

# README

## for the One Button Installer version 2.5

### a. Preparation

You need two drives or mass storage devices (pendrive, flash card, HDD, SSD). The minimum size is 4 GB each, but obviously the final operating system will soon need more space for your personal files as well as for additional system files (program packages),

- one USB pendrive, 4 GB (for a text mode installer) or 8 GB (for a graphical mode installer)
- one drive for the target, the final installed operating system (typically an internal drive, but it could also be connected via USB or eSATA). A 4 GB USB pendrive will work for a small portable system. A 16 GB USB 3 pendrive will make a good portable system. Any internal drive from 4 GB will work with the small operating system Lubuntu, but 8 GB or more is recommended, and will work with all desktop flavours of Ubuntu and many other linux operating systems, that are portable when installed. See this link

<http://help.ubuntu.com/community/Installation/FromUSBStick#Prerequisites>

This method does not work from optical devices (CD/DVD). It is not an option for really old hardware unless you boot the computer with Plop, and select USB (in complicated cases via alt + u), or boot from one internal drive and install to the other one. The following link describes the Plop boot managers and how to download one of them.

<http://www.plop.at/en/bootmanagers.html>

So if the computer has USB but cannot boot from it, download a Plop boot manager, and make a boot CD from the iso file. If the computer has no USB port or cannot boot from floppy, CD or DVD, use two (internal) hard disk drives, boot from one of them and install to the other one.

**b. Backup all personal data before trying this method because the target drive will be overwritten**

### c. Basic and advanced OBI level

Most users are recommended to use the **basic** OBI level. This means that the OBI will **install a system from a tarball into a whole device**, typically an internal hard disk drive or a USB 3 pendrive. It is easy and takes only a few minutes to install a system at the basic OBI level.

The advanced level opens the door to dual boot (mainly for internal disks) and a first FAT32 partition for access from Windows (for USB pendrives). In the advanced level the OBI will let you **select the partitions**. It means that you can install a system from a tarball into two partitions, one root file system partition and one swap partition. This way it is possible to create a **dual boot** device with an existing (already installed) operating system. It is also possible to create a separate **data partition** with an NTFS or FAT32 file system, that can be used by linux as well as Windows.

The intention with the advanced level is to edit and create partitions with **Gparted** (booted from a 'regular' boot CD/DVD/USB device). One partition is labelled 'obi-root' and one (smaller) partition is labelled 'obi-swap'. Such partitions can be identified and selected automatically in the advanced level, but manual selection is also possible.

Editing partitions is risky (so you need a good backup) and it takes long time (hours) to shrink an existing partition with a lot of data (Windows), so that there will be space for new partitions.

### d. Check very carefully which drive is the USB drive,

which is done automatically, if you use **mkusb** in linux. In Windows the file browser **Explorer** can help identify the USB drive intended to be the target. Normally **win32diskimager** will only select USB drives, which makes it easy, if you have no other USB drives connected. But please check anyway!

```
sudo fdisk -lu
sudo parted -l
```

### e. Download and check the files

Select one of the compressed image files (where **xx** = *version x 10* )

```
dd_blank-obi_4GB_xx_text.img.xz
dd_blank-obi_7.8GB_xx_LubuntuTrusty.img.xz
```

and at least one of the tarballs (check for new tarballs at the websites for downloading).

