

# Linux Administration

## Assignment Day 6

### SS(Screenshot) 1 : Use ps to search for the “systemd” process by name

The screenshot shows a terminal window with the following commands and output:

```
[kshinde@localhost ~]$ ps -e | grep systemd
1 ?      00:00:12 systemd
493 ?    00:00:03 systemd-journald
535 ?    00:00:01 systemd-udevd
707 ?    00:00:00 systemd-logind

[kshinde@localhost ~]$ ps -ef | grep systemd
root     1      0      0 18:02 ?        00:00:12 /usr/lib/systemd/systemd --switched-root --system --deserialize 22
root     493    1      0 18:03 ?        00:00:03 /usr/lib/systemd/systemd-journald
root     535    1      0 18:03 ?        00:00:01 /usr/lib/systemd/systemd-udevd
root     707    1      0 18:03 ?        00:00:00 /usr/lib/systemd/systemd-logind
dbus     749    1      0 18:03 ?        00:00:05 /usr/bin/dbus-daemon --system --address=systemd: --nofork --nopidfile --systemd-activation
kshinde  4803   4289   0 18:55 pts/1    00:00:00 grep --color=auto systemd

[kshinde@localhost ~]$ ps -e | grep systemd-logind
707 ?    00:00:00 systemd-logind

[kshinde@localhost ~]$ ps -ef | grep systemd-logind
root     707    1      0 18:03 ?        00:00:00 /usr/lib/systemd/systemd-logind
kshinde  4868   4289   0 18:59 pts/1    00:00:00 grep --color=auto systemd-logind
```

Sr. No.	Commands Used
1.	ps -e   grep systemd
2.	ps -ef   grep systemd
3.	ps -e   grep systemd-logind
4.	ps- ef   grep systemd-logind

### SS 2 : Find out your terminal name. Using your terminal name, use ps to find all processes associated with your terminal.

The screenshot shows a terminal window with the following commands and output:

```
[kshinde@localhost ~]$ tty
/dev/pts/1
Terminal Name

[kshinde@localhost ~]$ ps -ef | grep pts/1
kshinde  4289   4282   0 19:18 pts/1    00:00:01 bash
kshinde  5472   4289   0 19:53 pts/1    00:00:05 gedit
kshinde  7140   4289   0 21:09 pts/1    00:00:01 /bin/bash
kshinde  7798   7140   1 21:31 pts/1    00:02:08 /usr/lib64/firefox/firefox http://www.google.com
kshinde  8102   7798   0 21:31 pts/1    00:00:37 /usr/lib64/firefox/firefox -contentproc -childID 1 -isForBrowser -prefsLen 1 -prefMapSize 219143 -parentBuildID 20201204154943 -appdir /usr/lib64/firefox/browser 7798 tab
kshinde  8164   7798   0 21:31 pts/1    00:00:01 /usr/lib64/firefox/firefox -contentproc -childID 2 -isForBrowser -prefsLen 242 -prefMapSize 219143 -parentBuildID 20201204154943 -appdir /usr/lib64/firefox/browser 7798 tab
kshinde  8269   7798   0 21:31 pts/1    00:00:08 /usr/lib64/firefox/firefox -contentproc -childID 3 -isForBrowser -prefsLen 6454 -prefMapSize 219143 -parentBuildID 20201204154943 -appdir /usr/lib64/firefox/browser 7798 tab
kshinde  8293   7798   0 21:32 pts/1    00:00:12 /usr/lib64/firefox/firefox -contentproc -childID 4 -isForBrowser -prefsLen 7356 -prefMapSize 219143 -parentBuildID 20201204154943 -appdir /usr/lib64/firefox/browser 7798 tab
kshinde  16277   7140   0 23:27 pts/1    00:00:00 ps -ef
kshinde  16278   7140   0 23:27 pts/1    00:00:00 grep --color=auto pts/1
```

Sr. No.	Find	Commands Used	Output
1.	Terminal Name	tty	/dev/pts/1
2.	Find all processes associated with terminal	ps -ef   grep pts/1	Displays all the process associated with the terminal pts/1

### SS 3 : Check and note the process id of your shell (from the output of the above command) Also, note the parent process id of your shell

```

kshinde@localhost ~]$ tty
/dev/pts/1
kshinde@localhost ~]$ ps -ef | grep pts/1
kshinde 4289 4282 0 19:18 pts/1 00:00:01 bash
kshinde 5472 4289 0 19:53 pts/1 00:00:05 gedit
kshinde 7140 4289 0 21:09 pts/1 00:00:01 /bin/bash
kshinde 7798 7140 1 21:31 pts/1 00:02:08 /usr/lib64/firefox/firefox http://www.google.com
kshinde 8102 7798 0 21:31 pts/1 00:00:37 /usr/lib64/firefox/firefox -contentproc -childID 1 -isForBrowser -prefsLen 1 -prefMapSize 219143 -parentBuildID 20201204154943 -appdir /usr/lib64/firefox/browser 7798 tab
kshinde 8164 7798 0 21:31 pts/1 00:00:01 /usr/lib64/firefox/firefox -contentproc -childID 2 -isForBrowser -prefsLen 242 -prefMapSize 219143 -parentBuildID 20201204154943 -appdir /usr/lib64/firefox/browser 7798 tab
kshinde 8269 7798 0 21:31 pts/1 00:00:08 /usr/lib64/firefox/firefox -contentproc -childID 3 -isForBrowser -prefsLen 6454 -prefMapSize 219143 -parentBuildID 20201204154943 -appdir /usr/lib64/firefox/browser 7798 tab
kshinde 8293 7798 0 21:32 pts/1 00:00:12 /usr/lib64/firefox/firefox -contentproc -childID 4 -isForBrowser -prefsLen 7356 -prefMapSize 219143 -parentBuildID 20201204154943 -appdir /usr/lib64/firefox/browser 7798 tab
kshinde 16277 7140 0 23:27 pts/1 00:00:00 ps -ef
kshinde 16278 7140 0 23:27 pts/1 00:00:00 grep --color=auto pts/1
kshinde@localhost ~]$ ps -p $$
PID TTY TIME CMD
7140 pts/1 00:00:01 bash
kshinde@localhost ~]$
  
