

Multiboot USB Boot Creation Tools

Wikipedia – USB Boot Tools Listing

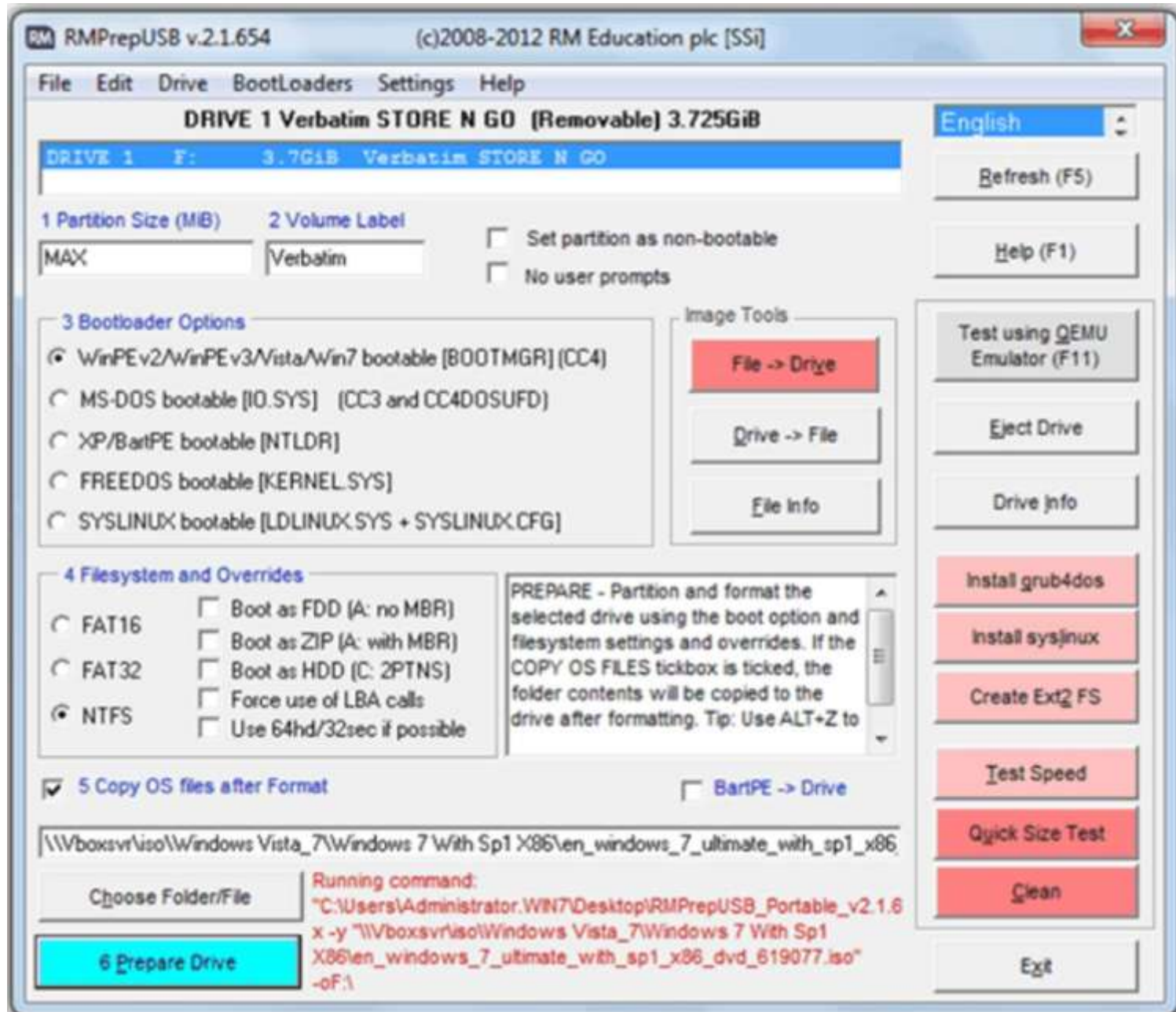
Name	Developer	Licensing	Maintained?	Runs on (OS)	Target OS
Rufus	Pete Batard	GNU GPL v3	Yes	Windows	DOS, Linux, Windows
Windows To Go	Microsoft	Proprietary	Yes	Windows	Windows 8 or later, Enterprise edition
DasBoot ^[1]	SubRosaSoft	Freeware	No	macOS	macOS
GNU dd	Paul Rubin, David MacKenzie, and Stuart Kemp ^[2]	Free software	Yes	Unix-like	Virtually anything
Fedora Media Writer	Fedora Project	GNU GPL	No	Linux, Windows	Linux
LinuxLive USB Creator	Thibaut Lauzière	GNU GPL v3	Yes	Windows	Linux
remastersys	Tony Brijeski	GNU GPL v2	No ^[3]	Debian, Linux Mint, Ubuntu	Debian, Linux Mint, Ubuntu & their derivatives
Slitaz TazUSB	Slitaz	GNU GPL	Yes	Slitaz GNU/Linux	Slitaz GNU/Linux
SUSE Studio ImageWriter	Matt Barringer	GNU GPL v2	Yes	Linux, Windows	Linux
Ubuntu Live USB creator	Canonical Ltd	GNU GPL v3	Yes	Ubuntu, Windows	Ubuntu
UNetbootin	Geza Kovacs	GNU GPL v2+ ^[4]	Yes	Linux, macOS, Windows	Arch Linux, CentOS, Fedora, Gentoo, Linux Mint, MEPIS, Mandriva, openSUSE, Slackware, Ubuntu ; FreeBSD , NetBSD ; FreeDOS