**User: guru, Password: changeme** if nothing else is stated, except for the One Button Installer itself, that comes with **User: myself, Password: 123456**

```

Bento12.04.04-oem0.tar.xz          # in OEM mode, password: 123456
Bento12.04.04-oem1.tar.xz          # OEM: ready for the end user
Bento12.04.04.tar.xz                # user: guru, password: changeme
Bento2ToriAlpha1.tar.xz
bodhi-230-nonpae.tar.xz
GnomeClassic1204-oem.tar.xz        # in OEM mode, password: changeme
GnomeClassic1204.tar.xz
Kubuntu_13.10oem-nov23.tar.xz      # OEM: ready for the end user
KubuntuPrecise.tar.xz
lubuntu-10.04.tar.gz  # good for old systems but past end of life of desktop packages
Lubuntu_13.10oct18-tweaked.tar.xz  # user: guru, password: changeme
Lubuntu_13.10oct30.tar.xz          # OEM: ready for the end user
Lubuntu_13.10oem-oct28-tweaked.tar.xz # in OEM mode, password: changeme
Lubuntu_13.10oem-oct30.tar.xz      # in OEM mode, password: changeme
Lubuntu_14.04oem-npae.tar.xz       # in OEM mode, password: 123456
Lubuntu_14.04_eu-npae.tar.xz       # OEM: ready for the end user
Lubuntu_14.04oem-npae5.tar.xz      # in OEM mode, password: 123456
LubuntuCoreSaucy.tar.xz
LubuntuTrusty-oem-feb12.tar.xz     # OEM: ready for the end user
lxle-2013-08-19.tar.xz             # tweaked, old, possible to update/upgrade
lxle32-12.04.4-oem0.tar.gz         # in OEM mode, password: 123456
lxle32-12.04.4-oem1.tar.gz         # OEM: ready for the end user
OBI_noswap_07.tar.gz
OBI_noswap_10.tar.xz
OBI_noswap_11.tar.xz
OBI_noswap_12.tar.xz
OBI_noswap_23_LubuntuSaucy.tar.xz
OBI_noswap_23_text.tar.xz
OBI_noswap_25_LubuntuTrusty.tar.xz
Trusty-nonpae-txt5.tar.xz          # user: guru, password: changeme
ubuntu-10.04.tar.gz  # good for old systems but past end of life of desktop packages
Ubuntu_13.10oem-nov22.tar.xz       # OEM: ready for the end user
Ubuntu_Gnome_13.10oem-nov25.tar.xz # OEM: ready for the end user
Xubuntu_13.10oem-nov22.tar.xz      # OEM: ready for the end user
xubuntu-precise.tar.xz
XubuntuTrusty-oem-feb13.tar.xz     # OEM: ready for the end user

```

Plus

mkusb and md5sums.txt.asc

from either phillw.net with a complete set of files or google drive with selected files

<http://phillw.net/isos/one-button-installer/>

<https://drive.google.com/folderview?id=0BzX-18u3W1sQVkpDUlgxS2FORkE&usp=sharing>

Check the signature of the file `md5sums.txt.asc` according to this link.

<http://ubuntuforums.org/showthread.php?t=2151890>

The One Button Installer can manage `xz` files as well as `gz` files. The `xz` files are compressed with `xz` and often more than 20% smaller compared to `gz` files (compressed with `gzip`).

## f.1 Install `pv`, check download and clone image in Linux

### 1. Install `pv` to monitor the progress of data through a pipe

```
sudo apt-get install pv
```

`pv` shows a progress bar, data piped, time used and time left. We tell it the amount of data to be expected (4 GB, or exactly 3999268864 bytes).

### 2. Change directory to where you have the downloaded files.

### 3. Check that the download was successful with `md5sum`

```
md5sum dd_blank-obi_7.8GB_25_LubuntuTrusty.img.xz
...
md5sum mkusb
```

`mkusb` can be recommended instead of the tasks 5-7.

### 4. Use `mkusb` to install the One Button Installer

This helps you find the correct target drive and avoid the risk with `dd`.

Make `mkusb` executable

```
sudo chmod ugo+x mkusb
```

The shell-script `mkusb` is described at the Ubuntu Forums tutorial

<http://ubuntuforums.org/showthread.php?t=1958073>

and it helps you write to the correct USB drive

```
./mkusb dd_blank-obi_7.8GB_25_LubuntuTrusty.img.xz
```

or with the smaller text-mode-installer

```
sudo ./mkusb dd_blank-obi_4GB_xx.img.xz
```

Usage:

```
sudo ./mkusb dd_blank-obi_4GB-xx.img.xz# copy and paste this command
```

```
sudo ./mkusb dd_blank-obi_4GB_xx.img.xz
```

