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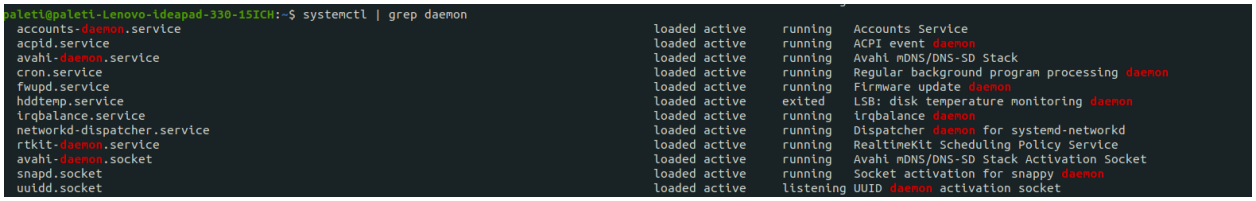
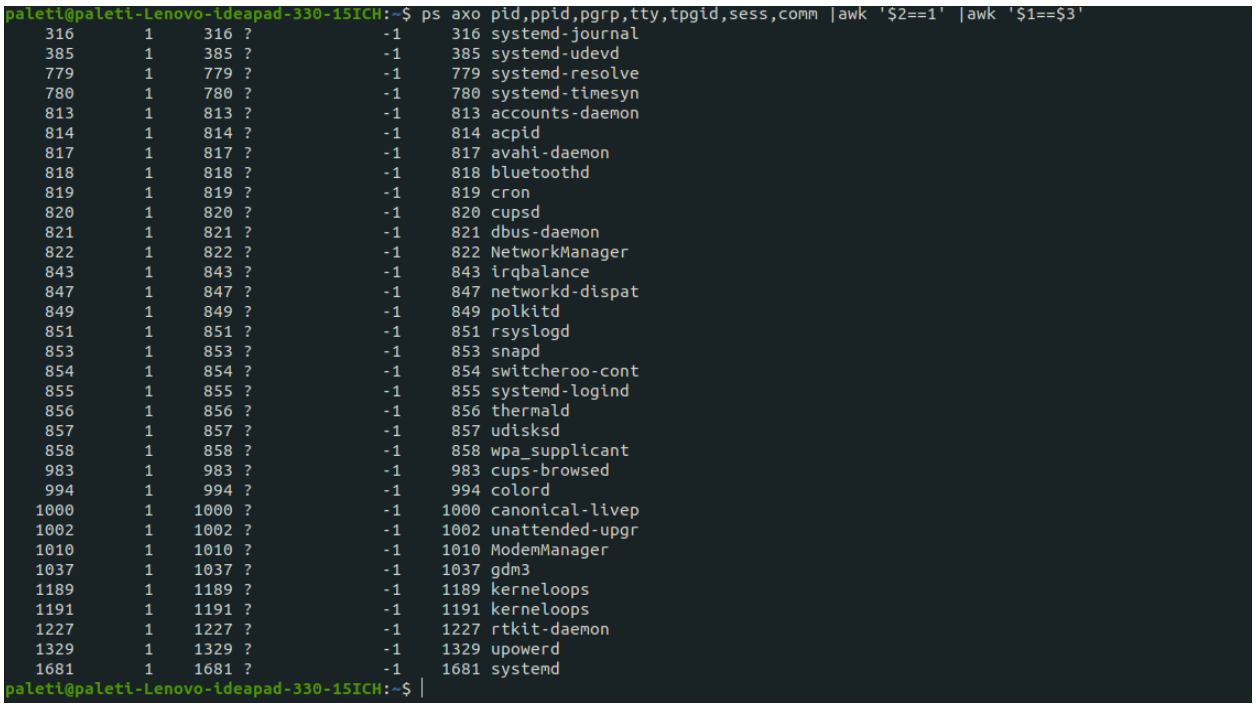
CED18I039

