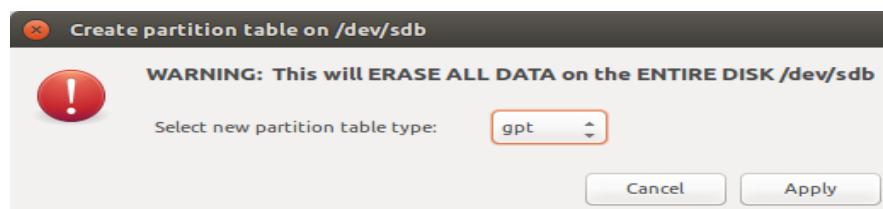


# GPT FOR UEFI

UEFI boots from GPT schemed drives. No bootloader is required because EFI firmware can read FAT32 partition contents by itself. It looks for a specific firmware and if it finds it then loads it into RAM. Without a MBR bootloader the USB will **not** be bootable for BIOS computers. **Only 64 bit versions of Windows 7 and newer are supported** according to eightforums.com.

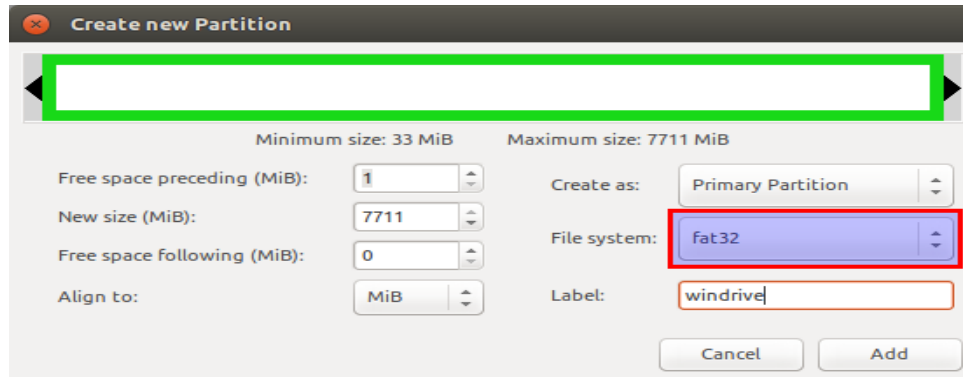
## 1. Format USB

Plug in the USB drive and launch GParted. Unmounts the drive as shown above. Create a GPT partition table by selecting from **Device** menu **Create Partition Table** option. Choose **gpt** and apply.



The Partition Table dialog

Now right-click the unallocated space and create a new partition. It must be primary and formatted as FAT32. Give it a label too.



New Partition dialog

Don't forget to apply all pending operations **Ctrl+Enter**.

## 2. Copy Windows files

Quit GParted and use the file manager to copy all files from Windows ISO to USB stick. Mount the ISO using **Open with - Disk Image Mounter** (if you use Nautilus as a file manager). Then select all files **Ctrl+A** and **Copy to** USB drive which will be automatically mounted when you click on it at `/media/<username>/<drive_label>`. After the copy process is finished, look in the USB root folder for the `efi/boot` directory. If there's a `bootx64.efi` file there skip to step 3.

If the OS you are making a bootable USB for is **Windows 7**, browse the `efi/microsoft` folder and copy the entire `boot` folder from this path one level up in the `efi` folder. Merge folders if `boot` already exists.

Here is what to do **if you don't have the bootx64.efi file** in efi/boot folder. Browse into the mounted Windows ISO image into the sources folder.

Open install.wim with your archive manager (you will need **7z** installed). Go to the path `./1/Windows/Boot/EFI` and extract the file `bootmgfw.efi` anywhere you want.

Rename it to `bootx64.efi` and put it on the USB drive, in the efi/boot folder. If you can't find `bootmgfw.efi` in `install.wim` then you probably have a 32 bit Windows ISO or other types of images (recovery disks, upgrade versions).

Some UEFI firmwares are able to boot from MBR partitions too as long as the `bootx64.efi` file exists at the right locations. Do not try to use this with customized Windows ISOs that have the `install.wim` file larger than 4 GB.

### **3. Make it bootable**

It should be bootable. You can boot from USB now. The Windows-only utility Rufus does exactly the same thing when UEFI/GPT mode is selected.

Unless you can't, do the following. Start over again but this time apply the **msdos** partition table instead of **gpt**. Check the **boot** flag and try again.

Tested using DUET (installation method from [rodsbooks.com](http://rodsbooks.com)) with a Windows 10 Technical Preview USB drive.

Source: <http://onetransistor.blogspot.in/2014/09/make-bootable-windows-usb-from-ubuntu.html>