



Ventoy Multi-Bootable USBs

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This document will serve as the guide to Ventoy installation and usage for operations.

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Overview

Ventoy is a free tool used to create multi-bootable USBs. If installed on a USB correctly, you will be able to store as many .iso files as you have space for on the USB and boot from whichever one you choose. You can also use the USB as a regular thumb drive to store files without affecting ventoy or the ISOs you have stored on the USB.

You can install Ventoy over Windows or Linux, however this guide will only go over the Linux installation because the way Ventoy works, it alters parts of the USBs MBR and partitions during installation, which Windows tends to think is a virus or malicious activity. It is much easier to install Ventoy on Linux, since it requires only a single command.



Ventoy Installation

- ❖ Start with a Linux distro of your choice, and a USB, preferably one that is at least 32GB in size.
- ❖ Go to ventoy.net
 - Under the Downloads tab, download the linux version of ventoy
- ❖ Extract the zip onto the desktop and navigate inside the newly extracted ventoy directory
- ❖ Keep going further into the directories until you find one which has Ventoy2Disk.sh
 - Somewhere in the blank space, right click and select 'Open in Terminal'
- ❖ To install ventoy, use this singular command: **sudo sh Ventoy2Disk.sh -i /dev/sdc**
 - The sudo command ensures you run it with administrator privileges
 - The 'sh' part after sudo tells the terminal that you are about to run a script
 - Ventoy2Disk.sh is the script itself that we are using to install Ventoy onto the USB. ****NOTE: The name of the script, like all things in Linux, is case sensitive****
 - -i is the option we use to install ventoy onto the USB
 - /dev/sdc was the location of my USB when I performed the installation. Yours may be different. Double check with the Disks utility.



```
(kali@OpenVAS)-[~/Desktop/ventoy-1.0.96]
└─$ sudo sh Ventoy2Disk.sh -i /dev/sdc
[sudo] password for kali:
*****
Ventoy: 1.0.96 x86_64
longpanda admin@ventoy.net
https://www.ventoy.net
*****
Disk : /dev/sdc
Model: SanDisk 3.2 Gen 1 (scsi)
Size : 920 GB
Style: MBR
Attention:
You will install Ventoy to /dev/sdc.
All the data on the disk /dev/sdc will be lost!!!
Continue? (y/n) y
All the data on the disk /dev/sdc will be lost!!!
Double-check. Continue? (y/n) y
Create partitions on /dev/sdc by parted in MBR style ...
Done
Wait for partitions ...
partition exist OK
create efi fat fs /dev/sdc2 ...
mkfs.fat 4.2 (2021-01-31)
success
Wait for partitions ...
/dev/sdc1 exist OK
/dev/sdc2 exist OK
partition exist OK
Format partition 1 /dev/sdc1 ...
mkexfatfs 1.3.0
Creating ... done.
Flushing ... done.
File system created successfully.
mkexfatfs success
writing data to disk/.../postgresql/16/main
sync data ...
esp partition processing ...
Install Ventoy to /dev/sdc successfully finished.
(kali@OpenVAS)-[~/Desktop/ventoy-1.0.96]
```





- ❖ When you run the command, you will be warned that continuing with the installation will result in the loss of all data on the USB (since installation requires reformatting of the USB). Select yes to continue, but make sure to back up your data first.
- ❖ The command will prompt you a second time, double checking that you are sure you want to continue with the installation (and destruction of your data). Select yes again.
- ❖ The script will then work its magic and after a minute or two, ventoy will be installed on your USB.

Ventoy Set-Up

- ❖ **Do not touch the EFI partition! No data or files will go here, ever.**
- ❖ Select the other partition. This is where all your ISO files will go, into the root of the filesystem
- ❖ You can also change the theme of your Ventoy USB using GRUB themes if you so desire:
 - Navigate to gnome-look.org
 - On the left-hand navigation pane, scroll down to and click on 'GRUB Themes'. There should be about 460 of them. Pick whichever one you like and click download.

The screenshot shows the GNOME-look.org website. The left sidebar lists various categories, with 'GRUB Themes' highlighted and a yellow arrow pointing to it. The main content area displays three theme cards:

- Yaru-Mint 3.0** (Full Icon Themes by Initu): Icon themes designed to use with Mint-Y gtk themes. Sources: <https://github.com/ubuntu/yaru>. Note: Linux Mint 21.2 has Yaru icons by default, so as not to get too bloated with icons, Yaru icons can be removed by synaptic by typing this command: `yaru-theme-icon`. 2 comments, 6.3 rating, 2 hours ago.
- DarkArc-Solarized COLORPACK [more animations this update] 1.1.2** (GTK3/4 Themes by rti88): Solarized-DarkArc COLORPACK is a GTK, xfwm4, openbox-3, and GNOME-Shell - Dark Mode Theme - based on the Official Color Pallet created by Ethan Schoonover (<https://itsfoss.com/best-gtk-themes/>). Choose from the official Blue, Cyan, Green, Magenta, Orange, Red, and Violet flavors. Solarized-DarkArc... 12 comments, 7.2 rating, 4 hours ago.
- macOS think different** (Plymouth Themes by Brahimsalem): - installer included. 5.0 rating, 6 hours ago.

