

Module:-COSA(Concept Of Operating System And Administration)

Date:- 31/10/2022

Assignment :- 05

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36. check-update:-

```
root@localhost:~  
[root@localhost ~]# dnf check-update  
Last metadata expiration check: 1:39:56 ago on Mon 31 Oct 2022 01:09:27 PM IST.  
  
NetworkManager.x86_64 1:1.40.0-1.el8 baseos  
NetworkManager-adsL.x86_64 1:1.40.0-1.el8 baseos  
NetworkManager-bluetooth.x86_64 1:1.40.0-1.el8 baseos  
NetworkManager-config-server.noarch 1:1.40.0-1.el8 baseos  
NetworkManager-libnm.x86_64 1:1.40.0-1.el8 baseos  
NetworkManager-team.x86_64 1:1.40.0-1.el8 baseos  
NetworkManager-tui.x86_64 1:1.40.0-1.el8 baseos  
NetworkManager-wifi.x86_64 1:1.40.0-1.el8 baseos  
NetworkManager-wwan.x86_64 1:1.40.0-1.el8 baseos  
alsa-lib.x86_64 1.2.7.2-1.el8 appstream  
alsa-sof-firmware.noarch 2.1.1-1.el8 baseos  
alsa-ucm.noarch 1.2.7.2-1.el8 appstream  
alsa-utils.x86_64 1.2.7-1.el8 appstream  
anaconda-core.x86_64 33.16.8.1-1.el8 appstream  
anaconda-gui.x86_64 33.16.8.1-1.el8 appstream  
anaconda-tui.x86_64 33.16.8.1-1.el8 appstream  
anaconda-widgets.x86_64 33.16.8.1-1.el8 appstream  
annobin.x86_64 10.67-3.el8 appstream  
annobin.x86_64 10.67-3.el8 baseos  
at.x86_64 3.1.20-12.el8 baseos
```

37.epel *:-

```

Oct 31 15:43
root@localhost:~
File Edit View Search Terminal Help
[root@localhost ~]# dnf install epel*
Extra Packages for Enterprise Linux 8 - x86_64 215 kB/s | 13 MB 01:02
Extra Packages for Enterprise Linux Modular 8 - 93 kB/s | 733 kB 00:07
Extra Packages for Enterprise Linux 8 - Next - 150 kB/s | 1.4 MB 00:09
Last metadata expiration check: 0:00:03 ago on Mon 31 Oct 2022 03:42:15 PM IST.
Package epel-next-release-8-11.el8.noarch is already installed.
Package epel-release-8-11.el8.noarch is already installed.
Dependencies resolved.
=====
Package Architecture Version Repository Size
=====
Installing:
epel-rpm-macros noarch 8-33 epel 24 k
epel-rpm-macros-systemd noarch 8-33 epel 14 k
Upgrading:
epel-next-release noarch 8-17.el8 epel 11 k
epel-release noarch 8-17.el8 epel 24 k
Installing dependencies:
ansible-srpm-macros noarch 1-8.1.el8 epel 8.5 k
fpc-srpm-macros noarch 1.3-1.el8 epel 8.2 k
lua-srpm-macros noarch 1-3.el8 epel 8.1 k
Transaction Summary
=====
Continue

```

38.top:- The top program provides a dynamic real-time view of a running system. It can display system summary information as well as a list of processes or threads currently being managed by the Linux kernel. The types of system summary information shown and the types, order and size of information displayed for processes are all user configurable and that configuration can be made persistent across restarts.

```

Nov 1 10:44
root@localhost:~
File Edit View Search Terminal Help
top - 10:44:51 up 1 day, 4:13, 2 users, load average: 0.87, 0.26, 0.09
Tasks: 218 total, 1 running, 217 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.0 us, 0.0 sy, 0.0 ni, 99.0 id, 0.0 wa, 1.0 hi, 0.0 si, 0.0 st
MiB Mem : 1812.8 total, 143.1 free, 1181.1 used, 488.6 buff/cache
MiB Swap: 2104.0 total, 2.1 free, 2101.9 used. 468.1 avail Mem

  PID USER      PR  NI    VIRT    RES    SHR S  %CPU  %MEM    TIME+  COMMAND
 6911 root        20   0 3037492 162008 20388 S   1.3   8.7   17:09.98 Web Content
 2120 root        20   0 3213836 118592 25316 S   0.7   6.4   2:54.96 gnome-shell
 7202 cockpit+    20   0 598484     0     0 S   0.3   0.0   0:17.10 cockpit-tls
 7266 root        20   0 911612   16416 2800 S   0.3   0.9   1:07.68 cockpit-bridge
    1 root        20   0 241796    7008 3612 S   0.0   0.4   0:41.00 systemd
    2 root        20   0      0     0     0 S   0.0   0.0   0:00.05 kthreadd
    3 root        0 -20     0     0     0 I   0.0   0.0   0:00.00 rcu_gp
    4 root        0 -20     0     0     0 I   0.0   0.0   0:00.00 rcu_par_gp
    6 root        0 -20     0     0     0 I   0.0   0.0   0:00.00 kworker/0:0H-e+
    8 root        0 -20     0     0     0 I   0.0   0.0   0:00.00 mm_percpu_wq
    9 root        20   0      0     0     0 S   0.0   0.0   0:00.00 rcu_tasks_rude_
   10 root        20   0      0     0     0 S   0.0   0.0   0:00.00 rcu_tasks_trace
   11 root        20   0      0     0     0 S   0.0   0.0   0:11.19 ksoftirqd/0
   12 root        20   0      0     0     0 I   0.0   0.0   0:00.34 rcu_sched
   13 root        rt    0      0     0     0 S   0.0   0.0   0:00.00 migration/0
   14 root        rt    0      0     0     0 S   0.0   0.0   0:00.10 watchdog/0
   15 root        20   0      0     0     0 S   0.0   0.0   0:00.00 cpuhp/0
   17 root        20   0      0     0     0 S   0.0   0.0   0:00.00 kdevtmpfs