DEVICE DRIVERS - LAB 1



```
paleti@paleti-Lenovo-ideapad-330-15ICH:~$ systemctl | grep daemon
  accounts-daemon.service                                                   loaded active     running   Accounts Service
  acpid.service                                                             loaded active     running   ACPI event daemon
  avahi-daemon.service                                                      loaded active     running   Avahi mDNS/DNS-SD Stack
  cron.service                                                              loaded active     running   Regular background program processing daemon
  fwupd.service                                                             loaded active     running   Firmware update daemon
  hddtemp.service                                                           loaded active     exited    LSB: disk temperature monitoring daemon
  irqbalance.service                                                        loaded active     running   irqbalance daemon
  networkd-dispatcher.service                                               loaded active     running   Dispatcher daemon for systemd-networkd
  rtkit-daemon.service                                                      loaded active     running   RealtimeKit Scheduling Policy Service
  avahi-daemon.socket                                                       loaded active     running   Avahi mDNS/DNS-SD Stack Activation Socket
  snapd.socket                                                              loaded active     running   Socket activation for snappy daemon
  uuidd.socket                                                              loaded active     listening UUID daemon activation socket
```



```
paleti@paleti-Lenovo-ideapad-330-15ICH:~$ ps axo pid,ppid,pgrp,tty,tpgid,sess,comm |awk '$2==1' |awk '$1==$3'
    316       1     316 ?             -1     316 systemd-journal
    385       1     385 ?             -1     385 systemd-udevd
    779       1     779 ?             -1     779 systemd-resolve
    780       1     780 ?             -1     780 systemd-timesyn
    813       1     813 ?             -1     813 accounts-daemon
    814       1     814 ?             -1     814 acpid
    817       1     817 ?             -1     817 avahi-daemon
    818       1     818 ?             -1     818 bluetoothd
    819       1     819 ?             -1     819 cron
    820       1     820 ?             -1     820 cupsd
    821       1     821 ?             -1     821 dbus-daemon
    822       1     822 ?             -1     822 NetworkManager
    843       1     843 ?             -1     843 irqbalance
    847       1     847 ?             -1     847 networkd-dispat
    849       1     849 ?             -1     849 polkitd
    851       1     851 ?             -1     851 rsyslogd
    853       1     853 ?             -1     853 snapd
    854       1     854 ?             -1     854 switcheroo-cont
    855       1     855 ?             -1     855 systemd-logind
    856       1     856 ?             -1     856 thermald
    857       1     857 ?             -1     857 udisksd
    858       1     858 ?             -1     858 wpa_supplicant
    983       1     983 ?             -1     983 cups-browsed
    994       1     994 ?             -1     994 colord
   1000       1    1000 ?             -1    1000 canonical-livep
   1002       1    1002 ?             -1    1002 unattended-upgr
   1010       1    1010 ?             -1    1010 ModemManager
   1037       1    1037 ?             -1    1037 gdm3
   1189       1    1189 ?             -1    1189 kerneloops
   1191       1    1191 ?             -1    1191 kerneloops
   1227       1    1227 ?             -1    1227 rtkit-daemon
   1329       1    1329 ?             -1    1329 upowerd
   1681       1    1681 ?             -1    1681 systemd
paleti@paleti-Lenovo-ideapad-330-15ICH:~$
```

Accounts-daemon.service:

It's an API and associated service daemon to add/remove/modify users, since Linux does not have one of those. (except forking out to useradd/usermod/userdel, except on Debian where they supply the adduser/rmuser commands instead).

Personal comment: This is the most I have found on the internet which was understandable.

acpid.service:

The acpid daemon supports the Advanced Configuration and Power Interface (ACPI) to allow intelligent power management on your system and to query battery and configuration status. It listens on a file and when an event occurs, executes programs to handle the event.

Rules are defined by simple configuration files. acpid will look in a configuration directory (**/etc/acpi/events** by default), and parse all files that do not begin with a period ('.'). Each file must define two things: an event and also a corresponding action.

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avahi-daemon.service

The avahi-daemon Linux service runs on client machines to perform network-based Zeroconf service discovery. Avahi is an implementation of the DNS Service Discovery and Multicast DNS specifications for Zeroconf Networking. User applications receive notice of discovered network services and resources using the Linux D-Bus message passing. The daemon coordinates application efforts in caching replies, helping minimize network traffic.

cron.service

The Cron (crond) daemon or service is used to execute scheduled commands or scripts. cron wakes up every minute, examining all stored crontabs, checking each command to see if it should be run in the current minute.

fwupd.service

fwupd is an open-source daemon for managing the installation of firmware updates on Linux-based systems, developed by GNOME maintainer Richard Hughes.[1] It is designed primarily for servicing the Unified Extensible Firmware Interface (UEFI) firmware on supported devices via EFI System Resource Table (ESRT) and UEFI Capsule, which is supported in Linux kernel 4.2 and later.

hddtemp.service

hddtemp is a small utility (with daemon) that gives the hard-drive temperature via S.M.A.R.T. (for drives supporting this feature).
Running the daemon allows access to the temperature information via TCP/IP as a regular user. This is useful for scripts and system monitors.

The daemon is controlled by hddtemp.service.

To get the temperature, connect to the daemon which listens on port 7634.

irqbalance.service

irqbalance is a Linux daemon that distributes interrupts over among the processors and cores in your computer system. The design goal of irqbalance is to find a balance between power savings and optimal performance. To a large degree, the work irqbalance does is invisible to you. The daemon balances savings in power consumption with performance.

networkd-dispatcher.service
Networkd-dispatcher is a dispatcher daemon for systemd-networkd connection status changes. It is similar to NetworkManager-dispatcher, but is much more limited in the types of events it supports due to the limited nature of systemd-networkd.
This daemon listens for signals from systemd-networkd over dbus, so it should be very light on resources (e.g. no polling). It is meant to be run as a system-wide daemon (as root). This allows it to be used for tasks such as starting a VPN after a connection is established.

rtkit-daemon.service
RealtimeKit is a D-Bus system service that changes the scheduling policy of user processes/threads to SCHED_RR (i.e. real time scheduling mode) on request. It is intended to be used as a secure mechanism to allow real-time scheduling to be used by normal user processes. Overall, I would not expect it to peg out CPU usage.

snapd.socket
The snapd daemon is a REST API daemon for managing snap packages. Users can interact with it by using the snap client, which is part of the same package.

uuidd.socket
The uuidd daemon is used by the UUID library to generate universally unique identifiers (UUIDs), especially time-based UUIDs, in a secure and guaranteed-unique fashion, even in the face of large numbers of threads running on different CPUs trying to grab UUIDs.

colord
The colord daemon is a system service that makes it easy to manage, install and generate color profiles to accurately color manage input and output devices.

References:

- https://askubuntu.com/questions/42444/the-list-of-running-daemons
- https://stackoverflow.com/questions/17991095/linux-how-to-find-the-list-of-daemon-processes-and-zombie-processes
- Wikipedia
- www.thegeekdiary.com

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