ANNEX A · PROXMOX: A FIRST LOOK

NAME _____ **DATE** _____

TASK 1 · 20 MIN · IN PAIRS

TASK 1 **The hunt**

Open the address on the board in your browser. Your browser will warn you: choose Advanced and continue. User `student`, the password on the board, **Realm**: Proxmox VE authentication server. You can look at everything. Find:

a. Why did the browser warn you?

_____

_____

b. Version of Proxmox VE (top bar): _____

c. Name of the node: _____

d. The node's CPUs: _____ RAM: _____ Uptime: _____

e. Kernel version of the node:

_____

f. Number of VMs: _____ of containers: _____ How do you tell them apart?

_____

_____

g. Pick one VM. Memory: _____ Processors: _____ Disk size: _____ Storage that holds the disk: _____

h. Name of a snapshot of that VM: _____

i. One ISO image stored in `local`:

_____

_____

j. Select a stopped VM and try to press **Start**. What happens? Why is that a good thing?

_____

_____

_____

DONE WHEN ten answers, and you can show a classmate where each one is.

TASKS 2–4 · 12 MIN · ALONE

TASK 2 Can the server run a VM inside a VM?

On Tuesday your VMs run on the **class server**, so the checks run there. Open a Terminal on your PC and log in with your slip: `ssh <user>@<server>`. The prompt changes to `<user>@si`. One of the two lines will say "No such file": that is normal.

```
cat /sys/module/kvm_intel/parameters/nested
cat /sys/module/kvm_amd/parameters/nested
```

Answer of the line that worked: _____ Intel or AMD? _____

DONE WHEN you read `Y` or `1`. If you read `N` or `0`, tell the teacher now.

TASK 3 Is the ISO the real one?

The Proxmox VE ISO is already on the server, in `/srv/isos`. Still logged in there:

```
cd /srv/isos
sha256sum proxmox-ve_9.2-1.iso
```

First six characters: _____ Last six: _____

DONE WHEN both match the value on the board.

TASK 4 The plan for Tuesday

On Tuesday you install Proxmox VE in a new VM. Fill in the plan.

```
free -h
df -h ~/.local/share/libvirt/images
exit
```

VM name	`pve`
vCPU / RAM / disk	2 / 4096 MB / 32 GB
Network	bridge `virbr0` (NAT)
CPU model	copied from the host
Hostname	`pve.lab.internal`
RAM available on the server now	
Disk free for VM disks	
Is that enough? Why?	

DONE WHEN every row is filled in and you know which VMs must be off on Tuesday: the server is shared by the whole class.

EXIT TICKET

1. How do you normally manage a Proxmox VE server?

- ☐ **A** With the screen and mouse plugged into it
- ☐ **B** With virt-manager on the server's desktop
- ☐ **C** From a web browser on another computer
- ☐ **D** By reinstalling it for each change

2. Which engine does Proxmox VE use to run virtual machines?

- ☐ **A** KVM and QEMU
- ☐ **B** VirtualBox
- ☐ **C** Windows Recovery Environment
- ☐ **D** GRUB

3. Live migration means…

- ☐ **A** copying a VM's ISO to another server
- ☐ **B** taking a snapshot every hour
- ☐ **C** restarting a VM after an update
- ☐ **D** moving a running VM to another node without stopping it

4. Nested virtualisation is…

- ☐ **A** two VMs sharing one disk
- ☐ **B** a hypervisor running inside a virtual machine
- ☐ **C** a VM with two operating systems
- ☐ **D** a snapshot of a snapshot