

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

Date:- 31/10/2022

Assignment :- 05

Name:- Prauthviraj Nikam

Configure CUP's

Step-1:- Install CUP's

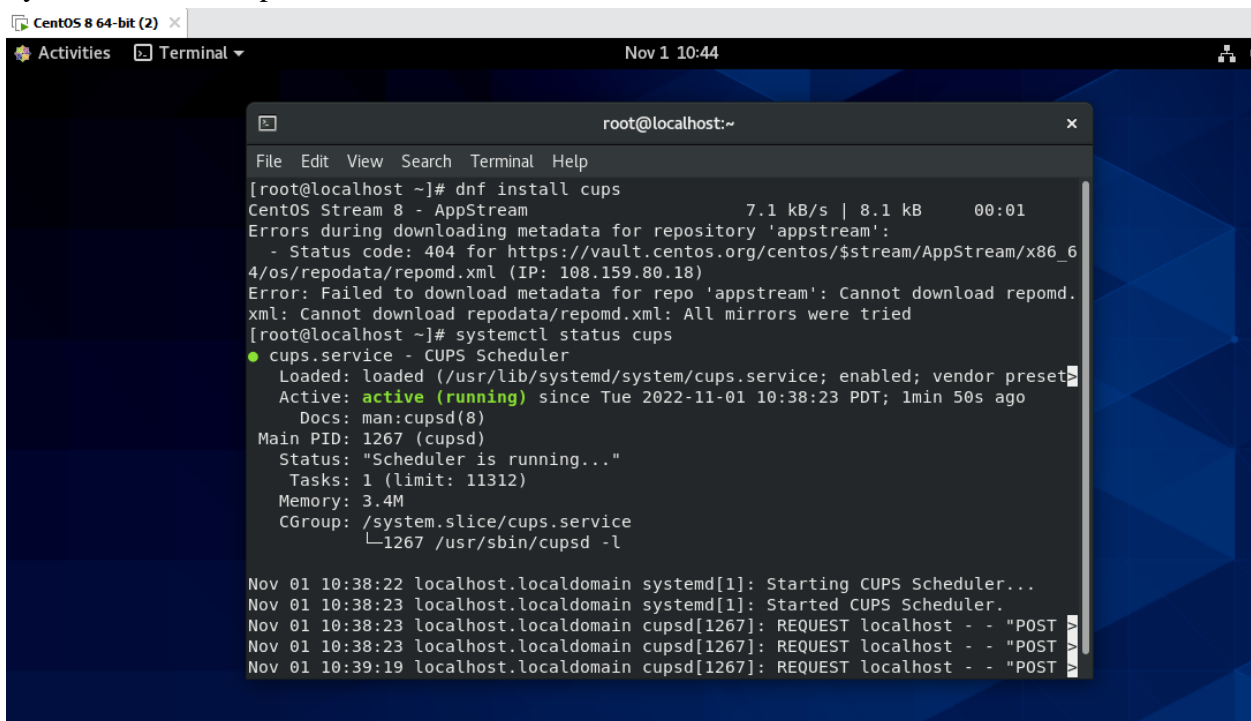
CMD:-

dnf install cups

systemctl status cups

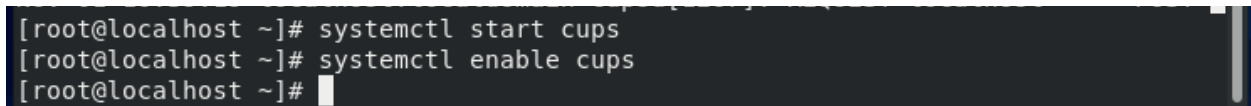
systemctl start cups

systemctl enable cups

A screenshot of a terminal window on a CentOS 8 64-bit system. The terminal shows the command 'dnf install cups' being executed. It displays progress for downloading metadata from the AppStream repository, including a status code of 404 and an error message about failed metadata downloads. After the command, 'systemctl status cups' is run, showing that the cups.service (CUPS Scheduler) is loaded, active (running), and has a main PID of 1267. The status also shows tasks, memory usage, and cgroup information. At the bottom, there are log messages indicating the CUPS Scheduler starting and receiving POST requests.

```
CentOS 8 64-bit (2) x
Activities Terminal Nov 1 10:44
root@localhost:~
File Edit View Search Terminal Help
[root@localhost ~]# dnf install cups
CentOS Stream 8 - AppStream 7.1 kB/s | 8.1 kB 00:01
Errors during downloading metadata for repository 'appstream':
- Status code: 404 for https://vault.centos.org/centos/$stream/AppStream/x86_64/os/repodata/repomd.xml (IP: 108.159.80.18)
Error: Failed to download metadata for repo 'appstream': Cannot download repomd.xml: Cannot download repodata/repomd.xml: All mirrors were tried
[root@localhost ~]# systemctl status cups
● cups.service - CUPS Scheduler
   Loaded: loaded (/usr/lib/systemd/system/cups.service; enabled; vendor preset: enabled)
   Active: active (running) since Tue 2022-11-01 10:38:23 PDT; 1min 50s ago
     Docs: man:cupsd(8)
  Main PID: 1267 (cupsd)
    Status: "Scheduler is running..."
      Tasks: 1 (limit: 11312)
     Memory: 3.4M
    CGroup: /system.slice/cups.service
            └─1267 /usr/sbin/cupsd -l

Nov 01 10:38:22 localhost.localdomain systemd[1]: Starting CUPS Scheduler...
Nov 01 10:38:23 localhost.localdomain systemd[1]: Started CUPS Scheduler.
Nov 01 10:38:23 localhost.localdomain cupsd[1267]: REQUEST localhost - - "POST"
Nov 01 10:38:23 localhost.localdomain cupsd[1267]: REQUEST localhost - - "POST"
Nov 01 10:39:19 localhost.localdomain cupsd[1267]: REQUEST localhost - - "POST"
```

A screenshot of a terminal window showing three commands being executed: 'systemctl start cups', 'systemctl enable cups', and the prompt 'root@localhost ~]#'.

```
[root@localhost ~]# systemctl start cups
[root@localhost ~]# systemctl enable cups
[root@localhost ~]#
```