Multiboot Listing (Updated)

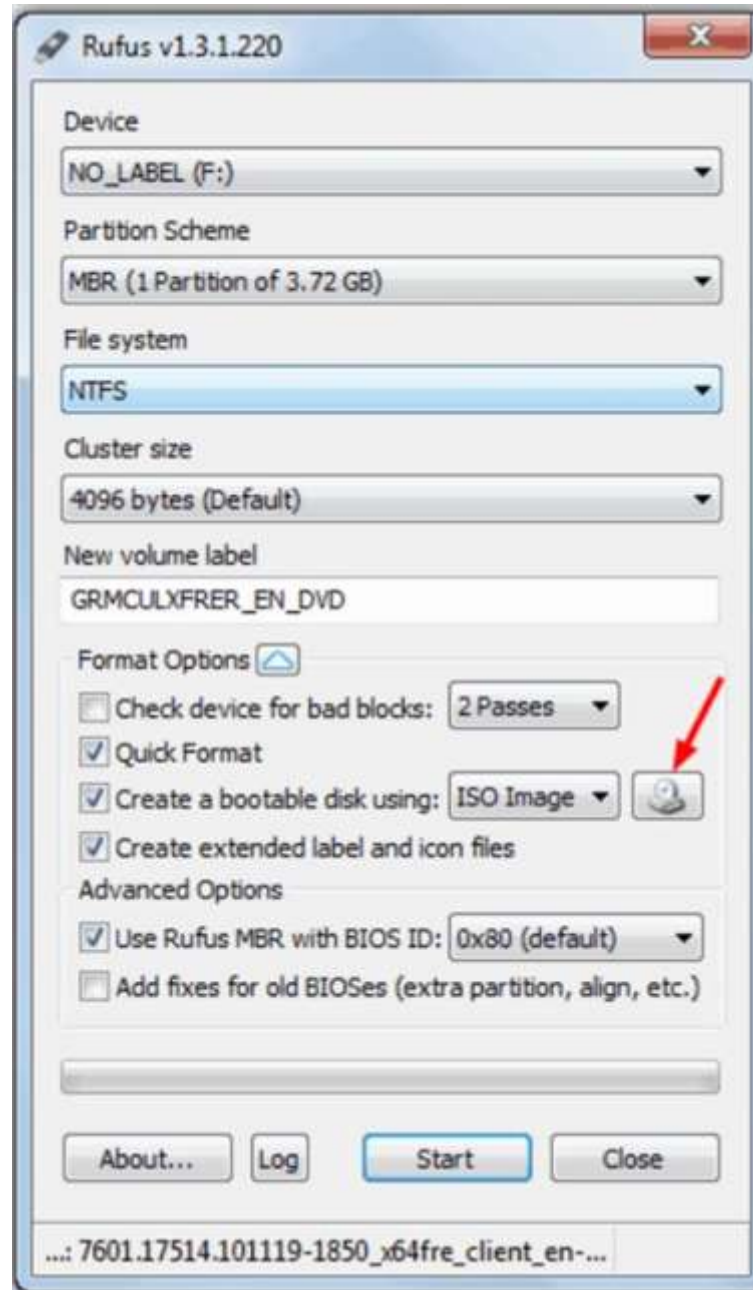
Multiboot - List of tools to create Live USB systems