```

Sr. No.	Process ID of Shell	Parent Process ID
1.	7140	4289

### SS 4 : Start 3 instances of “sleep 123” as background processes

```

kshinde@localhost ~]$ sleep 123 &
[1] 20030
kshinde@localhost ~]$
kshinde@localhost ~]$ sleep 123 &
[2] 20047
kshinde@localhost ~]$
kshinde@localhost ~]$ sleep 123 &
[3] 20065
kshinde@localhost ~]$
  
```

Sr. No.	Command used	Details
1.	sleep 123 &d	<ul style="list-style-type: none"> <li>123 – number of seconds</li> <li>&amp;d – is to run the process in background</li> </ul>

## SS 5 : Check and note the process id's of all sleep processes

```

kshinde@localhost:~$ ps -ef
kshinde 4102 1 0 Dec11 ? 00:00:00 /usr/libexec/evolution-addressbook-factory
kshinde 4120 4102 0 Dec11 ? 00:00:01 /usr/libexec/evolution-addressbook-factory-subprocess --factory all --bus-name org.gnome.evolution.
kshinde 4170 3664 0 Dec11 ? 00:00:00 /usr/libexec/ibus-engine-simple
kshinde 5037 1 0 Dec11 ? 00:00:00 /usr/libexec/gvfsd-metadata
kshinde 7798 1 1 Dec11 ? 00:02:49 /usr/lib64/firefox/firefox http://www.google.com
kshinde 8102 7798 0 Dec11 ? 00:00:56 /usr/lib64/firefox/firefox -contentproc -childID 1 -isForBrowser -prefsLen 1 -prefMapSize 219143 -p
kshinde 8164 7798 0 Dec11 ? 00:00:02 /usr/lib64/firefox/firefox -contentproc -childID 2 -isForBrowser -prefsLen 242 -prefMapSize 219143
kshinde 8269 7798 0 Dec11 ? 00:00:11 /usr/lib64/firefox/firefox -contentproc -childID 3 -isForBrowser -prefsLen 6454 -prefMapSize 219143
kshinde 8293 7798 0 Dec11 ? 00:00:22 /usr/lib64/firefox/firefox -contentproc -childID 4 -isForBrowser -prefsLen 7356 -prefMapSize 219143
root 10128 888 0 Dec11 ? 00:00:00 /sbin/dhclient -d -q -sf /usr/libexec/nm-dhcp-helper -pf /var/run/dhclient-ens33.pid -lf /var/lib/N
root 14389 2 0 Dec11 ? 00:00:00 [kworker/u256:1]
root 16153 2 0 Dec11 ? 00:00:00 [kworker/u256:2]
postfix 16881 1508 0 Dec11 ? 00:00:00 pickup -l -t unix -u
root 18512 2 0 Dec11 ? 00:00:01 [kworker/0:1]
kshinde 19060 1 0 Dec11 ? 00:00:05 /usr/libexec/gnome-terminal-server
kshinde 19071 19060 0 Dec11 ? 00:00:00 gnome-pty-helper
kshinde 19073 19060 0 Dec11 pts/2 00:00:00 bash
root 19529 2 0 Dec11 ? 00:00:00 [kworker/0:2]
root 19947 2 0 Dec11 ? 00:00:00 [kworker/0:0]
root 20025 843 0 Dec11 ? 00:00:00 sleep 60
kshinde 20030 19073 0 Dec11 pts/2 00:00:00 sleep 123
kshinde 20047 19073 0 Dec11 pts/2 00:00:00 sleep 123
root 20063 2 0 Dec11 ? 00:00:00 [kworker/0:3]
kshinde 20065 19073 0 Dec11 pts/2 00:00:00 sleep 123
kshinde 20083 19073 0 Dec11 pts/2 00:00:00 ps -ef
kshinde@localhost ~]$
  
```

Sr. No.	Process	Process ID
1.	sleep 123	20030
2.	sleep 123	20047
3.	sleep 123	20065

## SS 6: Display only those three sleep processes in top. Then quit top

```

kshinde@localhost:~$ top
Tasks: 3 total, 0 running, 3 sleeping, 0 stopped, 0 zombie
%Cpu(s): 7.4 us, 1.1 sy, 0.0 ni, 90.5 id, 1.1 wa, 0.0 hi, 0.0 si, 0.0 st
KiB Mem : 995676 total, 71216 free, 704132 used, 220328 buff/cache
KiB Swap: 2097148 total, 1324028 free, 773120 used, 105980 avail Mem

  PID USER      PR  NI  VIRT  RES  SHR S %CPU %MEM    TIME+  COMMAND
 20030 kshinde   20   0 108052 356 280 S  0.0  0.0   0:00.00 sleep
 20047 kshinde   20   0 108052 356 280 S  0.0  0.0   0:00.00 sleep
 20065 kshinde   20   0 108052 356 280 S  0.0  0.0   0:00.00 sleep
  
```

Sr. No.	Process ID	Command Used
1.	20030,20047,20065	top -p 20030,20047,20065

-----Assignment Day 6 Completed-----