



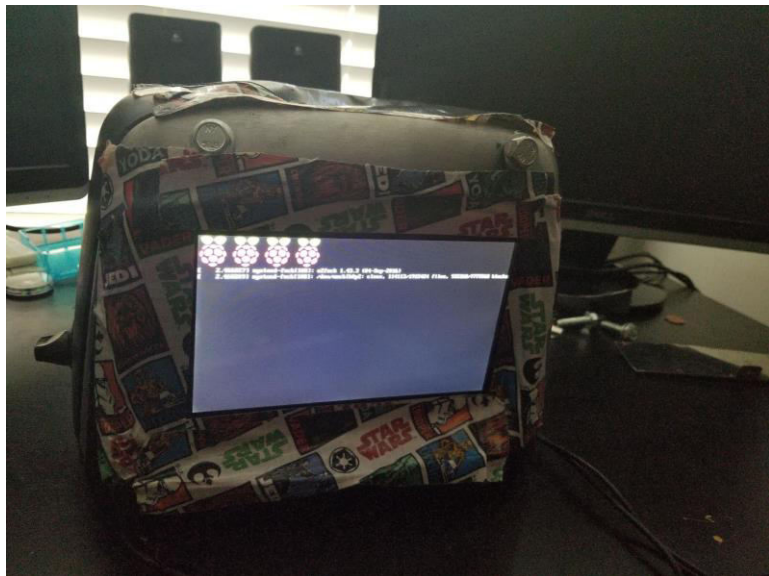
PSSOH

# Revitalizing old tablets/laptops with Linux operating system

Nebojša Jovanović

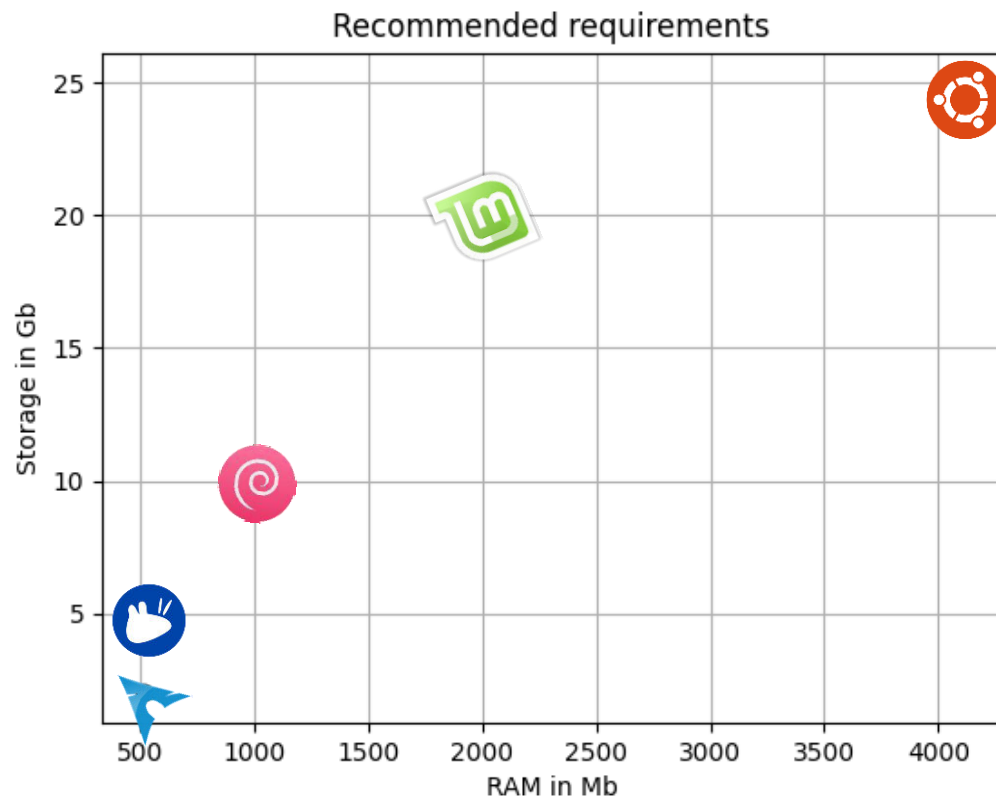
# About Linux OS

- Open-source, safe, reliable OS
- Can be installed on pretty much everything



Linux installed on a toaster  
by a [Reddit user](#)

# What Linux distro to choose?



# Xubuntu!

- **Lightweighth** official Ubuntu flavour
- Perfect for older hardware
- Great balance between resources and features
- Minimum requirements:
  - 512 Mb of RAM
  - 8 GB of storage
  - monitor capable of at least 800×600 pixels resolution.