Name	Developer	Licensing	Maintained?	Runs on (OS)	Target OS	UEFI/EFI Support	Persistence
Rufus	Pete Batard	GNU GPL v3	Yes	Windows	DOS, Linux, Windows	Yes	No
Windows To Go	Microsoft	Proprietary	Yes	Windows	Windows 8 or later, Enterprise edition	Yes	No
DasBoot ^[2]	SubRosaSoft	Freeware	No	macOS	macOS	No	
GNU dd	Paul Rubin, David MacKenzie, and Stuart Kemp ^[2]	Free software	Yes	Unix-like	Virtually anything		
Fedora Media Writer	Fedora Project	GNU GPL	No	Linux, Windows	Linux		
LinuxLive USB Creator	Thibaut Lauzière	GNU GPL v3	Yes	Windows	Linux	-	Yes
remastersys	Tony Brijeski	GNU GPL v2	No ^[3]	Debian, Linux Mint, Ubuntu	Debian, Linux Mint, Ubuntu & their derivatives		
Slitaz TazUSB	Slitaz	GNU GPL	Yes	Slitaz GNU/Linux	Slitaz GNU/Linux		
SUSE Studio ImageWriter	Matt Barringer	GNU GPL v2	Yes	Linux, Windows	Linux	Yes	No
Ubuntu Live USB creator	Canonical Ltd	GNU GPL v3	No	Ubuntu, Windows	Ubuntu	-	-
UNetbootin	Geza Kovacs	GNU GPL v2+ ^[4]	Yes	Linux, macOS, Windows	Arch Linux, CentOS, Fedora, Gentoo, Linux Mint, MEPIS, Mandriva, openSUSE, Slackware, Ubuntu ; FreeBSD , NetBSD ; FreeDOS		
Mac Linux USB Loader		BSD 3-Clause	Yes	macOS	macOS	Yes	Yes
Universal USB Installer	Pendrivelinux.com	GNU GPL	Yes	Linux, Windows	Debian, Linux Mint, Ubuntu & their derivatives	Yes	Yes
YUMI - Multiboot USB Creator	Pendrivelinux.com	GNU GPL	Yes	Linux, Windows	Debian, Linux Mint, Ubuntu & their derivatives	Yes	Yes
XBoot		Proprietary	Yes	Windows [.NET]	DOS, Linux, Windows		
SARDU	Davide Costa	Proprietary	Yes	Windows	Linux & derivatives, Windows	Yes	
MultiSystem	LiveUSB.info	Proprietary	Yes	Linux, Windows	Debian, Linux Mint, Ubuntu & their derivatives	Yes	Yes
MultiBootUSB	Sundar Ima	GNU GPL	Yes	Linux, Windows	Debian, Linux Mint, Ubuntu & their derivatives	Yes	Ubuntu, Fedora & Debian
WinSetupFromUSB	itaushanov	Proprietary	Yes	Linux, Windows	Virtually anything	Yes	No
WiNToBootic	WiNToBootic.com	Proprietary	Yes	Windows [.NET]	Windows Vista or later, Enterprise edition	No	No

