

# Ventoy (multiboot USB)

To make a USB stick which can boot multiple ISOs, use Ventoy. Ventoy is an open source tool which creates a special USB stick. That stick contains an exFAT partition in which you can copy multiple ISO files and an EFI partition where Ventoy puts its bootable menu. When you boot on the Ventoy USB stick, the menu lists all the ISOs you placed in the exFat partition and you can boot any of them.

## Installation

Go to the [Ventoy release page](#) to find the latest version of Ventoy.

```
cd ~/Downloads
wget
https://github.com/ventoy/Ventoy/releases/download/v1.0.91/ventoy-1.0.91-linux.tar.gz
tar -xvzf ventoy-1.0.91-linux.tar.gz
cd ventoy-1.0.91
sudo ./VentoyGUI.x86_64
```

Bash script to check for and download latest ventoy version then start it. Requires wget, curl and jq:

[ventoy-update.sh](#)

```
#!/bin/bash

get_ventoy_release() {
curl -s https://api.github.com/repos/ventoy/Ventoy/releases | \
jq -r '[[.[] |
select(.draft != true) |
select(.prerelease != true)]][] |
.assets |
.[] |
select(.name | endswith(".tar.gz")) |
.browser_download_url]' | grep -o "http.*-linux.tar.gz"
}

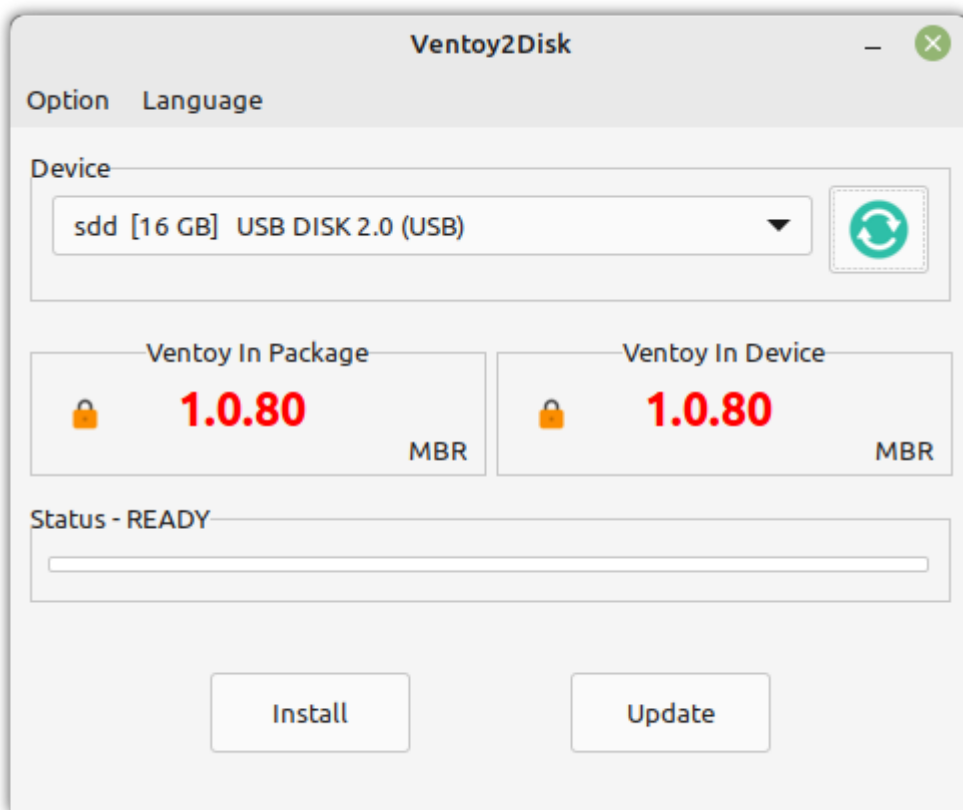
VTDLURL=$(get_ventoy_release | head -1)
VTFILENAME=$(echo "$VTDLURL" | cut -d "/" -f9)
VTDIRNAME=${VTFILENAME::-13}
if [ ! -d "$VTDIRNAME" ];
then
if [ ! -f "$VTFILENAME" ];
then
echo "$VTDLURL" | xargs -n1 wget
fi
tar -xvzf $VTFILENAME
fi
```

```
cd $VTDIRNAME
sudo ./VentoyGUI.x86_64
#rm -rf /tmp/ventoy
```

## Using Ventoy

Choose the device which corresponds to your USB stick.