```

39.atop

```
Activities Terminal Oct 31 15:44
root@localhost:~
File Edit View Search Terminal Help
Complete!
[root@localhost ~]# dnf install atop
Last metadata expiration check: 0:00:37 ago on Mon 31 Oct 2022 03:42:15 PM IST.
Dependencies resolved.
=====
Package           Architecture      Version           Repository        Size
=====
Installing:
  atop             x86_64            2.7.1-1.el8      epel               182 k
=====
Transaction Summary
=====
Install 1 Package

Total download size: 182 k
Installed size: 390 k
Is this ok [y/N]: y
Downloading Packages:
atop-2.7.1-1.el8.x86_64.rpm                62 kB/s | 182 kB    00:02
-----
Total                                      42 kB/s | 182 kB    00:04
Running transaction check
Transaction check succeeded.
Running transaction test
Continue
```

```
Activities Terminal Oct 31 15:44
root@localhost:~
File Edit View Search Terminal Help
ATOP - localhost 2022/10/31 15:44:39 ----- 2d21h39m37s elapsed
PRC | sys 7m15s | user 5m08s | #proc 212 | #zombie 0 | #exit 0 |
CPU | sys 0% | user 0% | irq 1% | idle 99% | wait 0% |
CPL | avg1 0.34 | avg5 0.41 | avg15 0.19 | csw 35544874 | intr 19151e3 |
MEM | tot 1.9G | free 144.4M | buff 1.0M | slab 127.0M | numnode 1 |
SWP | tot 4.0G | free 3.2G | swcac 53.2M | vmcom 4.4G | vmlim 5.0G |
PAG | numamig 0 | migrate 20e4 | swin 157669 | swout 360173 | oomkill 0 |
DSK | sda busy 0% | read 123047 | write 41691 | avio 2.74 ms |
NET | transport | tcpi 332396 | tcpo 134074 | udpi 1239 | udpo 4035 |
NET | network | ipi 438740 | ipo 139172 | ipfrw 0 | deliv 334282 |
NET | enp0s3 0% | pcki 687269 | pcko 139838 | si 21 Kbps | so 0 Kbps |
NET | lo ---- | pcki 530 | pcko 530 | si 0 Kbps | so 0 Kbps |

PID SYSCPU USRCPU RDELAY VGROW RGROW RDDSK WRDSK CPU CMD 1/22
1684 86.36s 2m07s 80.33s 3.1G 139.0M 311.1M 1.6M 0% gnome-shell
837 1m48s 34.91s 5m43s 689.0M 8.4M 4.4M 12.0K 0% tuned
1824 20.17s 78.96s 3.45s 391.4M 24.4M 4.9M 4.0K 0% sssd_kcm
1411 50.40s 25.33s 9.90s 1.4G 513.8M 3.6G 204.3M 0% packagekitd
51826 28.49s 11.29s 1m44s 3.4G 209.1M 438.2M 237.5M 0% firefox
50756 22.38s 5.99s 61.04s 1.5G 30.0M 9.8M 0B 0% gnome-control-
1849 23.81s 0.45s 7.38s 668.3M 3.8M 1.5M 0B 0% gsd-smartcard
1955 9.63s 4.37s 12.14s 1.2G 103.9M 120.6M 8.6M 0% gnome-software
11 13.40s 0.00s 71.03s 0B 0B 0B 0B 0% ksoftirqd/0
1732 4.77s 2.73s 11.08s 586.9M 5.3M 2.4M 4.0K 0% ibus-daemon

Continue
```

