# Bootable USB (clef démarrable)

## Par Hajar BENKHADRA

In this documentation, we will go through the steps of creating a bootable USB ready for whatever ISO you want to install and use.

#### **Requirements:**

- An empty USB or one with at least 8GB of free space and ready for use.
- The live image of the ISO of your choosing. Note that in this documentation the ISO used will be Debian, but the process is the same for other ISOs — the logic remains the same.

## **STEP 1: Formatting the USB (optional)**

(If you are confident in your abilities and have a USB with at least 8GB of free space, you can skip this step. Otherwise, continue.)

Hopefully, you've already emptied your USB. If not, make sure to retrieve any important files, then proceed as follows:

- 1. Insert your USB into your device.
- 2. In the file explorer, you will find it next to your C: drive.

<ul> <li>Peripheriques et lecteurs</li> </ul>	
Windows (C:)	Lecteur USB (D:)
822 Go libres sur 951 Go	7,48 Go libres sur 7,48 Go

3. Right clique on it > formatting, after make sur that the file system box is on {FAT32}, otherwise change it to it

Formater Lecte	eur USB (D:)	×				
Capacité :						
7,49 Go ~						
Système de fichiers :						
FAT32 (par défaut) V						
Taille d'unité d'allocation :						
4096 octets		~				
Nom de volume : Options de formatage Formatage rapide						
	Démarrer	Fermer				

#### If all is alright, proceed with **START**:

At this point, a small warning will pop up indicating that all your files on the USB will be removed. Make sure you haven't forgotten anything important. If everything is good, click **OK** and wait a bit



At the end, you will receive a message indicating that the process is complete and the formatting has been successfully done. You're now good to go!

Formatage de Lecteur USB (D:)	×
Formatage terminé.	
	ОК

## **STEP 2: RUFUS INSTALLATION**

**RUFUS** is a utility that allows the formatting and creation of bootable media devices such as USB drives, hard drives, and others. In our case, we are using a USB device.

There are other alternatives like **Ventoy** or **YUMI** if you'd like to check them out — they are all free and open source. The link for RUFUS : <u>https://rufus.ie/fr/</u>, you pick the first choice

Téléchargement								
Dernières versions :								
Lien	Туре	Plateforme	Taille	Date				
rufus-4.7.exe	Standard	Windows x64	1.6 Mo	2025.04.09				
rufus-4.7p.exe	Portable	Windows x64	1.6 Mo	2025.04.09				
rufus-4.7_x86.exe	Standard	Windows x86	1.6 Mo	2025.04.09				
rufus-4.7_arm64.exe	Standard	Windows ARM64	5.3 Mo	2025.04.09				

Note that even though there are many other links sharing the Rufus installation file, it is safer to download it from the official website.

### **STEP 3: ISO INSTALLATION**



(You can skip this step if you already have your ISO downloaded.) Link for Debian: <u>https://www.debian.org/index.fr.html</u> or directly <u>https://www.debian.org/download</u> (choose **debian-12.10.0-amd64-netinst.iso**).

As always, it is best to download it from the official website.



Now that you have installed Debian ISO we will go forward to the next step

## **STEP 4:**

Now you open the rufus app previously installed and you insert the USB, rufus will automatically detect your USB