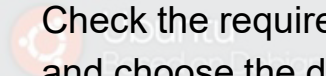
Beginner-friendly

Intermediate

Hard mode

# Installation process

- Check the requirements for your hardware and choose the distro accordingly
- Feel free to experiment



Ubuntu  
Based on Debian



Linux Mint  
Based on Ubuntu



elementary OS  
Based on Ubuntu (LTS)



Mint  
Based on Ubuntu



Zorin  
Based on Ubuntu



Solus  
[Independent]



Garuda Linux  
Based on Arch



EndeavourOS  
Based on Arch



Manjaro  
Based on Arch



MX Linux  
Based on Debian



Fedora  
Based on Red Hat



OpenSUSE  
[Independent]



Arch  
[Independent] – DIY



Gentoo  
[Independent] – DIY



Slackware  
[Independent]



Linux From Scratch  
[Independent] – DIY



Qubes OS  
Based on Fedora – Security



NixOS  
[Independent] – DIY

- When you are set, go to the distro official download page
- Recommended to download the latest LTS release



<https://xubuntu.org/download/>

Get Xubuntu

About

Help & Support

The Community

Development

The Blog

## Download Xubuntu

### Latest LTS release: 20.04, Focal Fossa

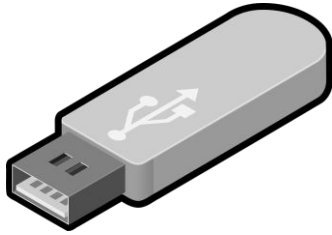
The 20.04 release, codenamed Focal Fossa, is a **Long Term Support** release and has support for 3 years. To learn more about the release, please refer to the [release announcement](#), which has links to complete release notes as well as highlights of the improvements in the release.

### Torrent downloads

If you know how to use torrents, it is highly recommended and preferred to use torrent downloads.

[64-bit systems](#) >

- Create a bootable USB stick



[Rufus](#)



[Etcher](#)



- Plug in and access **BIOS** on your device
- Check the correct keys for your specific manufacturer and laptop

## Boot Menu Keys



Boot Menu	Diagnostics	Startup Device	BIOS
F12	F12 select diags	F12	F2



Boot Menu	Diagnostics	Startup Device	BIOS
Esc	F2	F9	F10



Boot Menu	Diagnostics	Startup Device	BIOS
F12 (some Enter)	Boot from flash drive	Enter	F1



Boot Menu	Diagnostics	Startup Device	BIOS
Desktop F8 Laptop Esc	NA	Desktop F8 Laptop Esc	Desktop Del Laptop F2 or Del



Boot Menu	Diagnostics	Startup Device	BIOS
Esc F12 F9	NA	F12 (some) (if enabled)	Del F2



Boot Menu	Diagnostics	Startup Device	BIOS
F12	NA	NA	F1 Esc F2 F12



Boot Menu	Diagnostics	Startup Device	BIOS
Esc F10	NA	NA	F1 Esc F2 F12

Picture was taken from  
<http://kb.naturalnetworks.com/article/boot-menu-keys-314.html>



English

Español

Esperanto

Euskara

Français

Gaeilge

Galego

Hrvatski

Íslenska

Italiano

Kurdî

Latviski

Lietuviškai

Magyar

Nederlands

No localization (UTF-8)



Try Xubuntu



Install Xubuntu

You can try Xubuntu without making any changes to your computer, directly from this CD.

Or if you're ready, you can install Xubuntu alongside (or instead of) your current operating system.  
This shouldn't take too long.

# Keyboard layout

[www.linuxhu22.com](http://www.linuxhu22.com)

Choose your keyboard layout:

English (Australian)

English (Cameroon)

English (Ghana)

English (Nigeria)

English (South Africa)

English (UK)

English (US)

Esperanto

English (US)

English (US) - Cherokee

English (US) - English (Colemak)

English (US) - English (Dvorak)

English (US) - English (Dvorak, alt. intl.)