The right sidebar shows forum information, including 'New Users', 'What do these stand for?', 'Irrelevant Product Links', and a comment from 'darkeye90'.

- Open the zipped file using whichever archiving software you're comfortable with such as WinRAR or 7zip.
- Navigate through all the directories until you find one that has a theme.txt file at the bottom

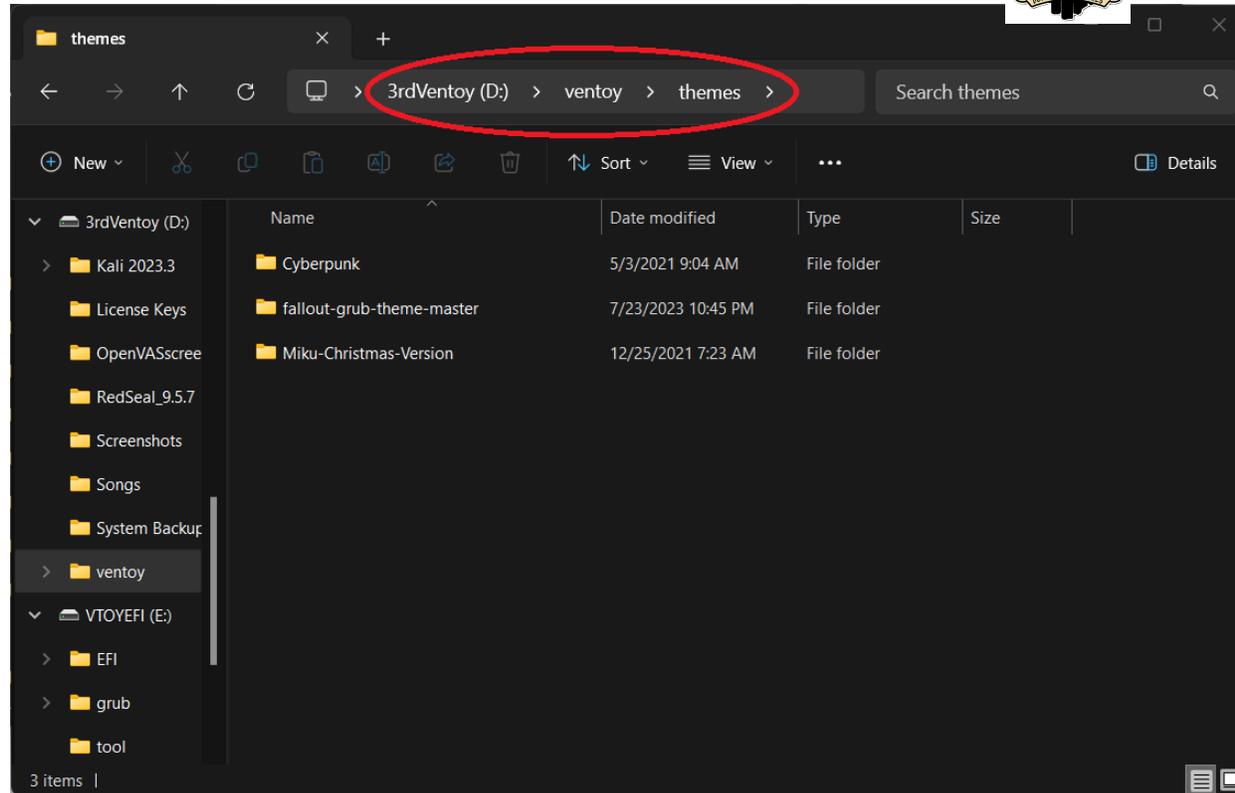


- Go back one directory, and minimize the window for now

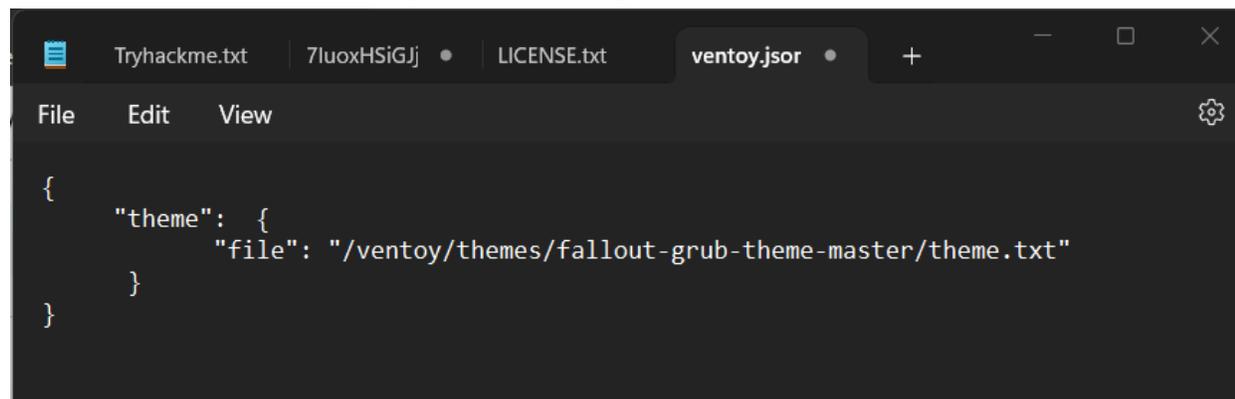
Name	Size	Packed Size	Modified	Created	Accessed	Attributes	Encrypted	Comment	CRC	Method	Characterist...	Host OS	Versi
menu_bkg_n.png	200	161	2021-10-30...			-rw-rw-rw-	-		FAC50BFA	Deflate		FAT	20
menu_bkg_ne.png	245	239	2021-10-30...			-rw-rw-rw-	-		69C9B55C	Deflate		FAT	20
menu_bkg_nw.png	234	226	2021-10-30...			-rw-rw-rw-	-		87491862	Deflate		FAT	20
menu_bkg_s.png	170	160	2021-10-30...			-rw-rw-rw-	-		45C772BF	Deflate		FAT	20
menu_bkg_se.png	231	224	2021-10-30...			-rw-rw-rw-	-		AE613EFB	Deflate		FAT	20
menu_bkg_sw.png	228	221	2021-10-30...			-rw-rw-rw-	-		666956D1	Deflate		FAT	20
menu_bkg_w.png	170	150	2021-10-30...			-rw-rw-rw-	-		E96540E8	Deflate		FAT	20
norwester_24.pf2	4 407	2 149	2022-06-21...			-rw-rw-rw-	-		04F2F812	Deflate		FAT	20
norwester_28.pf2	5 201	2 383	2022-06-21...			-rw-rw-rw-	-		5DE4C556	Deflate		FAT	20
norwester_30.pf2	5 419	2 568	2022-06-21...			-rw-rw-rw-	-		03D169C8	Deflate		FAT	20
progress_bar_c.png	1 415	1 408	2022-07-28...			-rw-rw-rw-	-		4033FE92	Deflate		FAT	20
progress_bar_e.png	1 660	1 665	2022-07-28...			-rw-rw-rw-	-		C8DC23C9	Deflate		FAT	20
progress_bar_w.png	1 636	1 641	2022-07-28...			-rw-rw-rw-	-		6F545B47	Deflate		FAT	20
progress_highlight...	353	303	2022-08-28...			-rw-rw-rw-	-		17FC9DD2	Deflate		FAT	20
select_c.png	1 194	1 199	2022-05-23...			-rw-rw-rw-	-		384D5E79	Deflate		FAT	20
select_e.png	1 543	1 548	2022-05-23...			-rw-rw-rw-	-		48926211	Deflate		FAT	20
select_w.png	1 599	1 604	2022-05-23...			-rw-rw-rw-	-		82D355E1	Deflate		FAT	20
slider_c.png	1 971	983	2021-10-30...			-rw-rw-rw-	-		F05C5609	Deflate		FAT	20