			-			×
Options de Périphériq	ue _					
Périphérique						
NO_LABEL (D:) [8 Go]						~
Type de démarrage						
debian-12.10.0-amd64-netinst.iso		~	$\oslash$	SÉLE	CTION	-
Taille de partition persistente						
L			0 (Dés	activé	e)	
Schéma de partition		Système de de	stinatio	on		
GPT	~	UEFI (non CSN	1)			`
<ul> <li>Afficher les options de périphérie</li> </ul>	que avan	cées				
Options de Formatage	e					
options ac ronnutuge	-					
Nom de volume	-					
Nom de volume Installation de Debian						
Nom de volume Installation de Debian Système de fichiers		Taille d'unité d	'allocat	ion		
Nom de volume Installation de Debian Système de fichiers FAT32 (Défaut)	~	Taille d'unité d 4096 octets (D	'allocat éfaut)	ion		
Nom de volume Installation de Debian Système de fichiers FAT32 (Défaut) ~ Afficher les options de formatag	v e avancée	Taille d'unité d 4096 octets (D 25	'allocat éfaut)	ion		,
Nom de volume Installation de Debian Système de fichiers FAT32 (Défaut) ✓ Afficher les options de formatag	✓ e avancée	Taille d'unité d 4096 octets (D 25	'allocat éfaut)	ion		,
Nom de volume Installation de Debian Système de fichiers FAT32 (Défaut)	∠ e avancée	Taille d'unité d 4096 octets (D es	'allocat éfaut)	ion		
Nom de volume Installation de Debian Système de fichiers FAT32 (Défaut) Afficher les options de formatag Statut	v e avancée PRÊT	Taille d'unité d 4096 octets (D es	'allocat éfaut)	ion		~
Nom de volume Installation de Debian Système de fichiers FAT32 (Défaut) ~ Afficher les options de formatag Statut	e avancée PRÊT	Taille d'unité d 4096 octets (D es	'allocat éfaut)	ion		
Nom de volume Installation de Debian Système de fichiers FAT32 (Défaut)  Afficher les options de formatag Statut	e avancée PRÊT	Taille d'unité d 4096 octets (D ss DÉMARRER	'allocat éfaut)	ion	ERMER	~
Nom de volume Installation de Debian Système de fichiers FAT32 (Défaut)  Afficher les options de formatag Statut	∠ e avancée PRÊT	Taille d'unité d 4096 octets (D ss DÉMARRER	'allocat éfaut)	ion FE	ERMER	~

Make sure your entries match those shown on the screen. It's important to pay close attention to the selected file system type, the partition scheme, and the correct ISO image.

If any of these are incorrect, your system may not detect the USB properly, and the boot process could fail. If everything looks good, click **START**.



If you get this pop-up, choose the **recommended option**. However, if after the process you check your USB and don't find the **EFI** folder, redo the procedure and this time select the **DD image mode** option.



But generally, it works with the recommended option, then click OK



This pop up is also normal to receive so just click OK again and the process will start

Statut							
Formatage (FAT32)							
S) (i) 🚁 🔳	DÉMARRER	ANNULER					
Veuillez patienter 00:00:14							
Statut							
Copie des fi <mark>c</mark> hiers ISO : 42.4%							
\$) (i) ≵ []	DÉMARRER	ANNULER					
D:\pool\ma\debian-archive-keyring-udeb_202	3.3+deb12u1_all.ude	eb (51.9 Ko) 00:04:03					

When it's done click CLOSE

Check you USB and you should see something like this:



	С	☐ > This PC > INSTALLATIO (D:)			
		[ື A] & ₪ N→ Sort ~	🗮 View 🗸 🛆 Eje	ect ····	
		Name	Date modified	Туре	Size
		.disk	5/14/2025 3:25 PM	File folder	
	-	[boot]	5/14/2025 3:11 PM	File folder	
ıa	-	boot	5/14/2025 3:12 PM	File folder	
		css	5/14/2025 3:12 PM	File folder	
۲.		dists	5/14/2025 3:12 PM	File folder	
•		doc	5/14/2025 3:12 PM	File folder	
•		EFI	5/14/2025 3:12 PM	File folder	
•		firmware	5/14/2025 3:12 PM	File folder	
•		install	5/14/2025 3:13 PM	File folder	
		install.amd	5/14/2025 3:13 PM	File folder	
		isolinux	5/14/2025 3:14 PM	File folder	
	-	pics	5/14/2025 3:14 PM	File folder	
	•	pool	5/14/2025 3:14 PM	File folder	
	1	autorun.ico	5/14/2025 3:26 PM	ICO File	34 KB
		autorun.inf	5/14/2025 3:25 PM	Setup Information	1 KB
		debian	5/14/2025 3:12 PM	File	1 KB
		md5sum.txt	5/14/2025 3:25 PM	Text Document	85 KB
	V	README.html	5/14/2025 3:25 PM	Brave HTML Docume	9 KB
	V	README.mirrors.html	5/14/2025 3:25 PM	Brave HTML Docume	1 KB
		README.mirrors.txt	5/14/2025 3:25 PM	Text Document	1 KB
		README.source	5/14/2025 3:25 PM	SOURCE File	1 KB
		README.txt	5/14/2025 3:25 PM	Text Document	6 KB
	0	syslinux.cfg	5/14/2025 3:25 PM	Fichier source Config	1 KB

CONGRATS!! You now successfully have a bootable USB with Debian.