40.htop:-

```
Activities Terminal Oct 31 15:46
root@localhost:~
File Edit View Search Terminal Help
[root@localhost ~]# atop
[root@localhost ~]# dnf install htop
Last metadata expiration check: 0:03:12 ago on Mon 31 Oct 2022 03:42:15 PM IST.
Dependencies resolved.
=====
Package           Architecture      Version           Repository        Size
=====
Installing:
htop              x86_64            3.2.1-1.el8      epel               170 k
Transaction Summary
=====
Install 1 Package

Total download size: 170 k
Installed size: 396 k
Is this ok [y/N]: y
Downloading Packages:
htop-3.2.1-1.el8.x86_64.rpm          110 kB/s | 170 kB    00:01
-----
Total                                54 kB/s | 170 kB    00:03
Running transaction check
Transaction check succeeded.
Running transaction test
Continue
```

```
Activities Terminal Oct 31 15:46
root@localhost:~

CPU[||||| 2.0%] Tasks: 126, 399 thr, 88 kthr; 1 runnin
Mem[||||| 1.12G/1.93G] Load average: 0.51 0.49 0.25
Swp[||||| 855M/4.00G] Uptime: 2 days, 21:41:37

Main I/O
PID USER PRI NI VIRT RES SHR S CPU% MEM% TIME+ Command
58606 root 20 0 236M 5076 3888 R 2.0 0.3 0:00.15 htop
1684 root 20 0 3148M 138M 28232 S 0.7 7.0 3:34.84 /usr/bin/gnom
1 root 20 0 171M 8944 5184 S 0.0 0.4 0:02.78 /usr/lib/syst
508 root 20 0 89904 6772 6068 S 0.0 0.3 0:00.74 /usr/lib/syst
549 root 20 0 115M 3940 3764 S 0.0 0.2 0:00.39 /usr/lib/syst
633 rpc 20 0 67216 3552 3204 S 0.0 0.2 0:00.11 /usr/bin/rpcb
635 root 16 -4 138M 1724 1444 S 0.0 0.1 0:00.12 /sbin/auditd
636 root 16 -4 138M 1724 1444 S 0.0 0.1 0:00.00 /sbin/auditd
642 root 16 -4 48636 2648 2544 S 0.0 0.1 0:00.01 /usr/sbin/sed
643 root 16 -4 138M 1724 1444 S 0.0 0.1 0:00.00 /sbin/auditd
667 root 20 0 50684 3788 3412 S 0.0 0.2 0:00.04 /usr/sbin/sma
668 dbus 20 0 74336 5552 3620 S 0.0 0.3 0:01.87 /usr/bin/dbus
671 root 20 0 543M 5232 4864 S 0.0 0.3 0:00.33 /usr/libexec/
672 root 20 0 18304 1920 1792 S 0.0 0.1 0:00.00 /usr/sbin/mce
673 chrony 20 0 147M 2912 2624 S 0.0 0.1 0:00.65 /usr/sbin/chr
675 avahi 20 0 85360 3468 3200 S 0.0 0.2 0:00.19 avahi-daemon:

F1Help F2Setup F3Search F4Filter F5Tree F6SortBy F7Nice - F8Nice + F9Kill F10Quit
Continue
```

41. glances:-

```
Activities Terminal Oct 31 15:47
root@localhost:~
File Edit View Search Terminal Help
Complete!
[root@localhost ~]# htop
[root@localhost ~]# dnf install glances
Last metadata expiration check: 0:04:56 ago on Mon 31 Oct 2022 03:42:15 PM IST.
Dependencies resolved.
=====
Package Architecture Version Repository Size
=====
Installing:
glances noarch 3.3.0.1-1.el8 epel 642 k
Installing dependencies:
python3-bottle noarch 0.12.21-2.el8 epel 100 k
python3-defusedxml noarch 0.6.0-1.el8 epel 52 k
python3-future noarch 0.18.2-2.el8 epel 790 k
Transaction Summary
=====
Install 4 Packages

Total download size: 1.5 M
Installed size: 6.4 M
Is this ok [y/N]: y
Downloading Packages:
(1/4): python3-defusedxml-0.6.0-1.el8.noarch.rpm 50 kB/s | 52 kB 00:01

Continue
```

```
Activities Terminal Oct 31 15:48
root@localhost:~
File Edit View Search Terminal Help
localhost.localdomain Uptime: 2 days, 21:43:31

CPU [ 2.8%] CPU ↓ 2.8% MEM - 66.7% SWAP - 22.7% LOAD - 1core
user 0.0% total 1.93G total 4.00G 1 min 0.15
MEM [ 66.7%] system 0.0% used 1.28G used 931M 5 min 0.37
SWAP [ 22.7%] iowait 0.0% free 658M free 3.09G 15 min 0.23

NETWORK Rx/s Tx/s TASKS 214 (612 thr), 3 run, 154 slp, 57 oth
enp0s3 0b 0b
lo 0b 0b
virbr0 0b 0b

FILE SYS Used Total CPU% MEM% PID USER THR NI S
/ (sda2) 6.80G 13.0G 0.5 7.0 51826 root 81 0 S firefox
/home 46.7M 1.99G 0.5 7.0 1684 root 9 0 S gnome-shel
0.5 1.4 50756 root 5 0 R gnome-cont
0.0 22.8 1411 root 3 0 S packagekit
0.0 4.8 1955 root 4 0 S gnome-soft
0.0 2.3 52153 root 15 0 S firefox -c
0.0 1.7 52502 root 15 0 S firefox -c
0.0 1.2 1824 root 1 0 S sssd_kcm -
0.0 1.1 50048 root 4 0 S gnome-term
0.0 1.1 52050 root 15 0 S firefox -c
0.0 1.0 52080 root 15 0 S firefox -c

2022-10-31 15:48:32 IST
Continue
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```