DEVICE DRIVERS – LAB EXERCISE 4

Submitted By:

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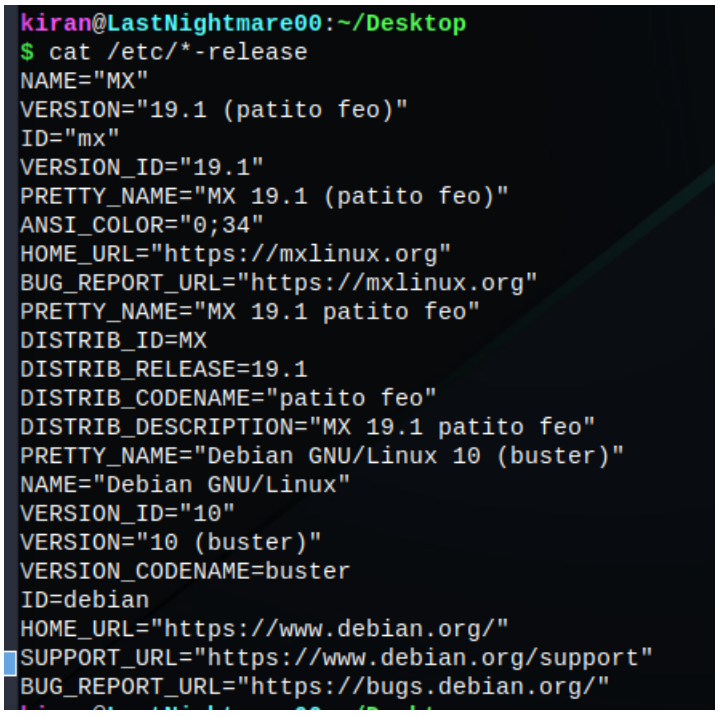
CED18I028

OBJECTIVE:

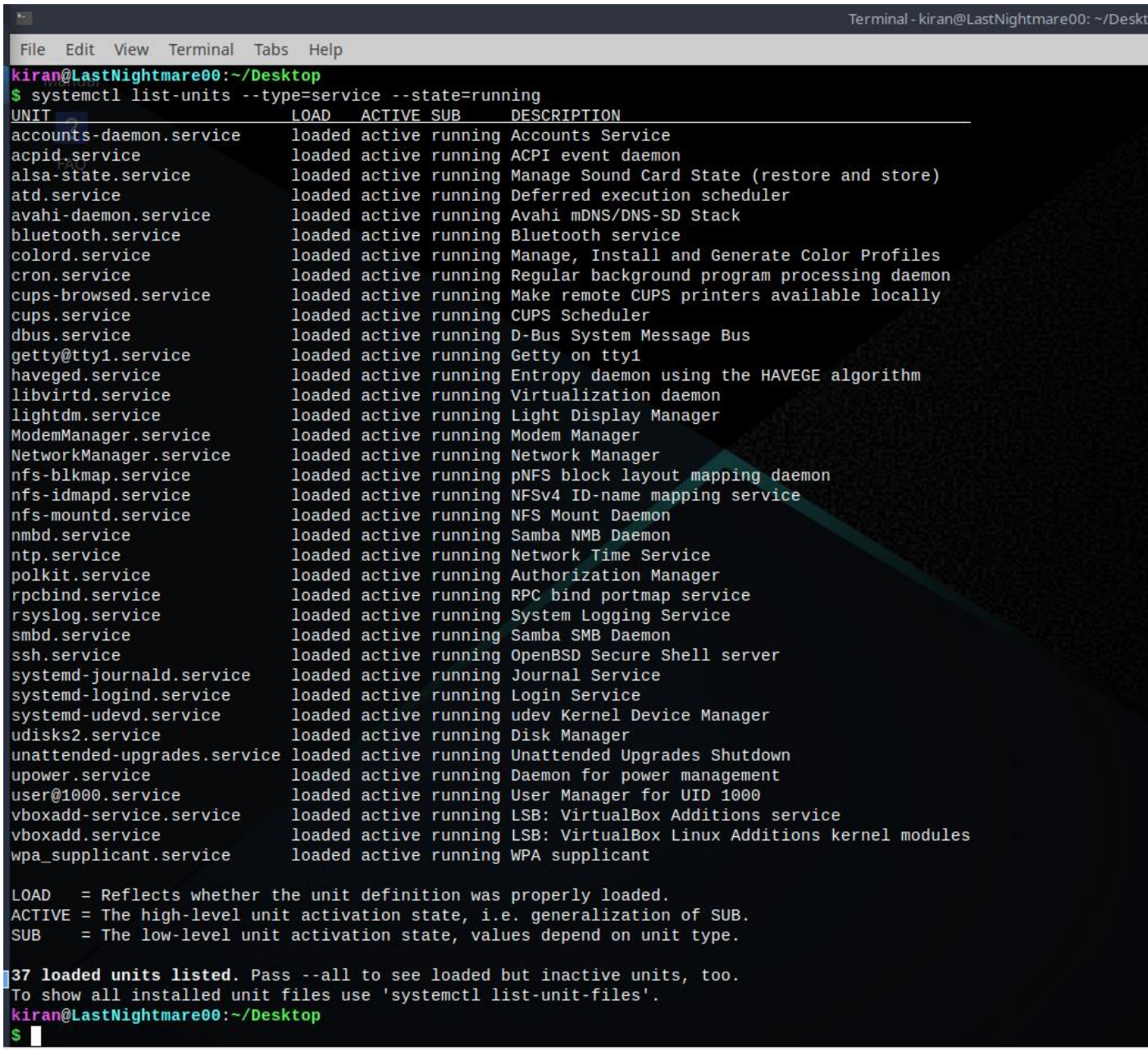
List at least 10 daemons present in your laptop with the screen shots and explain each daemon in two or three lines on what they do. No programming is required. Just listing and submitting in text format.