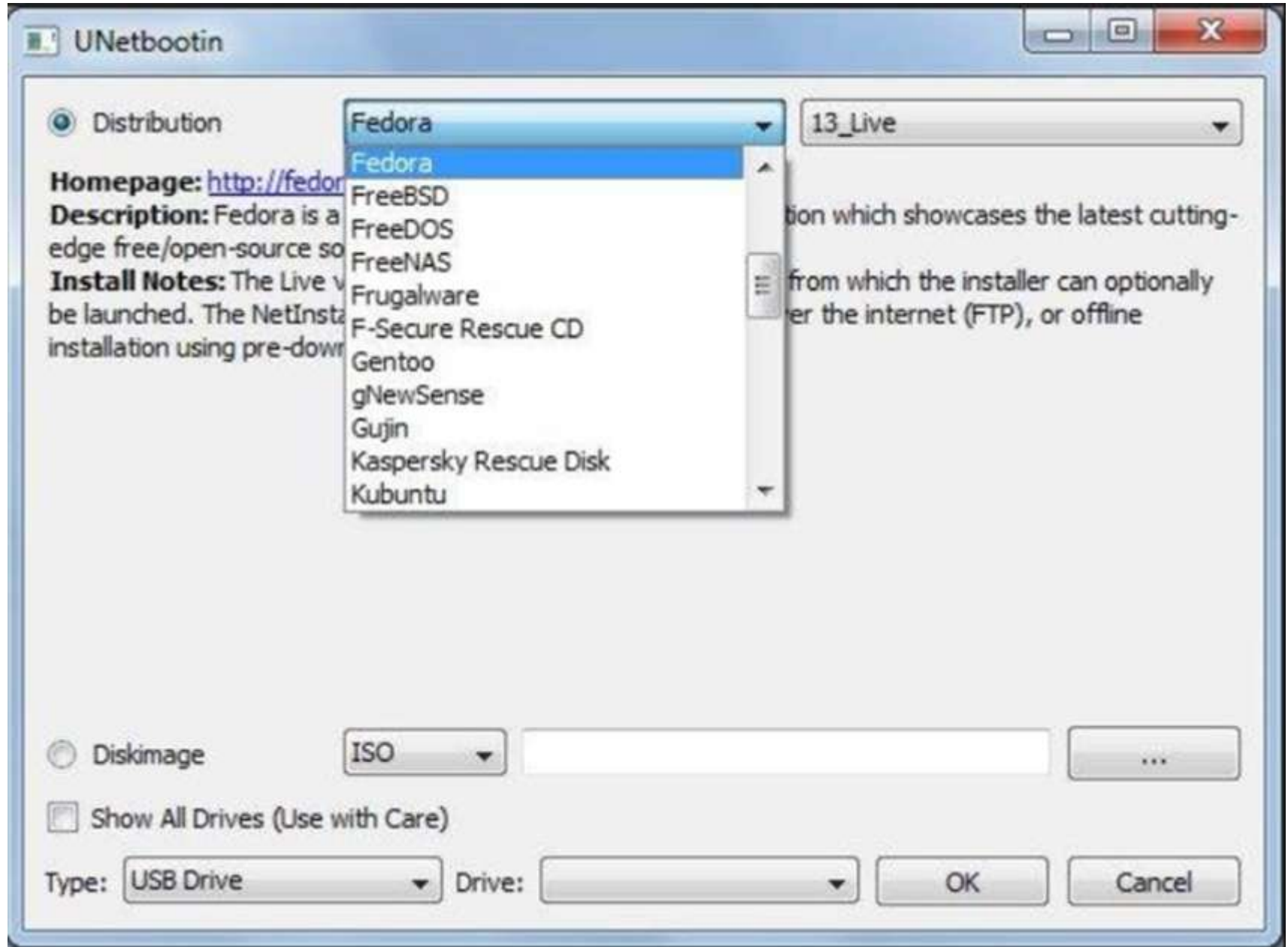
RMPrepUSB



Rufus (non-multiboot utility)




UNetbootin



UniversalUSBInstaller

Universal USB Installer 1.9.2.1 Setup

Setup your Selections Page
Choose a Linux Distro, ISO/ZIP file and, your USB Flash Drive.

 USB Installer
Pendrivelinux.com

Step 1: Select a Linux Distribution from the dropdown to put on your USB
Windows 7 Installer

Step 2 PENDING: Browse to your *.iso
S:\Apps\ISO\Windows Vista_7\Windows 7 With Sp1 X64\7601.17514.10111\ Browse

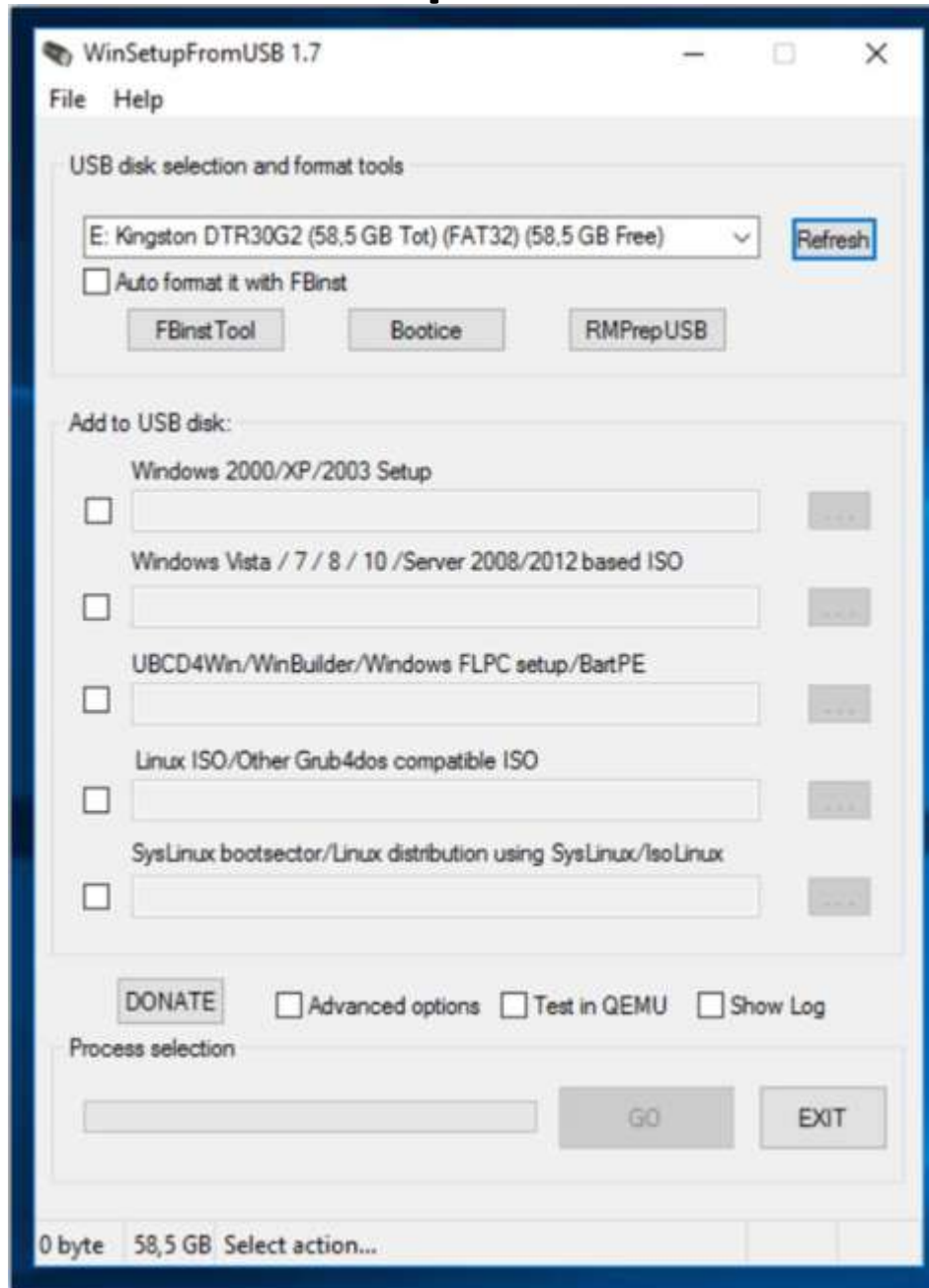
Step 3: Select your USB Flash Drive Letter Only Show all Drives (USE WITH CAUTION)
J:\ Format J:\ Drive (Erases Content)