English (US) - English (Dvorak, intl., with dead keys)

English (US) - English (Dvorak, left-handed)

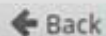
English (US) - English (Dvorak, right-handed)

Type here to test your keyboard

Detect Keyboard Layout



Quit



Back

Continue

## Updates and other software

☒ Download updates while installing Xubuntu

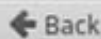
This saves time after installation.

☒ Install third-party software for graphics and Wi-Fi hardware and additional media formats

This software is subject to license terms included with its documentation. Some is proprietary.



Quit



Back

Continue

- Best to do your own partition scheme

## Installation type

[www.linuxbuzz.com](http://www.linuxbuzz.com)


This computer currently has no detected operating systems. What would you like to do?


☐ Erase disk and install Xubuntu  
**Warning:** This will delete all your programs, documents, photos, music, and any other files in all operating systems.

☐ Encrypt the new Xubuntu installation for security  
You will choose a security key in the next step.

☐ Use LVM with the new Xubuntu installation  
This will set up Logical Volume Management. It allows taking snapshots and easier partition resizing.

☒ **Something else**  
You can create or resize partitions yourself, or choose multiple partitions for Xubuntu.

 Quit

 Back

Continue

Device	Type	Mount point	Format?	Size	Used	System
/dev/sda						

+

-

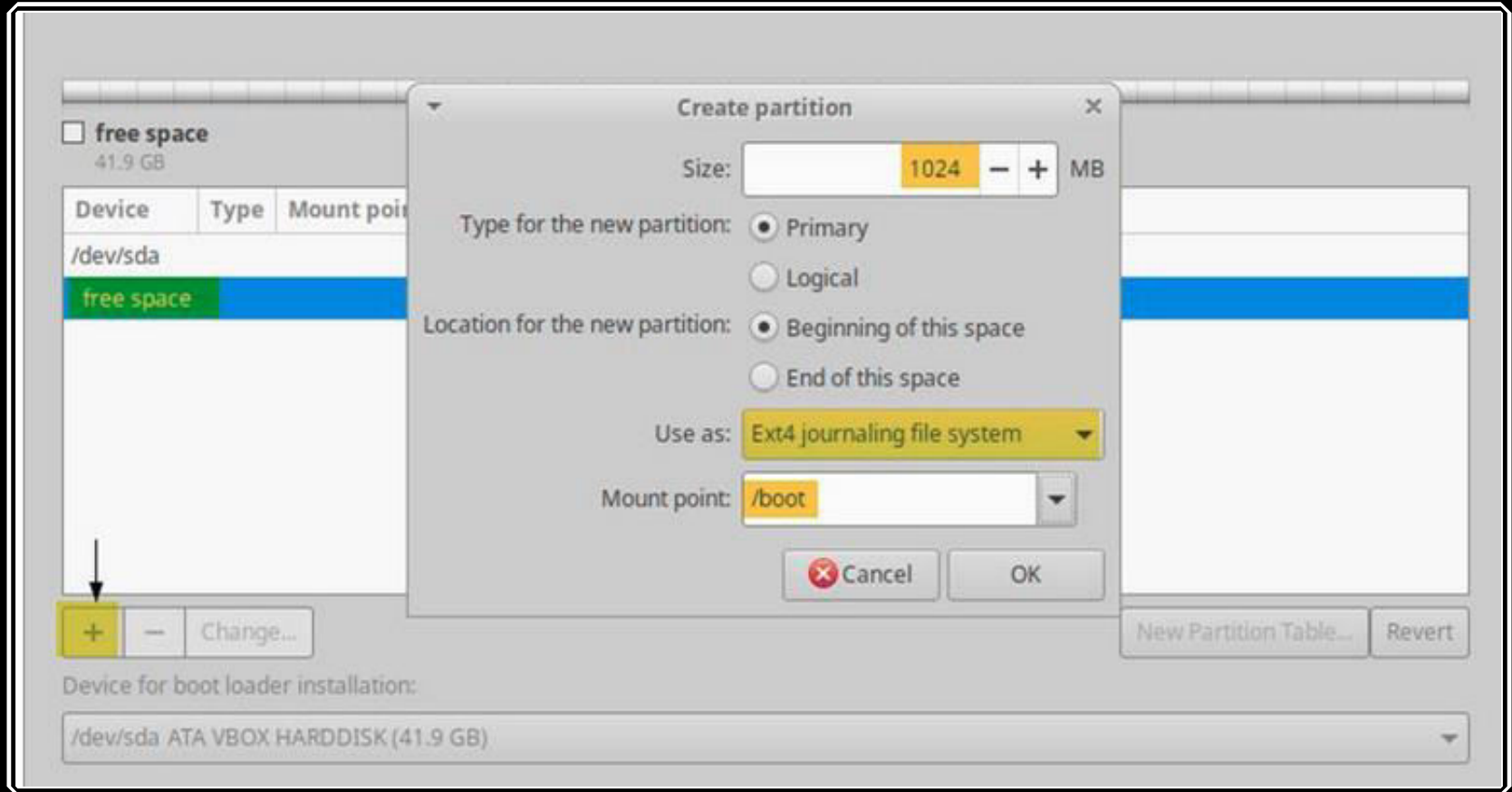
Change...