Step-2:- Configure cups

CMD:-

vim /etc/cups/cupsd.conf

→ #Listen local host :631

Listen Port 631

→ On Browsing

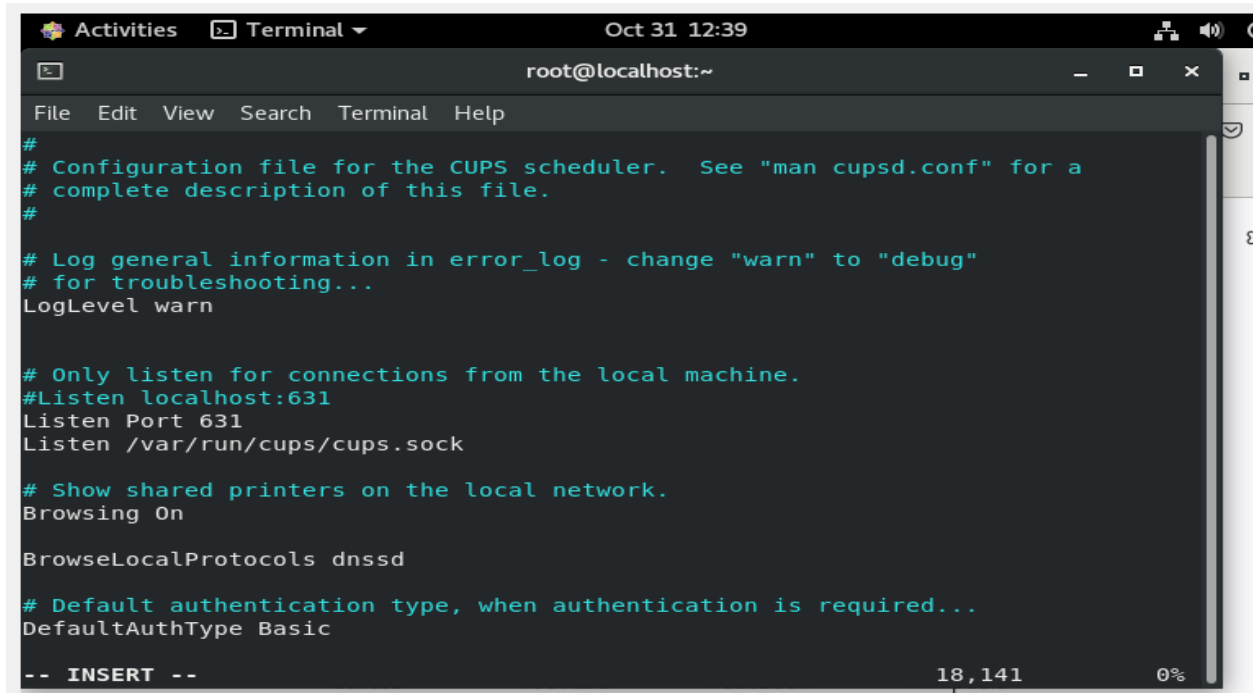
Browsing On

→ Restrict Access to the server

ALLOW @LOCAL

→ Restrict Access to the admin

ALLOW @LOCAL



A terminal window titled "Terminal" with a timestamp of "Oct 31 12:39". The prompt is "root@localhost:~". The window displays the first part of the "/etc/cups/cupsd.conf" file. The configuration includes comments about the CUPS scheduler, logging settings (LogLevel warn), listening ports (localhost:631 and /var/run/cups/cups.sock), and shared printer settings (BrowseLocalProtocols dnssd, BrowseLocalProtocols dnssd). The file ends with "-- INSERT --". The status bar at the bottom right shows "18,141" and "0%".

