

Multiboot UFD

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Introduction

Using a UFD for booting a single bootable .iso image and re-writing it every time you want to boot something else is not efficient. This page is about creating UFDs offering a choice of boot images.

We have used both Easy2Boot (a.k.a E2B) and MultiSystem (a.k.a LiveUSB MultiBoot) to create bootable UFDs . Based on that experience, we are tending to prefer MultiSystem.

E2B - Easy2Boot

sources:

- <https://sites.google.com/a/rmprepusb.com/www/tutorials/114>
- <http://linuxmusicians.com/viewtopic.php?f=19&t=11479>

Pros:

- Simple enough
- Clear
- Works with most iso's
- Loads directly the iso

Cons:

- Slower than other solutions

Prepare the drive

Format your USB Flash Drive to use a Single Partition (FAT32 type 0C - or if possible add a small 2nd partition too, to help bootability) using [gparted](#) - or do it the hard way using fdisk as follows:

- Open a terminal and type `sudo su`
- Type `fdisk -l` (and note which device is your USB Drive)
- Type `fdisk /dev/sdx` (replacing x with your actual usb device)
- Type `d` (to delete the existing partition) (press d again to delete the next partition, etc.)
- Type `n` (to create a new partition)
- Type `p` (for primary partition)
- Type `1` (to create the first partition)
- Press Enter (to use the first cylinder)
- Press Enter again (to use the default value as the last cylinder)
- Type `a` (for active)
- Type `1` (to mark the first partition active "bootable")
- Type `t` (for partition type)
- Type `c` (to use fat32 partition)
- Type `w` (to write the changes and close fdisk)

Create a Fat32 Filesystem on the USB Flash Drive:

```
fdisk -l
```

(check which device is the USB Flash drive)

```
umount /dev/sdx1
```

(to unmount the mounted partition if it is mounted)

```
sudo mkfs.vfat -F 32 -n MULTIBOOT /dev/sdx1 (to format the partition as fat32)
```

Download the necessary files

grub4dos: <https://code.google.com/p/grub4dos-chenall/downloads/list>

Easy2boot (at the bottom of the page): <http://www.rmprepusb.com/tutorials/72---easyboot---a-grubdos-multiboot-drive-that-is-easy-to-maintain/e2bv1#TOC-Downloads>

defragfs script: <http://defragfs.sourceforge.net/>

Install grub4dos & Easy2boot

- Mount the partition you just formatted.
- Uncompress the grub4dos archive.
- Install grub4dos onto the USB Flash Drive:

Assuming that the bootlace.com executable is on /mnt/mysrc and the USB drive is sdx, use the following command to install grub4dos to the MBR with 0 seconds timeout

```
sudo /mnt/mysrc/bootlace.com --time-out=0 /dev/sdx
```

(note that we specify the whole disk sdx)

If you have formatted the drive as NTFS using gparted, you may need to add the --ntfs parameter to the command line

- Extract the Easy2Boot files from the E2B zip file and copy it onto the USB Flash drive

e.g.

```
unzip /mnt/mysrc/Easy2Boot_v1.10.zip -d /mnt/newusb/
```

Add iso to the USB stick

- Copy all your linux livecd ISOs to the _ISOMAINMENU or _ISOLINUX folder using the GUI File Manager in linux.

For other ISOs or for linux ISOs+Persistence, follow the instructions in the Easy2Boot tutorial.

Finalize the install

The iso files need to be contiguous or they will not be read properly.

```
df
```

```
sudo perl defragfs.pl /mnt/newusb/ -f
```

MultiSystem

Introduction

⚠ The text below is old, in early draft and may not be thoroughly researched. Maybe more at <https://jira.bluelightav.org/browse/BUE-1882>

Website of the project: <http://liveusb.info/dotclear>

Pro:

Cons:

- Does a lot of tricky things on your system,
- Many iso will not work properly

Requirement

- ubuntu 12.04 (only works on systems with apt-get)
- xterm
- UFD formated in FAT32 with non spaced label

Install

1. Get the tarball. Attachment: [install-depot-multisystem.sh.tar.bz2](#). Repository: rose:home/share/resources/software/Linux/install-depot-multisystem.sh.tar.bz2).
2. Extract: `tar -xjf install-depot-multisystem.sh.tar.bz2`
3. Run **install-depot-multiboot.sh**

```
gksu install-depot-multiboot.sh
```

Add images to the drive

- Insert the UFD (better let it be automounted as the mount point should be /media/<label>)
- Launch the software: **Multisystem**
- Select the USB device to use and click **Validate**
- drag and drop the images you want to add.