The current version of **mkusb** uses a simple text based interface to help you select the correct target device. Nota bene, **mkusb** can monitor the data transfer with **pv**, and suggests that you install it, if not available. **pv** shows Mibibytes and **dd** shows Megabytes.

```
3,72GB 0:00:33 [ 113MB/s] [=====>] 100%
976384+0 poster in
976384+0 poster ut
3999268864 byte (4,0 GB) kopierade, 34,4289 s, 116 MB/s
```

**Alternative to mkusb: Install manually according to the tasks 5-7**

**5. Identify the device letter of the target drive `/dev/sdx` with the following commands**

```
sudo fdisk -lu
sudo parted -l
```

where ~~x~~ is the target drive. It should be a letter (no digit, because you are writing to the drive (or device), not to a partition). So for the first drive `/dev/sda`, for the second drive `/dev/sdb` ...

Triple check that it is the correct drive letter, so that you will write to the correct drive. **dd** is nicknamed 'disk destroyer' because it does what you tell it to do without any questions. The margin between miracle and catastrophe is very narrow.

**6. Make sure there is no mounted partition on the target drive.**

```
df
sudo umount /dev/sdxy
df
```

where ~~y~~ is the partition number (to be unmounted), for example `/dev/sda1` or `/dev/sdb5` ...

**7. Run the **zcat** command line as superuser**

You can cut and paste the commands from here to a terminal window

```
sudo -s          # enter superuser prompt
zcat dd_blank-obi_4GB.img.gz | pv -s 3999268864 | dd bs=4096 of=/dev/sdx
```

or

```
xzcat dd_blank-obi_4GB.img.xz | pv -s 3999268864 | dd bs=4096 of=/dev/sdx  
sync # and wait for the command prompt (while writing to the USB drive)  
exit # exit superuser prompt
```

where <sup>x</sup> is the target drive. It should be a letter (no digit, because you are writing to the drive (or device), not to a partition). So for the first drive of=/dev/sda, for the second drive of=/dev/sdb ...

Triple check that it is the correct drive letter, so that you will write to the correct drive. dd is nicknamed 'disk destroyer' because it does what you tell it to do without any questions. The margin between miracle and catastrophe is very narrow.

## f.2 Check download and clone image in Windows

Download and install the following help programs

<http://www.md5summer.org>

<http://www.7-zip.org>

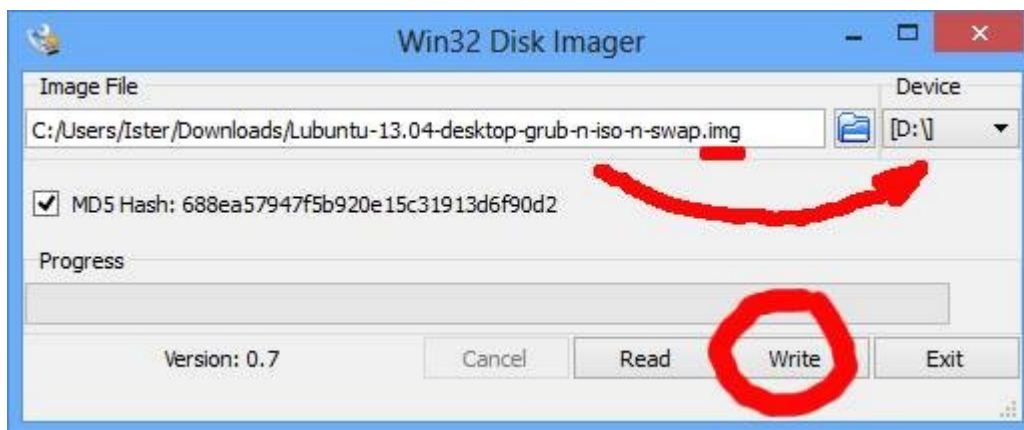
<http://sourceforge.net/projects/win32diskimager>

First check that the download was successful with **md5summer** according to the file **md5sums.txt.asc**

Next extract the image file with **7-zip** (It is also possible with **winzip**)

from **dd\_blank-obi\_4GB\_xx.img.xz** to **dd\_blank-obi\_4GB\_xx.img**

Then write the extracted image file (without the ending gz) with **win32diskimager** according to the picture. Win32diskimager looks for **img** files (Don't mind that the picture was made with another img file).