[Click HERE to Visit the Universal USB Installer Page for additional HELP](#)

Universal USB Installer <http://www.pendrivelinux.com>

Create Cancel

WinSetupFromUSB



WinSetupFromUSB

The image shows two windows from the WinSetupFromUSB 1.7 application. The left window, titled "Advanced options", contains several sections of checkboxes for configuring the installation process. The right window, titled "WinSetupFromUSB 1.7", shows the "USB disk selection and format tools" section with a dropdown menu for selecting a USB drive (currently showing "E: Kingston DTR30G2 (58.5 GB Tot) (FAT32) (58.5 GB Free)"), a "Refresh" button, and an "Auto format it with FBinst" checkbox. Below this are buttons for "FBinstTool", "Bootice", and "RMPrepUSB". The "Add to USB disk:" section lists various operating systems and ISO types with corresponding checkboxes and input fields. At the bottom, there are checkboxes for "DONATE", "Advanced options" (checked), "Test in QEMU", and "Show Log". A "Process selection" field is also present with "GO" and "EXIT" buttons. The status bar at the bottom indicates "0 byte 58,5 GB Select action...".

Advanced options

General

- Display disk drives on all interfaces, not only USB
- Don't check for and install grub4dos MBR

XP/2000/2003 Setup

- Shared BTS driver pack OEM folder
- Prepare Windows 2000/XP/2003 to be installed on USB
- Remove disk space requirements from btsetup .inf
- Show debug messages during Text mode
- Custom folder and menu name for 2000/XP/2003 Setup
- Do not copy and use DPMS
- Custom drivers/F6 floppy image for 2000/XP/2003 Setup
- Custom NTDETECT.COM file for 2000/XP/2003 Setup

Vista/7/8/10/Server 2008/2012 Setup/PE

- Custom menu names for Vista/7/8/Server Source
- Launch Q-Dir before Setup
- Add boot-critical drivers, loaded before start of Setup

Linux/Other ISO

- Add persistence Label Size MB

WinSetupFromUSB 1.7

File Help

USB disk selection and format tools

E: Kingston DTR30G2 (58.5 GB Tot) (FAT32) (58.5 GB Free) Refresh

Auto format it with FBinst

FBinstTool Bootice RMPrepUSB

Add to USB disk:

- Windows 2000/XP/2003 Setup
- Windows Vista / 7 / 8 / 10 /Server 2008/2012 based ISO
- UBCD4Win/WinBuilder/Windows FLPC setup/BartPE
- Linux ISO/Other Grub4dos compatible ISO
- SysLinux bootsector/Linux distribution using SysLinux/Isolinux

DONATE Advanced options Test in QEMU Show Log

Process selection

GO EXIT

0 byte 58,5 GB Select action...

WINBootic (2014)