```
#
# Configuration file for the CUPS scheduler.  See "man cupsd.conf" for a
# complete description of this file.
#

# Log general information in error_log - change "warn" to "debug"
# for troubleshooting...
LogLevel warn

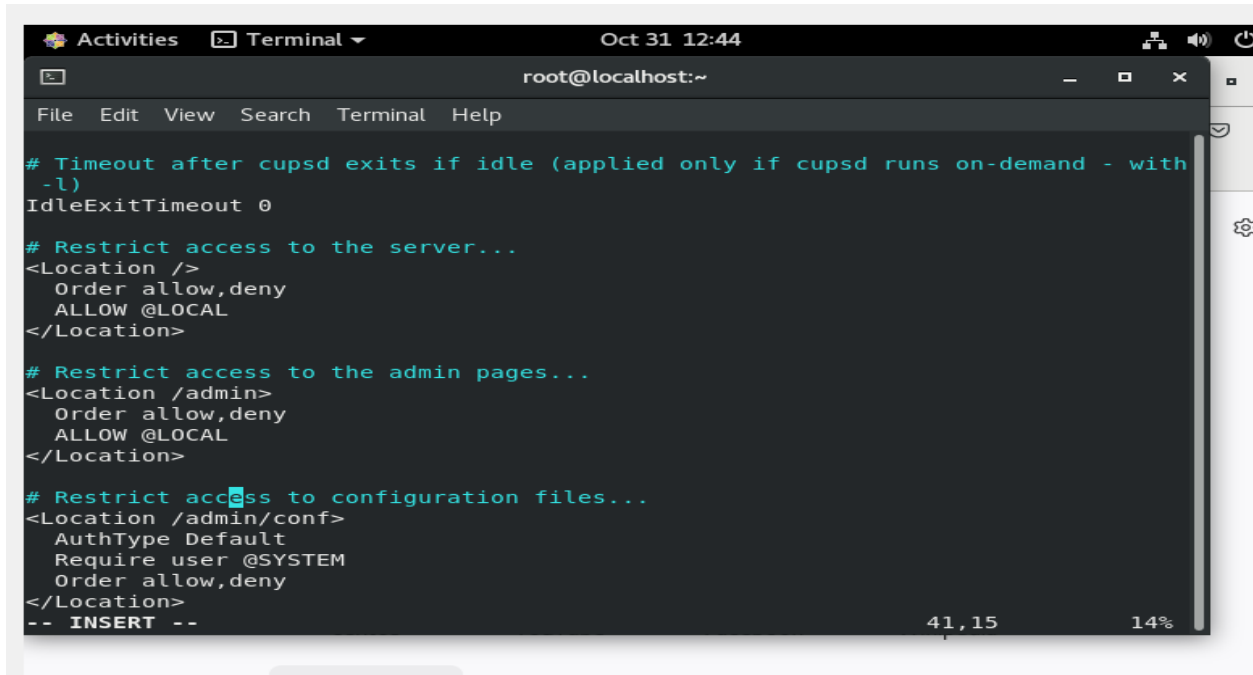
# Only listen for connections from the local machine.
#Listen localhost:631
Listen Port 631
Listen /var/run/cups/cups.sock

# Show shared printers on the local network.
BrowseLocalProtocols dnssd

BrowseLocalProtocols dnssd

# Default authentication type, when authentication is required...
DefaultAuthType Basic

-- INSERT --
```