## g. Download or copy the tarballs to the One Button Installer

***If you have not downloaded any tarball yet, you can do it with the download option at the main menu of the One Button Installer.*** This can be quite convenient, if the internet connection is good. You can download tarballs to the OBI when booted on any i386/amd64/bios machine, which is an advantage, if there is no wired connection to the target machine (where you intend to install the system from the tarball).

Otherwise you can download one or more tarballs using a standard browser and copy to the One Button Installer afterwards. Let us say you have downloaded some [extra] tarballs. Now it is time to copy them to the `/tarballs` directory of the One Button Installer. Do that by mounting its first partition. Manually, it looks like this.

```
sudo mount /dev/sdx1 /mnt
```

where ~~x~~ is the device (drive) letter of the One Button Installer, and copy

```
cp -p *.tar.xz /mnt/tarballs
```

or if problems with the permissions

```
sudo cp -p *.tar.xz /mnt/tarballs
```

If you mount it with a file browser, or auto-mount it, you can expect it to be mounted to

`/media/OneButtonInstall` or `/media/'your-user-ID'/OneButtonInstall`. So copy the tarballs (for example with the file browser) to

```
/media/OneButtonInstall/tarballs
```

or

```
/media/$USER/OneButtonInstall/tarballs
```

You cannot do the corresponding thing with Windows Explorer because it cannot mount the linux partition, but ...

You can copy the tarballs after booting the computer from the One Button Installer. Quit the starter menu to the bash shell. Then you should mount the partition with the tarballs and copy from there to the `tarballs` directory in the home directory (symbolic link) or in the root directory

```
/tarballs
```

or get them via the network with **sftp**, **wget** or **lynx** [also started from the bash shell].

## h. Slide-show

Download the pictures from

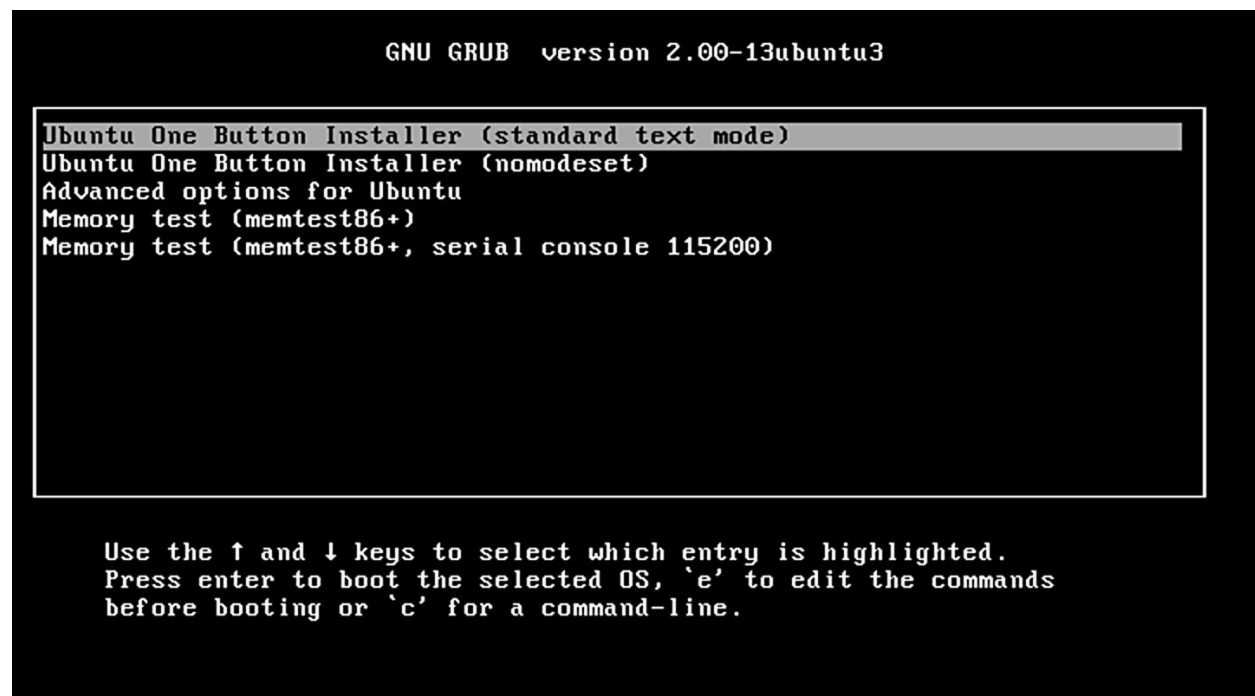
<http://drive.google.com/folderview?id=0BzX-18u3W1sQbIBTYXNacGVsVkk&usp=sharing>

