

Assignment 2

Using Logs to Help You Track Down an Issue in Linux

1) view log files

```
khushi@khushi:~$ ls /var/log
alternatives.log      boot.log.1      dpkg.log.2.gz      speech-dispatcher
alternatives.log.1    boot.log.2      dpkg.log.3.gz      syslog
alternatives.log.2.gz boot.log.3      dpkg.log.4.gz      syslog.1
alternatives.log.3.gz boot.log.4      dpkg.log.5.gz      syslog.2.gz
alternatives.log.4.gz boot.log.5      dpkg.log.6.gz      syslog.3.gz
alternatives.log.5.gz boot.log.6      faillog            syslog.4.gz
appport.log           boot.log.7      fontconfig.log     syslog.5.gz
appport.log.1         bootstrap.log   gdm3              syslog.6.gz
appport.log.2.gz      bttmp          gpu-manager.log    syslog.7.gz
appport.log.3.gz      bttmp.1        hp                ubuntu-advantage.log
appport.log.4.gz      cups           installer          unattended-upgrades
appport.log.5.gz      dist-upgrade   journal           vboxadd-install.log
appport.log.6.gz      dmesg          kern.log           vboxadd-setup.log
apt                   dmesg.0        kern.log.1         vboxadd-setup.log.1
auth.log              dmesg.1.gz     kern.log.2.gz      vboxadd-setup.log.2
auth.log.1            dmesg.2.gz     kern.log.3.gz      vboxadd-setup.log.3
auth.log.2.gz         dmesg.3.gz     kern.log.4.gz      vboxadd-setup.log.4
auth.log.3.gz         dmesg.4.gz     lastlog            wtmp
auth.log.4.gz         dpkg.log        openvpn            Xorg.0.log
boot.log              dpkg.log.1     private            Xorg.1.log
```

2) Track down all the issues

```
khushi@khushi:~$ sudo cat /var/log/syslog
[sudo] password for khushi:
May 24 16:01:50 khushi rsyslogd: [origin software="rsyslogd" swVersion="8.2001.0" x-pid="628" x-info="https://www.rsyslog.com"] rsyslogd was HUPed
May 24 16:01:50 khushi dbus-daemon[601]: [system] AppArmor D-Bus mediation is enabled
May 24 16:01:50 khushi systemd[1]: Started Login Service.
May 24 16:01:50 khushi dbus-daemon[601]: [system] Successfully activated service 'org.freedesktop.systemd1'
May 24 16:01:50 khushi systemd[1]: Started Avahi mDNS/DNS-SD Stack.
May 24 16:01:50 khushi systemd[1]: Started Thermal Daemon Service.
May 24 16:01:50 khushi avahi-daemon[598]: Successfully called chroot().
May 24 16:01:50 khushi avahi-daemon[598]: Successfully dropped remaining capabilities.
May 24 16:01:50 khushi wpa_supplicant[635]: Successfully initialized wpa supplicant
May 24 16:01:50 khushi systemd[1]: Started Make remote CUPS printers available locally.
May 24 16:01:50 khushi systemd[1]: Started WPA supplicant.
May 24 16:01:50 khushi systemd[1]: Started Switcheroo Control Proxy service.
May 24 16:01:50 khushi systemd[1]: Condition check resulted in Manage Sound Card State (restore and store) being skipped.
May 24 16:01:50 khushi systemd[1]: Starting Save/Restore Sound Card State...
May 24 16:01:50 khushi systemd[1]: Finished Save/Restore Sound Card State.
May 24 16:01:50 khushi systemd[1]: Reached target Sound Card.
May 24 16:01:50 khushi avahi-daemon[598]: No service file found in /etc/avahi/services.
May 24 16:01:50 khushi avahi-daemon[598]: Joining mDNS multicast group on interface lo.IPv6 with address ::1.
May 24 16:01:50 khushi avahi-daemon[598]: New relevant interface lo.IPv6 for mDNS.
May 24 16:01:50 khushi avahi-daemon[598]: Joining mDNS multicast group on interface lo.IPv4 with address 127.0.0.1.
May 24 16:01:50 khushi avahi-daemon[598]: New relevant interface lo.IPv4 for mDNS.
May 24 16:01:50 khushi avahi-daemon[598]: Network interface enumeration completed.
May 24 16:01:50 khushi avahi-daemon[598]: Registering new address record for ::1 on lo.*.
May 24 16:01:50 khushi avahi-daemon[598]: Registering new address record for 127.0.0.1 on lo.IPv4.
```