A terminal window titled "Terminal" with a timestamp of "Oct 31 12:44". The prompt is "root@localhost:~". The window displays the second part of the "/etc/cups/cupsd.conf" file. The configuration includes comments about the timeout after cupsd exits, and three location blocks for restricting access to the server, admin pages, and configuration files. The file ends with "-- INSERT --". The status bar at the bottom right shows "41,15" and "14%".

```
# Timeout after cupsd exits if idle (applied only if cupsd runs on-demand - with
# -l)
IdleExitTimeout 0

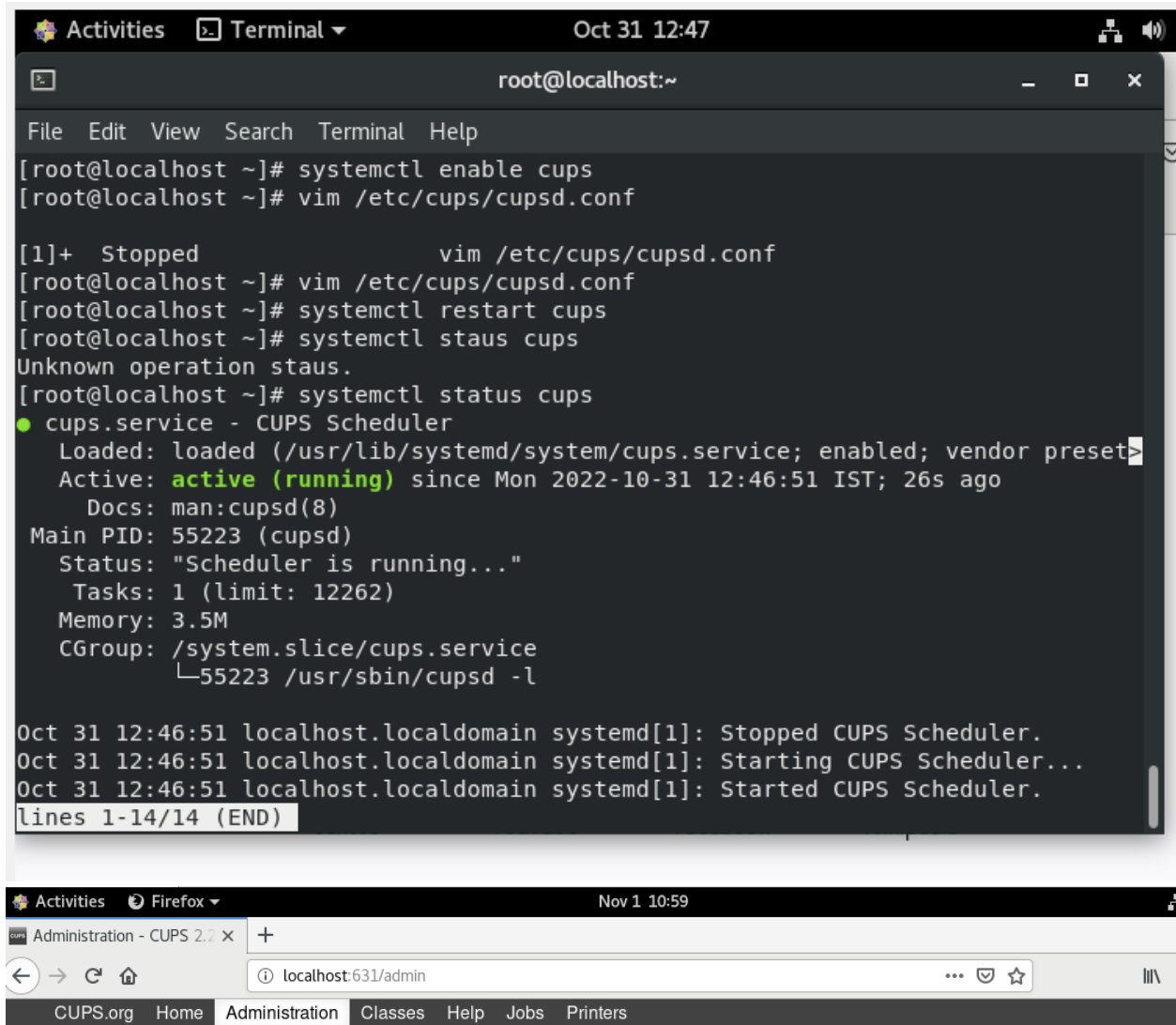
# Restrict access to the server...
<Location />
  Order allow,deny
  ALLOW @LOCAL
</Location>

# Restrict access to the admin pages...
<Location /admin>
  Order allow,deny
  ALLOW @LOCAL
</Location>

# Restrict access to configuration files...
<Location /admin/conf>
  AuthType Default
  Require user @SYSTEM
  Order allow,deny
</Location>

-- INSERT --
```