and view them as a slide-show to see what it looks like to run the One Button Installer.

## i. The One Button Installer

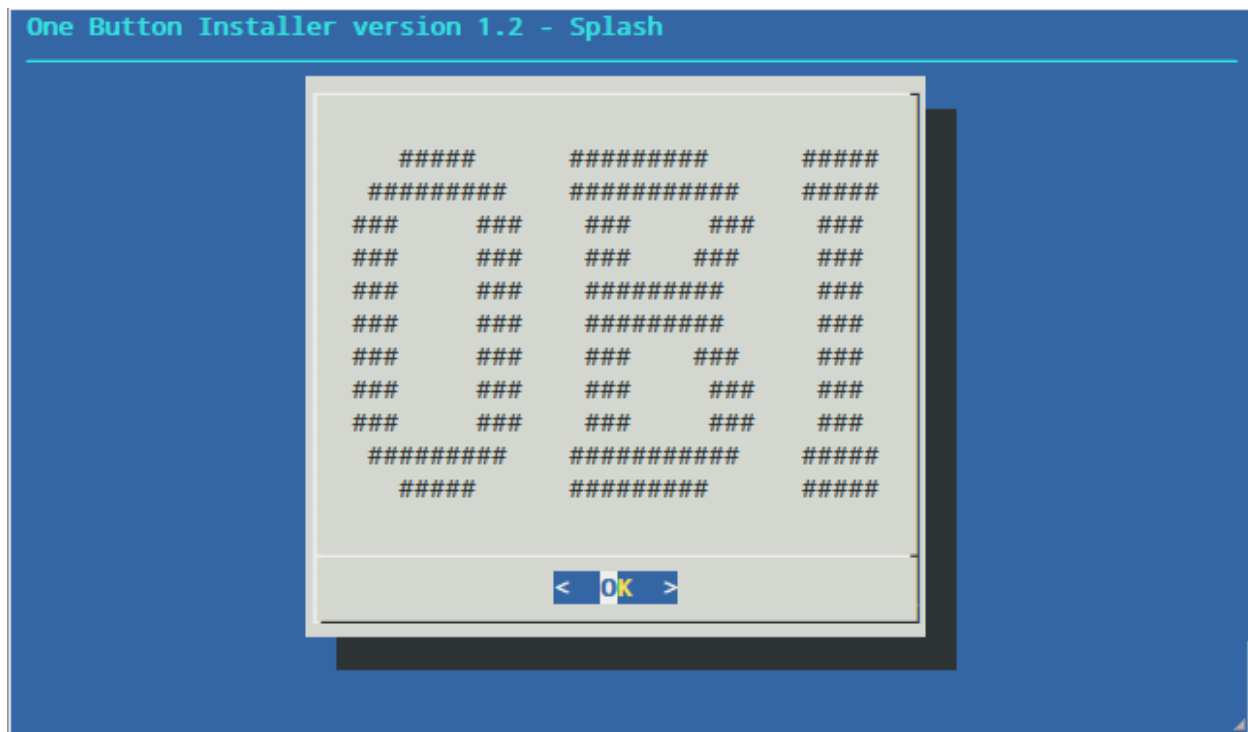
Now you have made the boot drive, that will start the One Button Installer, so you can insert it into the computer, where you want to install your new operating system. You may need Plop to make it boot a really old computer.