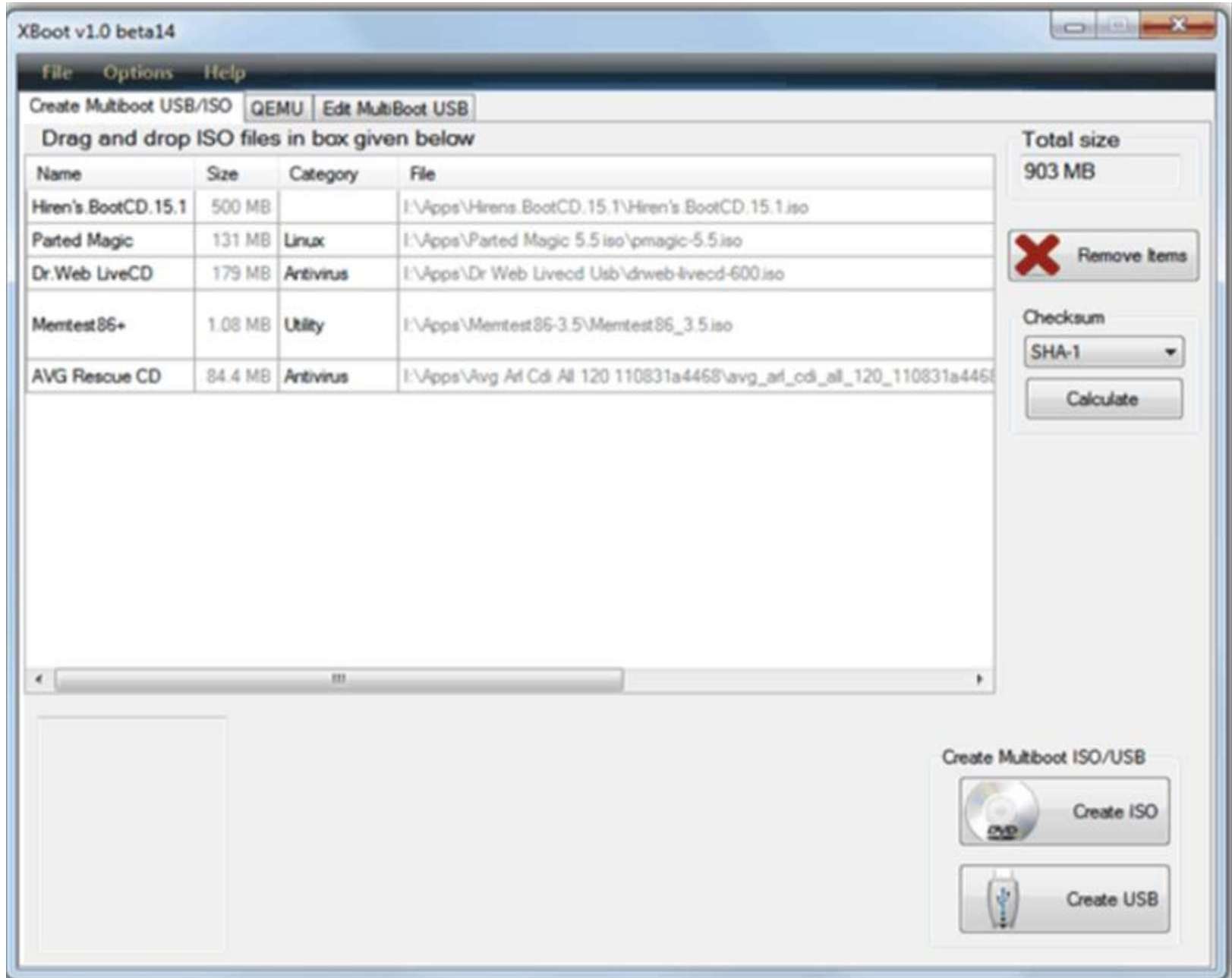
MANY REASONS TO GO WITH LEADER ...

Feature	WINToBootic 2.2	Rufus 1.4.6	UNETBootin 578	WinToFlash 0.7.0053 beta	Windows 7 USB/DVD Download Tool 1.0.24	Windows 7 SBB Tool 1.3	Microsoft Portable Workspace Creator	Yumi 0.0.6.4
Windows To Go	✓	—	—	—	—	—	✓	—
Windows To Go from Non-Enterprise Windows	✓	—	—	—	—	—	—	—
Windows To Go on Non- Microsoft-Certified Drive	✓	—	—	—	—	—	—	—
NTFS Support	✓	✓	—	—	✓	✓	✓	—
Windows 7,8 Bootloader	✓	partially	—	—	✓	—	✓	—
Source: ISO 9660 (Joliet)	✓	✓	✓	✓	—	—	—	✓
Source: ISO 13346 (UDF)	✓	✓	✓	✓	✓	—	✓	✓
Source: DVD or Folder	✓	—	—	—	—	✓	—	—
Boot support for: Win Vista,7,8,2008,2012	✓	✓	—	✓	partially	—	—	—
Boot support for: Win PE2, PE3, PE4	✓	✓	—	—	—	—	—	—
Standalone	✓	✓	✓	—	—	✓	✓	✓
Super User Friendly	✓	—	—	—	—	—	—	—
Super Fast	✓	✓	—	—	—	—	✓	—
Your Choice	✓							