Step-3:- After Configuration Restart the cups Service



The image shows two screenshots. The top screenshot is a terminal window titled 'root@localhost:~' with a menu bar (File, Edit, View, Search, Terminal, Help). It displays the following commands and output:

```
[root@localhost ~]# systemctl enable cups
[root@localhost ~]# vim /etc/cups/cupsd.conf

[1]+  Stopped                  vim /etc/cups/cupsd.conf
[root@localhost ~]# vim /etc/cups/cupsd.conf
[root@localhost ~]# systemctl restart cups
[root@localhost ~]# systemctl status cups
Unknown operation staus.
[root@localhost ~]# systemctl status cups
● cups.service - CUPS Scheduler
   Loaded: loaded (/usr/lib/systemd/system/cups.service; enabled; vendor preset:
   Active: active (running) since Mon 2022-10-31 12:46:51 IST; 26s ago
     Docs: man:cupsd(8)
  Main PID: 55223 (cupsd)
    Status: "Scheduler is running..."
     Tasks: 1 (limit: 12262)
    Memory: 3.5M
   CGroup: /system.slice/cups.service
           └─55223 /usr/sbin/cupsd -l

Oct 31 12:46:51 localhost.localdomain systemd[1]: Stopped CUPS Scheduler.
Oct 31 12:46:51 localhost.localdomain systemd[1]: Starting CUPS Scheduler...
Oct 31 12:46:51 localhost.localdomain systemd[1]: Started CUPS Scheduler.
lines 1-14/14 (END)
```

The bottom screenshot is a web browser window titled 'Administration - CUPS 2.2' showing the CUPS administration interface. The address bar shows 'localhost:631/admin'. The navigation bar includes 'CUPS.org', 'Home', 'Administration' (selected), 'Classes', 'Help', 'Jobs', and 'Printers'. The main content area is titled 'Administration' and is divided into two columns. The left column has sections for 'Printers' (with buttons 'Add Printer', 'Find New Printers', 'Manage Printers'), 'Classes' (with buttons 'Add Class', 'Manage Classes'), and 'Jobs' (with button 'Manage Jobs'). The right column is titled 'Server' and contains a button 'Edit Configuration File' and a section 'Server Settings: Advanced' with several checkboxes: 'Share printers connected to this system' (unchecked), 'Allow printing from the Internet' (unchecked), 'Allow remote administration' (unchecked), 'Use Kerberos authentication (FAQ)' (unchecked), 'Allow users to cancel any job (not just their own)' (unchecked), and 'Save debugging information for troubleshooting' (unchecked). A 'Change Settings' button is at the bottom of the right column.

Administration

Printers

[Add Printer](#) [Find New Printers](#) [Manage Printers](#)

Classes

[Add Class](#) [Manage Classes](#)

Jobs

[Manage Jobs](#)

Server

[Edit Configuration File](#)

Server Settings:

Advanced

- ☐ Share printers connected to this system
 - ☐ Allow printing from the Internet
- ☐ Allow remote administration
- ☐ Use Kerberos authentication ([FAQ](#))
- ☐ Allow users to cancel any job (not just their own)
- ☐ Save debugging information for troubleshooting

[Change Settings](#)



Add Printer

Add Printer

Local Printers: ☐ Serial Port #1

Discovered Network Printers:

- Other Network Printers:**
- ☐ Internet Printing Protocol (ipps)
 - ☐ Internet Printing Protocol (http)
 - ☐ Internet Printing Protocol (ipp)
 - ☐ AppSocket/HP JetDirect
 - ☐ LPD/LPR Host or Printer
 - ☐ Internet Printing Protocol (https)
 - ☐ Backend Error Handler
 - ☐ Windows Printer via SAMBA