

My Own Linux

x) Read and summarize

Top rules of reporting:

- Report anything and everything that you did and what happened.
- Make it repeatable.
- Be precise.
- Cite your sources.

What not to do:

- NO FABRICATION
- NO PLAGIARISM
- SAY YOU DID STUFF YOU ACTUALLY DIDN'T

a) Install Linux on a virtual machine. (Create a new virtual machine for the report, even if you have installed Linux before.)

Preparing

- Date: 2025-08-25
- Host System: TrueNAS server with additional compute resources.
- VM Location: /mnt/POOL01/Application/VM
- Access Controls: Set necessary permissions for users on the dataset.

I chose TrueNAS as the VM host because I already use it for NAS purposes, and its VM features have worked fine in past. My chosen Linux distribution was Debian 13 “Trixie”, the latest release.

Setting up the VM

I set up new dataset:

Path:

/mnt/POOL01/Application/VM

I give necessary access controls to users.



Virtual Machine Configuration:

Setting	Value
Operating System	Linux
VM Name	Schooldeb
Description	School Debian
System Clock	UTC
Boot Method	UEFI
Shutdown Timeout	90 seconds
Start on Boot	Enabled
Enable Display	Enabled
Bind	<IP address>
Password	<password>
Virtual CPUs	1
CPU Cores	2
CPU Threads	2
CPU Mode	Host Passthrough
Memory Size	8 GB
Minimum Memory Size	4 GB

Installing the OS

1. Started the VM and verified that it boots on startup.
2. Connected via the TrueNAS web console (VNC).
3. Selected Graphical Install.
4. Language and Location/Keyboard: English / Finland
5. Hostname: Schooldeb
6. Domain Name: Left empty (using own DNS server)
7. Root Password: Left empty
8. New User:
 - a. Full Name: <user>
 - b. Username: <user>
 - c. Password: <password>
9. Time Zone: Eastern (time synchronized via NTP server)
10. Partitioning:
 - a. Method: Guided – use entire disk
 - b. Disk: Virtual disk 1 (vda) – 53.7 GB Virtio Block Device
 - c. Scheme: All files in one partition / (Finnish partitioning)
 - d. Wrote changes to disk
 - e. Do not scan for extra installation media
11. Mirror country: Finland
 - a. Deb.debian.org
12. Choose software to install
 - a. Debian desktop environment

- b. Xfce
- c. SSH server
- d. Standard system utilities

All installation steps completed successfully without errors.

Hostname:

- Schooldeb

Domain:

- I left my domain name empty because I use my own DNS.

Root password:

- I left my root without password

Fullname for new user:

- < user >

Username for your account

- < user >

Choose a password for the new user:

- < password >

Select your time zone:

- Eastern. This doesn't matter, as my NTP server will ensure the time is set correctly.

Partitioning method:

- Guided – use entire disk

Select disk to partition:

- I only have one (Virtual disk 1 (vda) - 53.7GB Virtio Block Device)

Partitioning scheme:

- All files in one partition. / Finnish partitioning and write changes to disk.

Write the changes to disk?

- Yes

Computer restarted and I removed the installation media from the truenas. I ran some basic things to test that everything in the installation went well.

- `sudo apt update`
- `Ping 1.1.1.1`
- `Ip a`
- `sudo apt install x11-apps`
- Xeyes&
Some very basic firewall settings
- `Sudo apt install ufw`
- `Sudo ufw default deny incoming`
- `Sudo ufw default allow outgoing`
- `Sudo ufw allow ssh`
- `Sudo ufw enable`



k) Optional bonus: My favorite program on Linux. Perform and report a simple task using a Linux application of your choice.

Xeyes&