change': new request (1 scripts)
May 24 15:05:25 srishti-Inspiron-5559 nm-dispatcher: req:2 'connectivity-change': start running ordered scripts...
May 24 15:05:25 srishti-Inspiron-5559 whoopsie[1158]: [15:05:25] The default IPv4 route is: /org/freedesktop/NetworkManager/ActiveConn
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May 24 15:05:25 srishti-Inspiron-5559 whoopsie[1158]: [15:05:25] Not a paid data plan: /org/freedesktop/NetworkManager/ActiveConnectio
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May 24 15:05:25 srishti-Inspiron-5559 whoopsie[1158]: [15:05:25] Found usable connection: /org/freedesktop/NetworkManager/ActiveConnec
tion/6
May 24 15:05:26 srishti-Inspiron-5559 whoopsie[1158]: [15:05:26] online
```
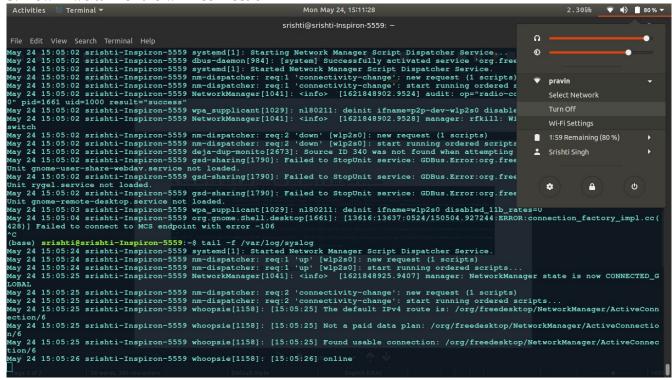
6. We can view the network logging data in real time

```
(base) srishti@srishti-Inspiron-5559:~$ tail -f /var/log/syslog
May 24 14:53:52 srishti-Inspiron-5559 wpa_supplicant[1029]: wlp2s0: Associated with c8:3a:35:43:4e:30
May 24 14:53:52 srishti-Inspiron-5559 wpa_supplicant[1029]: wlp2s0: CTRL-EVENT-SUBNET-STATUS-UPDATE status=0
May 24 14:53:52 srishti-Inspiron-5559 kernel: [22376.798510] wlp2s0: associated
May 24 14:53:52 srishti-Inspiron-5559 NetworkManager[1041]: <info>  [1621848232.4489] device (wlp2s0): supplicant interface state: ass
ociating -> associated
May 24 14:53:52 srishti-Inspiron-5559 NetworkManager[1041]: <info>  [1621848232.4547] device (wlp2s0): supplicant interface state: ass
ociated -> 4-way handshake
May 24 14:53:52 srishti-Inspiron-5559 NetworkManager[1041]: <info>  [1621848232.4695] device (wlp2s0): supplicant interface state: 4-w
ay handshake -> group handshake
May 24 14:53:52 srishti-Inspiron-5559 wpa_supplicant[1029]: wlp2s0: WPA: Key negotiation completed with c8:3a:35:43:4e:30 [PTK=CCMP GT
K=CCMP]
May 24 14:53:52 srishti-Inspiron-5559 wpa_supplicant[1029]: wlp2s0: CTRL-EVENT-CONNECTED - Connection to c8:3a:35:43:4e:30 completed [
id=0 id_str=]
May 24 14:53:52 srishti-Inspiron-5559 NetworkManager[1041]: <info>  [1621848232.4909] device (wlp2s0): supplicant interface state: gro
up handshake -> completed
May 24 14:53:52 srishti-Inspiron-5559 wpa_supplicant[1029]: wlp2s0: CTRL-EVENT-SIGNAL-CHANGE above=1 signal=-48 noise=9999 txrate=1500
00
May 24 15:05:02 srishti-Inspiron-5559 kernel: [23047.183963] wlp2s0: deauthenticating from c8:3a:35:43:4e:30 by local choice (Reason:
3=DEAUTH_LEAVING)
May 24 15:05:02 srishti-Inspiron-5559 wpa_supplicant[1029]: wlp2s0: CTRL-EVENT-DISCONNECTED bssid=c8:3a:35:43:4e:30 reason=3 locally_g
enerated=1
May 24 15:05:02 srishti-Inspiron-5559 whoopsie[1158]: [15:05:02] Cannot reach: https://daisy.ubuntu.com
May 24 15:05:02 srishti-Inspiron-5559 whoopsie[1158]: [15:05:02] offline
May 24 15:05:02 srishti-Inspiron-5559 NetworkManager[1041]: <info>  [1621848902.8545] manager: rfkill: WiFi hardware radio set disable
d
May 24 15:05:02 srishti-Inspiron-5559 avahi-daemon[967]: Interface wlp2s0.IPv6 no longer relevant for mDNS.
May 24 15:05:02 srishti-Inspiron-5559 NetworkManager[1041]: <info>  [1621848902.8545] device (wlp2s0): state change: activated -> unav
ailable (reason 'none', sys-iface-state: 'managed')
May 24 15:05:02 srishti-Inspiron-5559 avahi-daemon[967]: Leaving mDNS multicast group on interface wlp2s0.IPv6 with address fe80::4efd
:aeeb:5b98:1898.
May 24 15:05:02 srishti-Inspiron-5559 systemd[1]: Starting Load/Save RF Kill Switch Status...
May 24 15:05:02 srishti-Inspiron-5559 avahi-daemon[967]: Interface wlp2s0.IPv4 no longer relevant for mDNS.
May 24 15:05:02 srishti-Inspiron-5559 systemd[1]: Started Load/Save RF Kill Switch Status.
May 24 15:05:02 srishti-Inspiron-5559 avahi-daemon[967]: Leaving mDNS multicast group on interface wlp2s0.IPv4 with address 192.168.0.
112.
May 24 15:05:02 srishti-Inspiron-5559 avahi-daemon[967]: Withdrawing address record for fe80::4efd:aeeb:5b98:1898 on wlp2s0.
May 24 15:05:02 srishti-Inspiron-5559 avahi-daemon[967]: Withdrawing address record for 192.168.0.112 on wlp2s0.
May 24 15:05:02 srishti-Inspiron-5559 wpa_supplicant[1029]: rfkill: WLAN soft blocked
```