3) Log results that have the word error in them

```
khushi@khushi:~$ less /var/log//syslog | grep error
May 24 16:01:51 khushi thermald[632]: [WARN]error: could not parse file /etc/thermald/thermal-conf.xml
May 24 16:01:51 khushi thermald[632]: [WARN]error: could not parse file /etc/thermald/thermal-conf.xml
May 24 16:01:51 khushi thermald[632]: [WARN]error: could not parse file /etc/thermald/thermal-conf.xml
May 24 16:02:04 khushi systemd-resolved[587]: Server returned error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retr
May 24 16:02:04 khushi systemd-resolved[587]: Server returned error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retr
May 24 16:02:50 khushi gnome-session[1095]: gnome-session-binary[1095]: WARNING: Falling back to non-systemd startup procedure due to
ess org.freedesktop.systemd1 exited with status 1
May 24 16:02:50 khushi gnome-session-binary[1095]: WARNING: Falling back to non-systemd startup procedure due to error: GDBus.Error:
ystemd1 exited with status 1
May 24 16:03:38 khushi org.gnome.Shell.desktop[1754]: > Internal error: Could not resolve keysym Invalid
May 24 16:05:41 khushi systemd-resolved[587]: Server returned error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retr
May 24 16:05:41 khushi systemd-resolved[587]: Server returned error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retr
May 24 16:05:50 khushi apt.systemd.daily[1947]: An error occurred: 404 Not Found [IP: 43.255.166.254 80]
May 24 16:10:58 khushi /usr/lib/gdm3/gdm-x-session[2438]: #011(WW) warning, (EE) error, (NI) not implemented, (??) unknown.
May 24 16:11:01 khushi /usr/lib/gdm3/gdm-x-session[2524]: VBoxClient: error: No service specified. Quitting because nothing to do!
May 24 16:11:08 khushi vboxclient.desktop[2809]: VBoxClient: error: No service specified. Quitting because nothing to do!
May 24 16:12:18 khushi systemd-resolved[587]: Server returned error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retr
May 24 16:12:18 khushi systemd-resolved[587]: Server returned error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retr
May 24 16:13:50 khushi systemd-resolved[587]: Server returned error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retr
May 24 16:13:50 khushi systemd-resolved[587]: Server returned error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retr
```

4) Tail -f the syslog file and keep it in an open window

```
khushi@khushi:~$ tail -f /var/log/syslog
May 24 16:21:11 khushi systemd[2342]: Started Application launched by gnome-shell.
May 24 16:21:12 khushi dbus-daemon[2362]: [session uid=1000 pid=2362] Activating via systemd: service name='org.gnome.Terminal' unit='gnome-ter
00 comm="/usr/bin/gnome-terminal.real --window " Label="unconfined")
May 24 16:21:12 khushi systemd[2342]: Starting GNOME Terminal Server...
May 24 16:21:12 khushi dbus-daemon[2362]: [session uid=1000 pid=2362] Successfully activated service 'org.gnome.Terminal'
May 24 16:21:12 khushi systemd[2342]: Started GNOME Terminal Server.
May 24 16:21:13 khushi systemd[2342]: Started VTE child process 4811 launched by gnome-terminal-server process 4803.
May 24 16:21:13 khushi systemd[2342]: gnome-launched-org.gnome.Terminal.desktop-4798.scope: Succeeded.
May 24 16:21:35 khushi systemd[1]: systemd-hostnamed.service: Succeeded.
May 24 16:21:40 khushi systemd-timesyncd[588]: Timed out waiting for reply from 91.189.91.157:123 (ntp.ubuntu.com).
May 24 16:21:40 khushi systemd-timesyncd[588]: Initial synchronization to time server 91.189.94.4:123 (ntp.ubuntu.com).
```