First you see the grub2 menu, where you can select **nomodeset**, if there are problems with the standard mode.

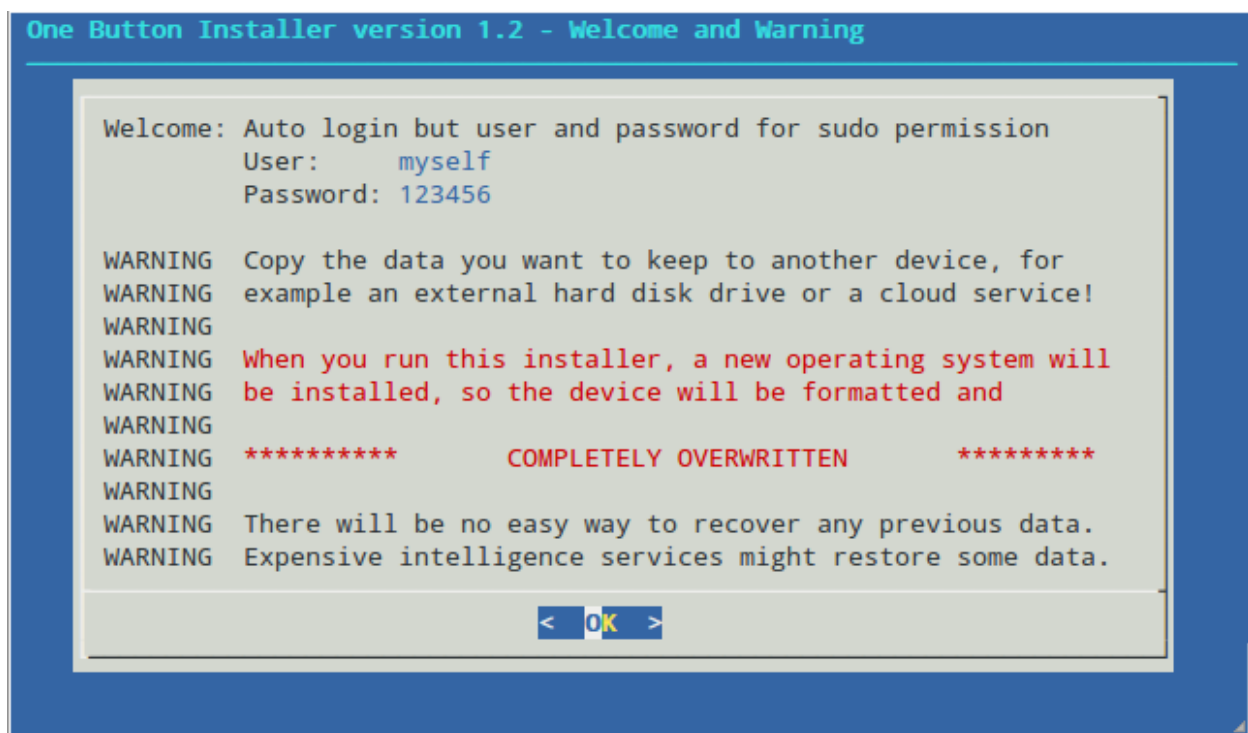


The small starter script is logged into automatically after a while (depending on the speed of the computer). First there is a splash screen