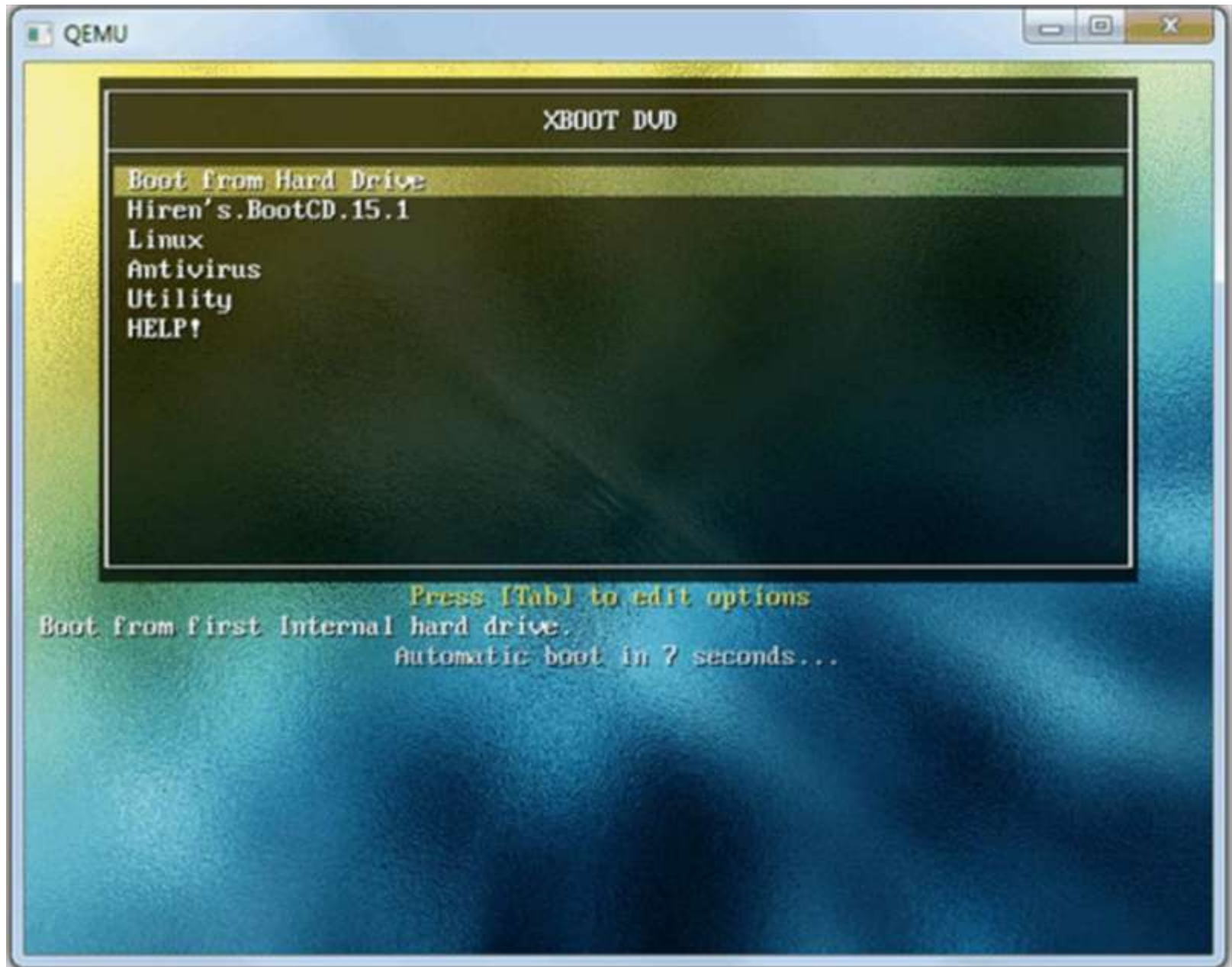
WINBootic (2014)



XBoot



XBoot



YUMI

YUMI



Drive Selection and Distro Options Page

Choose your Flash Drive, and a Distro, ISO/ZIP file.
Additional Distributions can be added each time this tool is run.

Step 1: You Selected E: as your USB Device

E:\MULTIBOOT 7GB

Show All Drives?

View or Remove Installed Distros?

Format E: Drive (Erase Content)?

Step 2: Select a Distribution to put on E:

Ubuntu

Local iso Selected.

[Visit the Ubuntu Home Page](#)

Step 3: Browse and Select your ubuntu*desktop*.iso

C:\Users\\Desktop\ubuntu-16.04-desktop-amd64.iso

Show All ISOs?

Browse

Step 4: Set a Persistent file size for storing changes (Optional).

283 MB

[Click HERE to visit the YUMI page for additional Help!](#)

YUMI

Create

Cancel

YUMI

YUMI

MultiBoot USB

Your Universal MultiBoot Installer

Continue to Boot from First HD (default)

Linux Distributions ->

Unlisted ISO (via SYSLINUX) ->

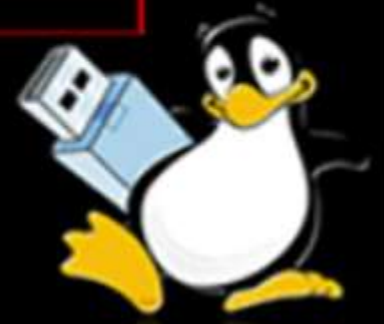
Antivirus Tools ->

System Tools ->

Netbook Distributions ->

Other OS and Tools ->

<http://www.pendrivelinux.com>



YUMI

Requirements

Changelog

HowTo

Supported Distros

FAQ

IMPORTANT NOTES: Your USB drive must be Fat16/Fat32/NTFS formatted, otherwise Syslinux will fail and your drive will NOT Boot. NTFS may not work with every distribution but is required for storing files over 4GB. YUMI UEFI must use Fat32 format.