slider_n.png	1 977	1 023	2021-10-30...			-rw-rw-rw-	-		4D8E705C	Deflate		FAT	20
slider_s.png	1 979	1 026	2021-10-30...			-rw-rw-rw-	-		134D1249	Deflate		FAT	20
theme.txt	1 065	428	2022-08-29...			-rw-rw-rw-	-		7728CC66	Deflate		FAT	20

0 / 35 object(s) selected

- Back in your Ventoy USB, go to the root of the filesystem (where all your ISOs are or should be if you haven't placed any yet) and create a folder named 'ventoy' (Case sensitivity counts)
- Inside the newly created ventoy directory, create a subdirectory named 'themes' (again, case sensitive)
- Go back to the window where you had the parent directory pulled up. Drag this directory into the newly created 'themes' subdirectory



- Step out of the themes subdirectory into the ventoy directory and create a new text file named 'ventoy.json'. You will get a warning saying that changing file extensions may cause them to not work as intended. Click 'ok' to proceed
- Inside the json file copy and paste this code:
 - {
 - "theme": {
 - "file": "/ventoy/themes/blur/theme.txt"
 - }
 - }
- Replace '/blur/' with the name of the parent directory you dragged into the themes folder. For example, if your parent directory was fallout-grub-theme-master then the line of code would read "file": "/ventoy/themes/fallout-grub-theme-master/theme.txt"



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- ❖ Restart your machine, making sure that you change the boot order so it boots from the USB first, and that you have disabled Secure Boot. If you installed everything properly, the Ventoy USB should load up displaying your chosen theme and a list of all your ISOs that you can boot from.

Ventoy Use Cases

- ❖ As explained in the overview, Ventoy USBs will allow you to store as many ISOs as you want or have room for and boot from them, while simultaneously allowing you to use the USB as a regular thumb drive to transport files between machines.
- ❖ Make sure that before you attempt to boot from a Ventoy USB, turn off Secure Boot on the machine you are using. The Ventoy USB will not boot properly if Secure Boot is turned on.