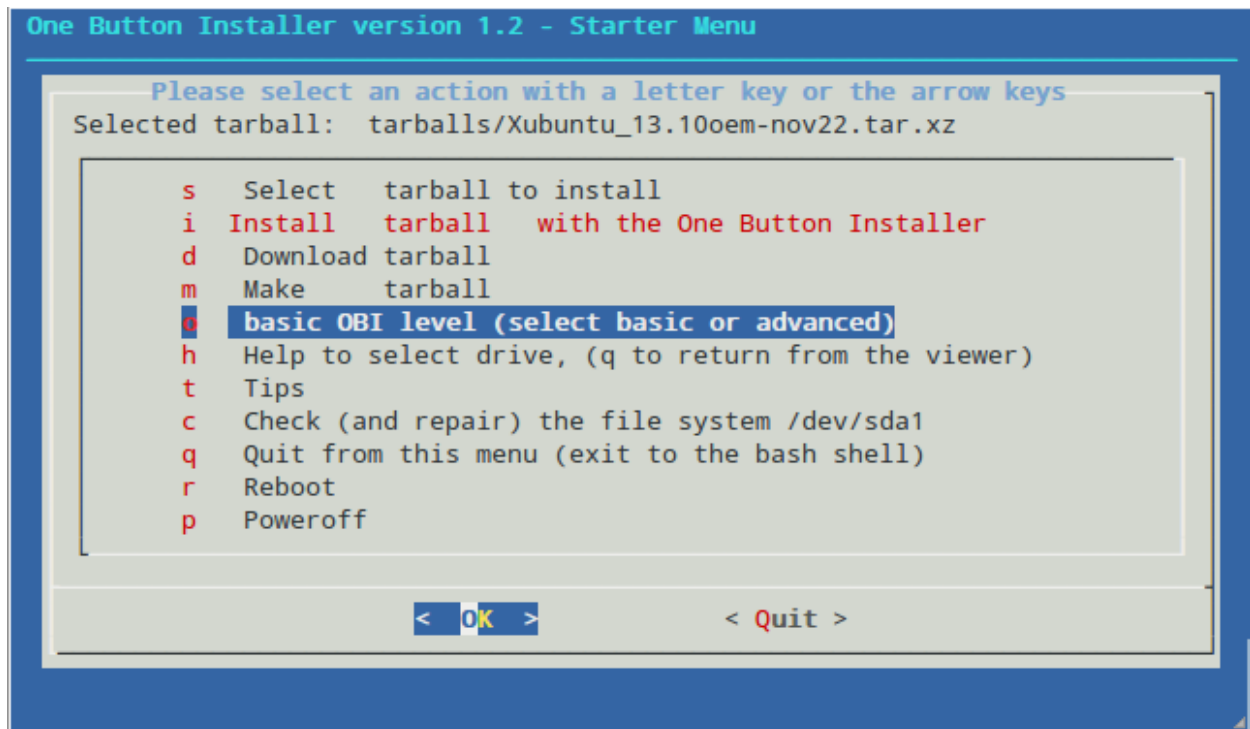
and then there is a welcome, warning and password screen.



Auto login but user and password

User: myself  
Password: 123456

**Be warned and avoid overwriting data you want to save!** Enter the password (123456 unless you change it), and arrive at the starter menu.

