ANNEX A · JOINING A DOMAIN

Name: _____ **Date:** _____

Controller: `dc1` = `192.168.122.20` · domain `tramuntana.internal` · short name `TRAMUNTANA`. **Always start `dc1` first.**

LAB A · `WIN11` JOINS THE DOMAIN (RUNNING: `DC1` + `WIN11`)

1 · A user to log in with. On `dc1` (password for marta: the lab password on the board):

```
sudo samba-tool user add marta --given-name=Marta --surname=Soler
sudo samba-tool user list
```

☐ **Done when:** the answer is `User 'marta' added successfully`. Which account in the list belongs to Kerberos itself?

_____

2 · Can this PC join? On `win11`: Settings → System → About. Edition: _____

Time on `dc1` (`date`): _____ Time on `win11`: _____

☐ **Done when:** the edition is Pro, Enterprise or Education, and the clocks show the same minute.

3 · DNS: the PC must find the controller. PowerShell **as administrator** (use your adapter's name):

```
Get-NetAdapter
Set-DnsClientServerAddress -InterfaceAlias "Ethernet" -ServerAddresses 192.168.122.20
nslookup -type=SRV _ldap._tcp.tramuntana.internal
nslookup debian.org
```

☐ **Done when:** the SRV answer names the host _____ and the port _____, and `debian.org` still resolves.

4 · Join. Win + R → `sysdm.cpl` → tab Computer Name → Change… → Member of → Domain: `tramuntana.internal` → OK. User `Administrator`, the **domain's** password (yesterday's). Restart when Windows asks.

☐ **Done when:** Windows welcomes you to the domain and restarts.

5 · Sign in as Marta and prove it. Sign-in screen → Other user → `TRAMUNTANA\marta`. Then, in a terminal:

```
whoami
echo %LOGONSERVER%
klist
```

`whoami`: _____ `%LOGONSERVER%`: _____ A ticket for `krbtgt/`

_____

On `dc1`: `sudo samba-tool computer list`. My PC's account in the domain: _____

☐ **Done when:** all four blanks are filled in from real output.

6 · Two kinds of account. Sign out. Sign in with your old local account, typed as `.\yourname`. Fill in:

	`.\yourname`	`TRAMUNTANA\marta`
Where does the account live?		
Who checks the password?		
On which PCs does it work?		

If you have time. Pause `dc1` in virt-manager. Sign out and sign in as marta again. Does it work? _____ Why might Windows allow that? _____ Resume `dc1`.

LAB B · `DEB-LAB` JOINS THE DOMAIN (SHUT `WIN11` DOWN; RUNNING: `DC1` + `DEB-LAB`)

7 · DNS first, again. On `deb-lab` (use your connection's name from the first command):

```
nmcli -t -f NAME con show --active
sudo nmcli con mod "Wired connection 1" ipv4.dns 192.168.122.20 ipv4.ignore-auto-dns yes
sudo nmcli con up "Wired connection 1"
getent hosts dc1.tramuntana.internal
```

☐ **Done when:** the last command answers with `192.168.122.20`.

8 · Discover and join.

```
sudo apt install -y realmd sssd sssd-tools libnss-sss libpam-sss adcli
sudo realm -v discover tramuntana.internal
sudo realm join -v -U Administrator tramuntana.internal
sudo pam-auth-update --enable mkhomedir
realm list
```

☐ **Done when:** `realm list` shows `tramuntana.internal`. Its `type` is: _____ Its `client-software` is: _____

9 · Marta on Linux.

```
getent passwd marta@tramuntana.internal
grep marta /etc/passwd
id marta@tramuntana.internal
su - marta@tramuntana.internal
pwd
exit
```

Marta's UID: _____ Her home folder: _____

`grep` finds nothing. So where did `getent` get the line from? _____

☐ **Done when:** you became marta on a machine where she has no local account, and on `dc1` `sudo samba-tool computer list` shows three computers.

10 · Log and tick. `ssh srv` → add today's entry to `~/server-log.md` (which machines joined, the DNS change on each, your evidence). Tick line 10 of the project checklist in pencil: it is finished on 11/05. Snapshot `joined` of `dc1` and `win11`.

EXIT TICKET

☐ **1.** A PC cannot join: "a domain controller could not be contacted". What do you check first?
A) Marta's password B) That the PC's DNS server is the DC C) The printer D) The disk space

☐ **2.** Which Windows 11 edition cannot join a domain?
A) Pro B) Enterprise C) Education D) Home

☐ **3.** What does the controller create when a computer joins?
A) A computer account ending in `$` B) A copy of all users on the PC C) A new domain D) A share

☐ **4.** On a joined PC, what does typing `.\enric` at the sign-in screen mean?
A) A domain user B) The administrator of the domain C) A local account of this PC D) A guest

☐ **5.** On Linux, which service looks up domain users and checks their passwords?
A) CUPS B) SSSD C) NFS D) cron