Device for boot loader installation:

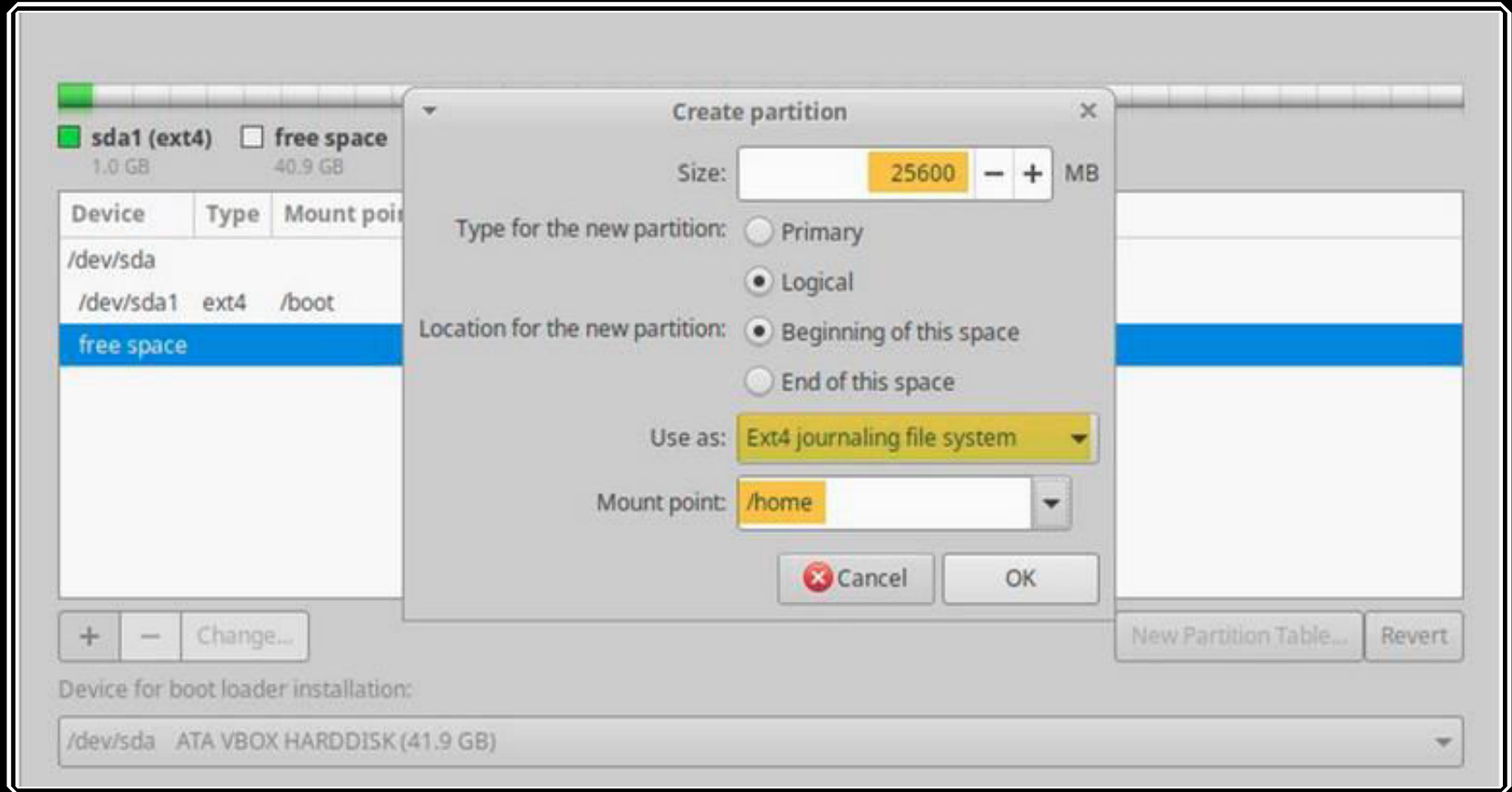
/dev/sda ATA VBOX HARDDISK (41.9 GB)