Linux Distribution Used:

MX Linux 19.1 (Running on Virtual machine)



Screenshot after running ‘ systemctl list-units --type=service --state=running ‘ command:



Short description about a few of the daemons found:

accounts-daemon (Accounts Service)

The AccountService project provides a set of D-Bus interfaces for querying and manipulating user account information and an implementation of these interfaces

acpid (ACPI event daemon)

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 (/proc/acpi/event) and when an event occurs, executes programs to handle the event.

atd (Deferred execution scheduler)

atd is a job scheduler daemon that runs jobs scheduled for later execution. These jobs are one-time task(not recurring) at a specific time scheduled using ‘at’ or ‘batch’ utility.

avahi-daemon (Avahi mDNS/DNS-SD Stack)

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 (Regular background program processing daemon)

Cron is a clock daemon, whose name originates from Chronos, the Greek word for time. It enables users to automate the execution of commands, scripts (a group of commands) or programs at specified time intervals.

colord (Manage, Install and Generate Color Profiles)

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

cups-browsed (Make remote CUPS printers available locally)

This package provides cups-browsed, a daemon which browses the Bonjour broadcasts of shared remote CUPS printers and makes the printers available locally, replacing the CUPS broadcasting/browsing.

haveged (Entropy daemon using the HAVEGE algorithm)

haveged is a userspace entropy daemon which is not dependent upon the standard mechanisms for harvesting randomness for the system entropy pool. This is important in systems with high entropy needs or limited user interaction (e.g. headless servers).haveged uses HAVEGE (HArdware Volatile Entropy Gathering and Expansion) to maintain a 1M pool of random bytes used to fill /dev/random whenever the supply of random bits in dev/random falls below the low water mark of the device.

libvirtd (Virtualization daemon)

The libvirtd program is the server-side daemon component of the libvirt virtualization management system. This daemon runs on host servers and performs required management tasks for virtualized guests. This includes activities such as starting, stopping and migrating guests between host servers, configuring and manipulating networking, and managing storage for use by guests.

nfs-blkmap (pNFS block layout mapping daemon)

The blkmapd daemon performs device discovery and mapping for the parallel NFS (pNFS) block layout client.The pNFS block layout protocol builds a complex storage hierarchy from a set of simple volumes. These simple volumes are addressed by content, using a signature on the volume to uniquely name each one. The daemon locates a volume by examining each block device in the system for the given signature.

nfs-idmapd (NFSv4 ID-name mapping service)

It is the NFSv4 ID <-> name mapping daemon. It provides functionality to the NFSv4 kernel client and server, to which it communicates via upcalls, by translating user and group IDs to names, and vice versa.

nfs-mountd (NFS Mount Daemon)

daemon implements the server side of the NFS MOUNT protocol, an NFS side protocol used by NFS version 2 [RFC1094] and NFS version 3 [RFC1813].

Nmbd (Samba NMB Daemon)

nmbd is a server that understands and can reply to NetBIOS over IP name service requests, like those produced by SMB/CIFS clients such as Windows 95/98/ME, Windows NT, Windows 2000, Windows XP and LanManager clients. It also participates in the browsing protocols which make up the Windows "Network Neighborhood" view. nmbd will listen for such requests, and if its own NetBIOS name is specified it will respond with the IP number of the host it is running on.

Smbd (Samba SMB Daemon)

smbd is the server daemon that provides filesharing and printing services to Windows clients. The server provides filespace and printer services to clients using the SMB (or CIFS) protocol. This is compatible with the LanManager protocol, and can service LanManager clients.

systemd-journald (Journal Service)

systemd-journald is a system service that collects and stores logging data. It creates and maintains structured, indexed journals based on logging information that is received from a variety of sources

systemd-logind (Login Service)

This is a tiny daemon that manages user logins and seats in various ways.

systemd-udevd (udev Kernel Device Manager)

systemd-udevd listens to kernel uevents. For every event, systemd-udevd executes matching instructions specified in udev rules.

upower (Daemon for power management)

Upower Is a piece of middleware (an abstraction layer) for power management on Linux systems. It enumerates power sources, maintains statistics and history data on them and notifies about status changes. The daemon provides its functionality to applications over the system bus.