Press the Install button.



Once Ventoy is installed two partitions will be available on the USB stick: 1.) Ventoy - this is empty and is the majority of the free space to copy iso files to 2.) VTOYEFI - this is an EFI partition, not usually auto-mounted, which contains the Ventoy config files

The 'Ventoy' partition usually will be auto-mounted and can be used.

Copy ISO files to the stick.

Windows ISO files should be renamed to end with \_VTWIMBOOT (e.g.: win10\_english\_x64\_VTWIMBOOT.iso) to boot properly. Alternatively, CTRL+w can be pressed in the Ventoy menu to activate WIMBOOT mode.

Boot on the Ventoy USB stick.



The ISOs you copied should appear as bootable options.

## Configuring Ventoy

All the plugins and their related files must be in a "ventoy" (all lowercase) directory in the first partition of the disk (along with the iso files and created by yourself). Directory and file names are case sensitive.

A json file ventoy.json must be placed under the ventoy directory (no subdirectory) as the configuration file. The file must match the syntax of json and the outermost layer must be an object( { } ). For json syntax you can check it with the 2 online tools as follows:

ventoy.json must in UTF-8 encoding.

VentoyPluson can be used to create and edit this json file.

```
sudo bash VentoyPluson.sh /dev/sdX
```

This loads a web server and provides URL to use the editor via browser. More details: [https://www.ventoy.net/en/plugin\\_pluson.html](https://www.ventoy.net/en/plugin_pluson.html)

The screenshot shows the 'Global Control Plugin' configuration page in the Ventoy Plugson interface. The left sidebar lists various plugins, and the main area displays settings for several options:

- control**: Includes sub-options like control\_legacy, control\_uefi, control\_ia32, control\_aa64, and control\_mips.
- VTOY\_DEFAULT\_SEARCH\_ROOT**: Option Setting is a text input field. Description: 'The root path where to search the image files. By default, Ventoy will search all the directories and subdirectories in the USB. This will be very slow when you have huge number of files in the USB. In this case, you can put all the image files in one directory and use this to specify the search path. After that Ventoy will only search this directory and its subdirectories for image files.' Buttons for 'Edit' and 'Clear' are present.
- VTOY\_WIN11\_BYPASS\_CHECK**: Option Setting is a radio button set with '1' selected. Description: 'Don not bypass Windows 11 hardware check. Bypass Windows 11 hardware check. This option only available for standard Windows 11 ISO files. When set to 1, Ventoy will create the following registries to bypass Windows 11 hardware check when install. HKEY\_LOCAL\_MACHINE\SYSTEM\Setup\LabConfig\BypassRAMCheck, HKEY\_LOCAL\_MACHINE\SYSTEM\Setup\LabConfig\BypassTPMCheck, HKEY\_LOCAL\_MACHINE\SYSTEM\Setup\LabConfig\BypassSecureBootCheck, HKEY\_LOCAL\_MACHINE\SYSTEM\Setup\LabConfig\BypassCPUCheck, HKEY\_LOCAL\_MACHINE\SYSTEM\Setup\LabConfig\BypassStorageCheck'.
- VTOY\_DEFAULT\_MENU\_MODE**: Option Setting is a radio button set with '1' selected. Description: 'Default boot menu display mode. List View Mode, Tree View Mode'.
- VTOY\_MENU\_TIMEOUT**: Option Setting is a text input field with '0'. Description: 'Menu timeout (seconds). Default value is 0 (no timeout is set). When you set it to 10 for example, the selected image will be booted automatically after 10 seconds. During the countdown, pressing any key will stop the countdown and wait for user operation.'

## Mount EFI partition

The "VTOYEFI" partition needs to be mounted manually if required or desired, e.g.:

```
sudo mkdir /mnt/vtoyefi
sudo mount /dev/sdb2 /mnt/vtoyefi/ -o
rw,nosuid,nodev,relatime,uid=1000,gid=1000,fsck=0,dmccache=0,iocharset=utf8,errors=remount-ro,uhelper=udisks2
```

source: <https://linuxmint-user-guide.readthedocs.io/en/latest/winiso.html>

## Multi-Boot USB w/ Grub

<https://nixsanctuary.com/how-to-create-multi-boot-usb-drive-without-ventoy-grub-ftw/>

From: <http://wuff.dyndns.org/> - **Wulf's Various Things**

Permanent link: <http://wuff.dyndns.org/doku.php?id=howto:ventoy>

Last update: **2023/05/29 11:55**