New Partition Table...Revert

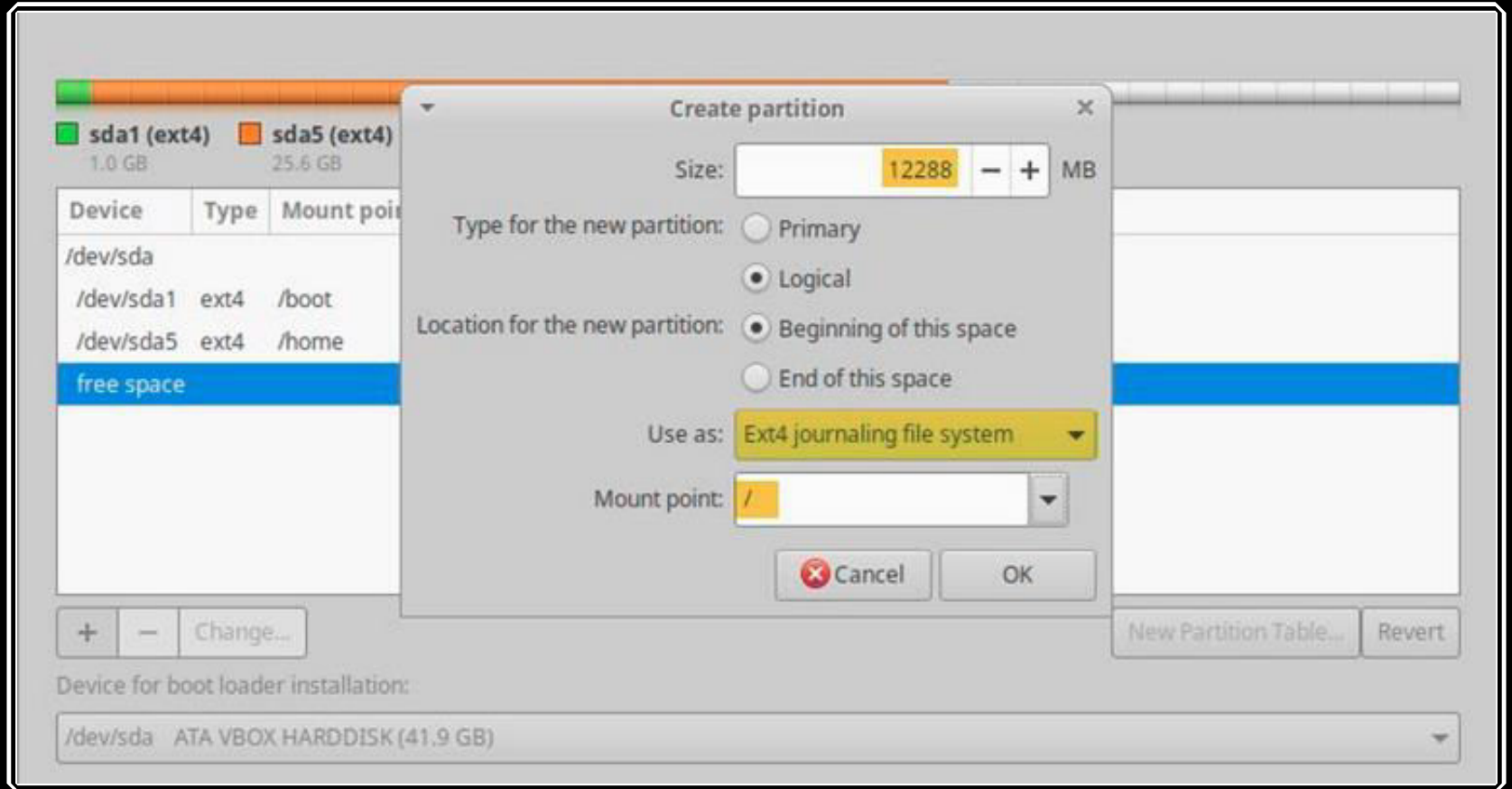
- Boot partition - contains the boot loader



