ANNEX A · PRINT SERVER

Name: _____ **Date:** _____ **Group:** DAM-1

Server: **ubu-srv** (use **ssh srv**). Client: **deb-lab**. Write the answers on this sheet.

TASK 1 Install CUPS (server)

```
sudo apt install cups printer-driver-cups-pdf
lpstat -r
sudo ss -tlnp | grep 631
```

On which address does CUPS listen? _____ Can **deb-lab** reach it? _____

☐ **DONE WHEN** **lpstat -r** says **scheduler is running.**

TASK 2 Create a queue and print (server)

One command in three lines (the \ at the end of a line means "it continues"):

```
sudo lpadmin -p office-pdf -E -v cups-pdf:/ \
  -m lsb/usr/cups-pdf/CUPS-PDF_opt.ppd \
  -D "Tramuntana office printer" -L "Palma office"
```

```
sudo lpadmin -d office-pdf
lpstat -p -d
echo "Invoice 2027-041" > invoice.txt
lp invoice.txt
ls ~/PDF
```

Request id of your job: _____

☐ **DONE WHEN** there is a PDF in **~/PDF**.

TASK 3 Share the queue (server)

```
sudo cupsctl --share-printers
sudo lpadmin -p office-pdf -o printer-is-shared=true
sudo ss -tlnp | grep 631
```

What changed in the **ss** line? _____

☐ **DONE WHEN** CUPS listens on every address, not only on localhost.

TASK 4 Print from the client

On **deb-lab**:

```
lpstat -h ubu-srv -p -d
echo "hello from deb-lab" > hello.txt
lp -h ubu-srv -d office-pdf hello.txt
```

Now find the PDF. On the server look in **~/PDF** and in:

```
sudo ls -l /var/spool/cups-pdf/ANONYMOUS/
```

Where was it? _____ On which machine? _____

☐ **DONE WHEN** a new PDF exists on the server for the job you sent from **deb-lab**.

TASK 5 Manage the queue

Server: pause the queue.

```
sudo cupsdisable office-pdf
lpstat -p
```

Client: send three jobs.

```
for i in 1 2 3; do lp -h ubu-srv -d office-pdf hello.txt; done
```

Server:

```
lpstat -o
```

How many jobs are waiting? _____ Cancel the middle one (use its real name from the list), then start the queue again:

```
sudo cancel office-pdf-N
sudo cupsenable office-pdf
lpstat -o
lpstat -W completed -o
```

Did the paused queue refuse your jobs? _____ How many PDFs came out in the end? _____

☐ **DONE WHEN** `lpstat -o` is empty and the cancelled job made no PDF.

Before you leave: add today's entry to `~/server-log.md` (what you installed, the queue name, how you tested it from the client) and tick line 7 of the project checklist.

Exit ticket — alone, no notes. One answer each.

1. Which protocol and port does CUPS use?

- ☐ **a)** SMB, 445
- ☐ **b)** SSH, 22
- ☐ **c)** IPP, 631
- ☐ **d)** NFS, 2049

2. A queue is paused. You send a job. What happens?

- ☐ **a)** It is accepted and waits
- ☐ **b)** It is refused with an error
- ☐ **c)** It prints at once
- ☐ **d)** It is deleted

3. Right after installing CUPS, who can send jobs to it?

- ☐ **a)** Every machine on the LAN
- ☐ **b)** Every machine on the Internet
- ☐ **c)** Only Windows clients
- ☐ **d)** Only the server itself

4. A user says "my document does not print". What do you look at first?

- ☐ **a)** The printer's cable
- ☐ **b)** The queue: `lpstat -p` and `lpstat -o`
- ☐ **c)** The user's password
- ☐ **d)** `/etc/exports`