YUMI can be used to format your select USB drive, but be aware that all partitions on the selected drive will also be deleted. Ensure that you have made a backup of any information you want to keep before using YUMI on any drive.

Basic Essentials to create a MultiSystem Bootable USB Drive

- [Fat32 or *NTFS Formatted USB Flash or USB Hard Drive](#)
- [PC that can boot from USB](#)
- [Windows Vista/7/8/10 or Linux/Mac OS with \(WINE\)](#)
- [YUMI-2.0.5.4.exe](#)
- [Your selection of ISO Files](#)

Please inform me of unlisted "FREE" Live Linux distributions or version revisions, and I will attempt to update YUMI to support them. Software developers who wish to have their "PAID" software added, can send me a copy to try.

Persistence

Article Source:

ER: Make USB stick persistent? #137

<https://github.com/pbatard/rufus/issues/137>

ER: Add Casper persistence support #691

<https://github.com/pbatard/rufus/issues/691>

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IMPORTANT NOTE: This is an investigative enhancement request, to figure out the feasibility of adding persistence support. It does NOT mean in any way shape of form that persistence support is going to be added in a future version of Rufus.

According to the following (<https://help.ubuntu.com/community/LiveCD/Persistence>), the way to enable persistence is either to:

create a partition with label "casper-rw" and formatted with an ext2 file system (or later)

create an image, at the root level of the device, called /casper-rw and formatted with an ext2 file system (or later)

As there exist ext2 formatting tools for Windows (mke2fs, genext2fs...), it looks like what would be required to add persistence in Rufus, is add the ability to format either an image or a partition to ext2. This may however require more effort than it looks, as if we want to reuse any code, it needs to be GPLv3 compatible, which genext2fs isn't for instance. So we may have to write our own ext2 formatting code from scratch...

General Issues and Complaints

Incompatible Images

There are various vendors that make ISOs to be incompatible when converting them from a CD/DVD-ROM format to a USB format, for example:

Acronis True Image

- Uses a boot method that is incompatible with Rufus, so stop asking already. Note that newer versions should be compatible with UEFI boot however.

Kaspersky Rescue Disk

- While they should really know better, the Kaspersky people decided that security through obscurity was a viable option, thereby making their ISO incompatible with Rufus. Bad, Kaspersky, bad!

OpenSUSE LIVE ISOs, and its derivatives such as Mandriva / Mageia

- This should only apply when trying to run the pre Leap Live images (pre-Leap installation should be okay, barring one potential issue, and Leap rescue more should also run fine). This mostly had to do with the openSUSE maintainers having decided to restrict Live support to a file system (ISO9660), which was too limiting for Windows usage. Hopefully, the Leap releases will make this a thing of the past.

General Issues and Complaints

Problematic Images

- Chromium / ChromeOS images
- While the image can be written successfully in DD Image mode, once written you will NOT be able to repartition/reformat your USB from Windows if you used any application that tried to clean the drive, such as diskpart or Rufus 2.9 or earlier.
- This is linked to the fact that the Windows "clean disk" command (IOCTL_DISK_CREATE_DISK) does not properly erase all of the MBR/GPT structures and leaves artifacts behind that Windows cannot handle properly. Unfortunately, this means that the only option to recover your drive is to erase it in Linux...
- Rufus 2.10 and later include a workaround, so that, at the very least, it does not leave your drive inoperable from Windows, after trying to reformat a drive where Chromium was installed. But, because this is essentially a Windows bug, you will need to be cautious about which application you use to repartition or reformat a drive after installing Chromium on it.

General Issues and Complaints

Incompatible Hardware

- Lexar JumpDrive Secure USB device
- PNY 16GB Retract USB (and some other PNY drives). This is due to a buggy firmware from PNY, and is not a Rufus issue. You may be able to recover your drive using either [this](#) or [this tool](#).

Incompatible Software

- ASUS USB 3.0 Boost Storage Driver
- Avira Antivirus
- Bit Defender Client Security
- Defraggler
- Explorer++
- Genie Timeline Backup Pro
- MBR Filter
- Open Hardware Monitor
- Panda USB vaccine
- Paragon ExtFS for Windows / Paragon HFS+ for Windows
- RealPlayer Cloud
- Sophos Antivirus if you have Peripheral Control Policy is set to disable access to USB storage devices.
- Trend Micro OfficeScan and some other versions of Trend Anti Virus.
- USB Drive Letter Manager (USBLDM)
- Windows' ReadyBoost (if enabled on the drive you are trying to format)

ISO Tools

- <https://sourceforge.net/projects/boot-repair-cd>
- <http://www.system-rescue-cd.org>
- <http://clonezilla.org/clonezilla-live.php>
- <http://www.ultimatebootcd.com>
- <https://gparted.org>

Filesystem Manipulation Tools

- <http://www.syslinux.org>
- <https://sourceforge.net/projects/grub2win>
- <http://ms-sys.sourceforge.net>
- <http://e2fsprogs.sourceforge.net>