- Home partition - personal files

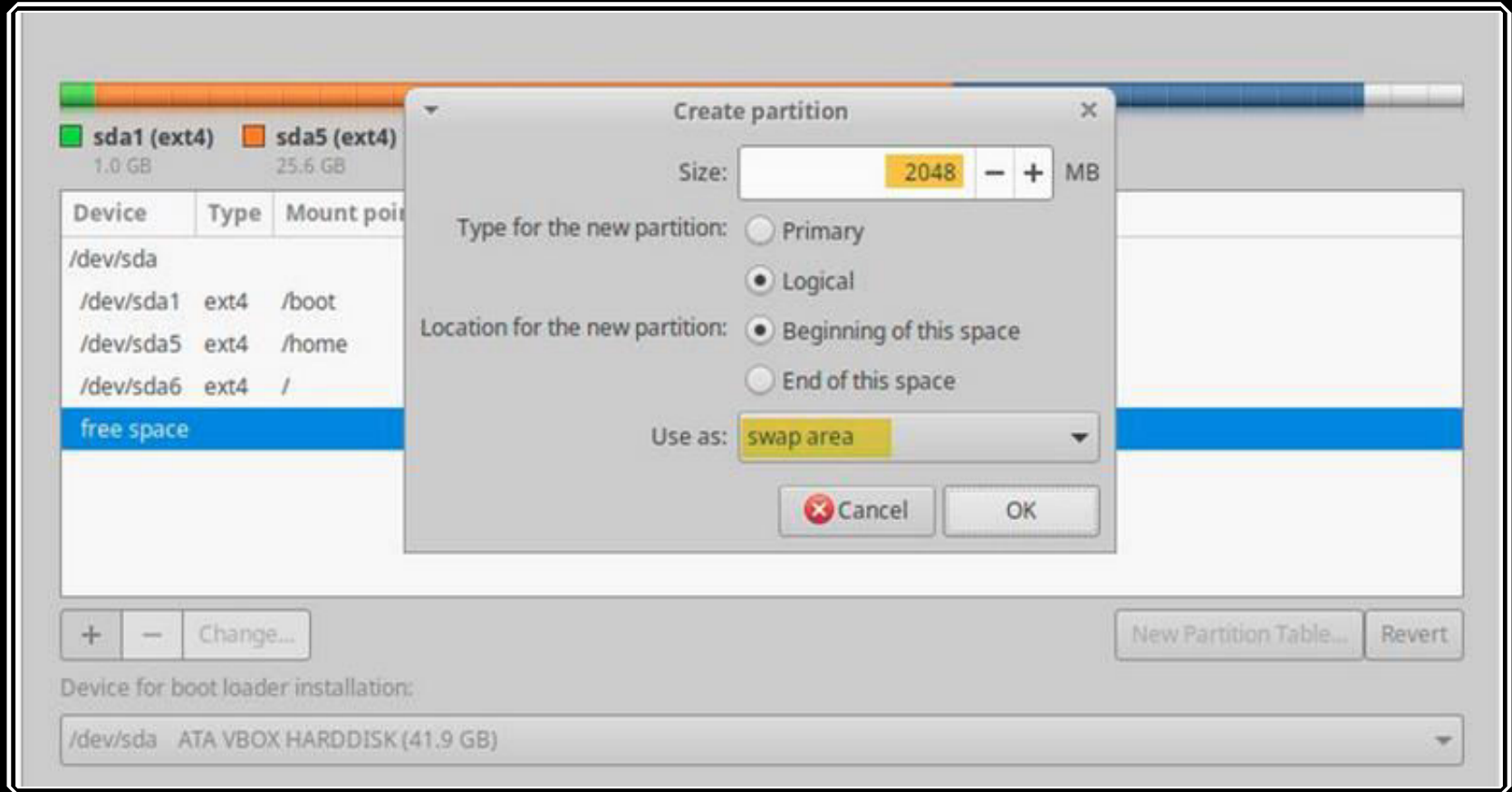


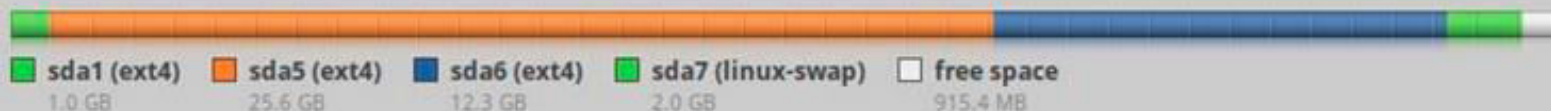
- System partition - root





- Swap - to compensate for lower RAM





### Write the changes to disks?

If you continue, the changes listed below will be written to the disks. Otherwise, you will be able to make further changes manually.

