Installing a Different OS onto a ThinkPad

NOTE:

The following steps were for a T14/T15 ThinkPad. The OS was installed onto a MacBook Pro M1.

What You Need:

Access to a working computer
To download the new OS files

Empty USB

(Yellow to not confuse with HardDrive) (16GB is very safe, but you can check the size of the OS file) (Usually under 10GB)

- An empty 2.5" SATA/SSD HARD DRIVE
 - This is located inside of the ThinkPad
- SATA/SSD to USB 3.0 Adapter

For formatting the SSD HARD DRIVE

- Teeny tiny screwdriver:

For removing the back of the ThinkPad







Linux: Ubuntu

This will cover the installation of Ubuntu, but if you want to explore <u>distrowatch.com</u> is a great resource for Linux Based systems.

Before you Start:

Formatting the SSD Drive:

Ensure your SSD disk is formatted correctly and read by computer:

You will need: Sabrent 2.5" SSD HARD DRIVE/SSD to USB 3.0 Adapter

With Terminal:

In your terminal, check to see if it is listed

\$ diskutil list

If it is readable, you can unmount it: (replace diskX with listed disk, make sure it is correct)

\$ diskutil unmountDisk /dev/diskX

If it is not empty, we want to erase and format it:

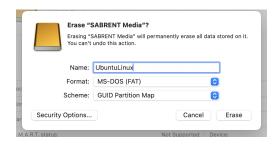
\$ diskutil eraseDisk FAT32 UBUNTU GPT /dev/diskX

After this, you can safely eject:

\$ diskutil eject /dev/disk4

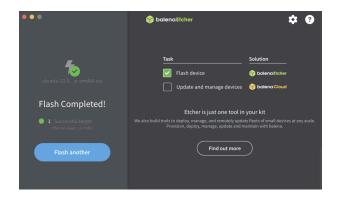
With Disk Utility:

- Find your SSD hard drive in Disk Utility
- Make sure you are at the root of the drive
- Erase it
 - Format SSD HardDrive as <u>FAT</u>



Part 1. On your Mac:

- Download Ubuntu Desktop ISO from <u>ubuntu.com</u>
 - <u>releases.ubuntu.com/jammy/</u>
- Download and install balenaEtcher
 - <u>etcher.balena.io/#download-etcher</u>
- Insert a USB drive (8GB+ capacity)
- Use balenaEtcher to write the Ubuntu ISO to the USB drive
- Result should look like this:



Part 2: Prepare the SSD:

- Connect the WD Blue SSD to your Mac using a SATA/SSD to USB adapter

Part 3: Install the SSD:

- Power off ThinkPad
- Remove bottom cover
- Install SSD in SATA slot
- Replace cover

Part 4: Install Ubuntu:

- Insert USB drive into ThinkPad
- Power on and press F12 for boot menu
- Select USB drive
- Choose "Install Ubuntu" and follow installer prompts:
 - Select language
 - Choose "Erase disk and install Ubuntu"
 - Select your timezone
 - Create user account
- Wait for installation to complete
- Remove USB drive and restart



Windows (harder)

Part 1: Download Windows 10:

- Go to: www.microsoft.com/en-us/software-download/
- Go to Microsoft's official Windows 10 download page: www.microsoft.com/en-us/software-download/windows10ISO
- Click "Download Windows 10 Disk Image (ISO)"
- Choose Windows 10 (multi-edition ISO)
- Select your language
- Click "64-bit Download"
 - The ISO file will be about 6GB
- Once the ISO is downloaded
- Use the Terminal to properly create the Windows installation drive.
 - Then prepare the USB drive:

Part 2: Download Windows 10:

In the Windows iso file, there is one extremely large file (sources/install.swm) that you cannot normally download. For this, you have to split it manually through the Terminal, and then safely merge it back into one.

In Terminal:

1. Identify your USB drive

\$ diskutil list

- 2. Take note of your USB drive identifier (like /dev/disk2)
- 3. Unmount the drive (replace X with your disk number)
 - \$ diskutil unmountDisk /dev/diskX
- 4. Format the drive with ExFAT
 - \$ diskutil eraseDisk ExFAT "WINDOWS10" MBR /dev/diskX
 - \$ git -C \$(brew --repository homebrew/core) reset --hard HEAD.

If you don't have Homebrew installed, run:

\$/bin/bash -c "\$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"

Install the wimlib library:

\$ brew install wimlib

Split the install.swm file:

\$ wimlib-imagex split /Volumes/CCCOMA_X64FRE_EN-US_DV9/sources/install.wim /Volumes/WINDOWS10/sources/install.swm 4000

(INCOMPLETE TODO)

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