The partition tables of the following devices are changed:  
SCSI3 (0,0,0) (sda)

The following partitions are going to be formatted:  
partition #1 of SCSI3 (0,0,0) (sda) as ext4  
partition #5 of SCSI3 (0,0,0) (sda) as ext4  
partition #6 of SCSI3 (0,0,0) (sda) as ext4  
partition #7 of SCSI3 (0,0,0) (sda) as swap

Go Back

Continue

/dev/sda ATA VBOX HARDDISK (41.9 GB)

Your name:

pkumar



Your computer's name:

linuxbuzz



The name it uses when it talks to other computers.

Pick a username:

pkumar



Choose a password:

●●●●●●●●●●●●●●●●

Strong password

Confirm your password:

●●●●●●●●●●●●●●●●



Log in automatically



Require my password to log in

# Welcome to Xubuntu

Start exploring your new desktop by making yourself familiar with the applications menu.

Use the Software application to install more applications and the Settings Manager to customise the look and feel of your desktop.



- The idea for this workshop was formed when we installed Linux Xubuntu 20.01 on **ASUS T100 transformer book**
- **Windows 8** is native OS on this tablet
- Hardware is suited to work with Windows 8

**The main problem** was the old 32 BIOS on this tablet, which is not supported by the 64 bit boot loader



# Solution?

- **Linux community!**
- One of the best in the world
- Since the platform is open-source many developers are fixing the most various types of problems

1. <https://www.linux.org/forums/>
2. <https://ubuntu.com/community>
3. <https://www.linuxquestions.org/>



LINUX.ORG

Forums ▼

What's new ▼

Linux Tutorials ▼

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<https://github.com/jfwells/linux-asus-t100ta>

master 1 branch 0 tags

Go to file Add file Code

jfwells Moved from deprecated v4l2\_mbus\_pixelcode to media\_bus\_format. 4301c88 on Jan 9, 2016 34 commits

boot	wrong EFI	8 years ago
cm3218_ambient_light_sensor_driver	Updated README	8 years ago
kernel-compiled	Added compiled kernel	8 years ago
mt9m114-driver	Added ACPI support to driver	6 years ago
nvrnm/lib/firmware/brcm	Added latest patches	8 years ago
patches	Added latest patches	8 years ago
support-scripts	Update base-station.sh	6 years ago
video/usr/share/X11/xorg.conf.d	- Rotation script, rotates screen clockwise	8 years ago
webcam	Moved from deprecated v4l2_mbus_pixelcode to media_bus_format.	6 years ago
.config	added config	8 years ago
LICENSE	Initial commit	8 years ago
README.md	Updated README	8 years ago

☰ README.md

## linux-asus-t100ta

Getting Linux (Esp. Ubuntu) up and running well on the Asus Transformer T100

Look in the subfolders for various useful items.

### About

Getting Linux (Esp. Ubuntu) up and running well on the Asus Transformer T100

📖 README

📄 GPL-2.0 License

### Releases

No releases published


### Packages

No packages published



### Languages

● C 95.5% ● Shell 3.3% ● Makefile 1.2%

master linux-asus-t100ta / boot / Go to file Add file ▾ ...

 jfwells wrong EFI 4721f7d on Mar 8, 2014 [History](#)

..

 bootia32.efi	wrong EFI	8 years ago
 readme.md	Added boot EFI	8 years ago

readme.md

- Xubuntu was successfully installed on ASUS T1000, and it has even fixed the notebook touchscreen problem!



# Conclusion

- Don't throw your old laptops and tablets in the trash



**Try Linux first!**

# Questions?

Email: [nebojsa.php@gmail.com](mailto:nebojsa.php@gmail.com)

Github: <https://github.com/nebojsa55>