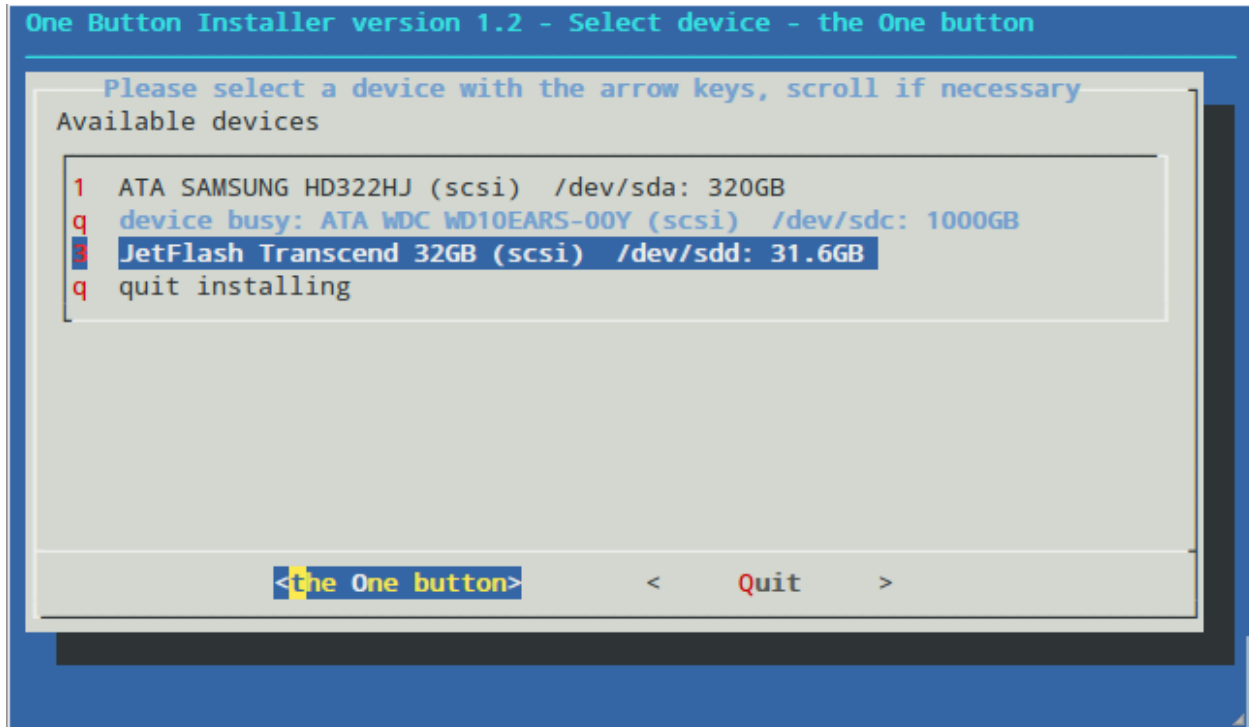


Use the arrow keys, PageUp and PageDn to navigate and the red letters at the left of the menu as hotkeys.

1. If you want to **download a tarball**, press **d** and the enter key. If there is a good internet connection to the server phillw.net, you will get a current list of tarballs to download. Select one with the arrow keys and press the enter key to start the downloading.
2. If you have made a system that you want to backup or port, **make a tarball** (press **m** and the enter key). Advanced options must be run from the bash shell, **quit** from this menu (press **q** and the enter key), and use the shell-script **mktb1**
3. **Select tarball** (press **s** and the enter key) -- normally you would 'select tarballs in the standard directory', that finds the tarballs in the directory /tarballs (linked to ~/tarballs).
4. If you are not sure what is in the computer, use the '**help to select drive**' (so press **h** and the enter key)

5. **Basic OBI level** – Now you can *install* the new operating system from the selected tarball (press *i* and the enter key) and follow the instructions.

You will be prompted to confirm that you want to install the selected system, and then there is a screen with an overview of the devices in the computer. After that you arrive at the meny where to select the target device and accept it with '**the One button**'.



**And here is the really important button. Press the enter key to go with the high-lighted choice!** If there are more than one feasible choice, you can select another device with its number in the list or the arrow keys (and press enter, when you have the right choice).

By inserting another USB drive there will be a choice between the internal drive and the added USB drive. This is typical when you intend to make a portable system.

There is also a screen with a **FINAL WARNING** before the installation starts.

```
...
pv /home/myself/tarballs/Xubuntu_13.10oem-nov22.tar.xz | tar -xJ
 661MB 0:2:34 [4.27MB/s] [=====>] 100%
the tarball Xubuntu_13.10oem-nov22.tar.xz is expanded, syncing the drive ...
...
-----
The installation of Xubuntu_13.10oem-nov22 to /dev/sdc has finished
```

Now you can shut down the computer and remove the installation media (typically a USB drive) and boot the computer from the installed system.

and the starter screen comes back. You should be ready to **poweroff**, remove the install drive and restart the computer with the new operating system.

6. **Advanced OBI level** – Select OBI level at the starter menu.

A. **Boot the computer from a CD/DVD/USB boot drive with a graphics user interface and run the program Gparted** in order to edit the partitions. Ubuntu flavour desktop iso files come with Gparted.

B. *Examples*

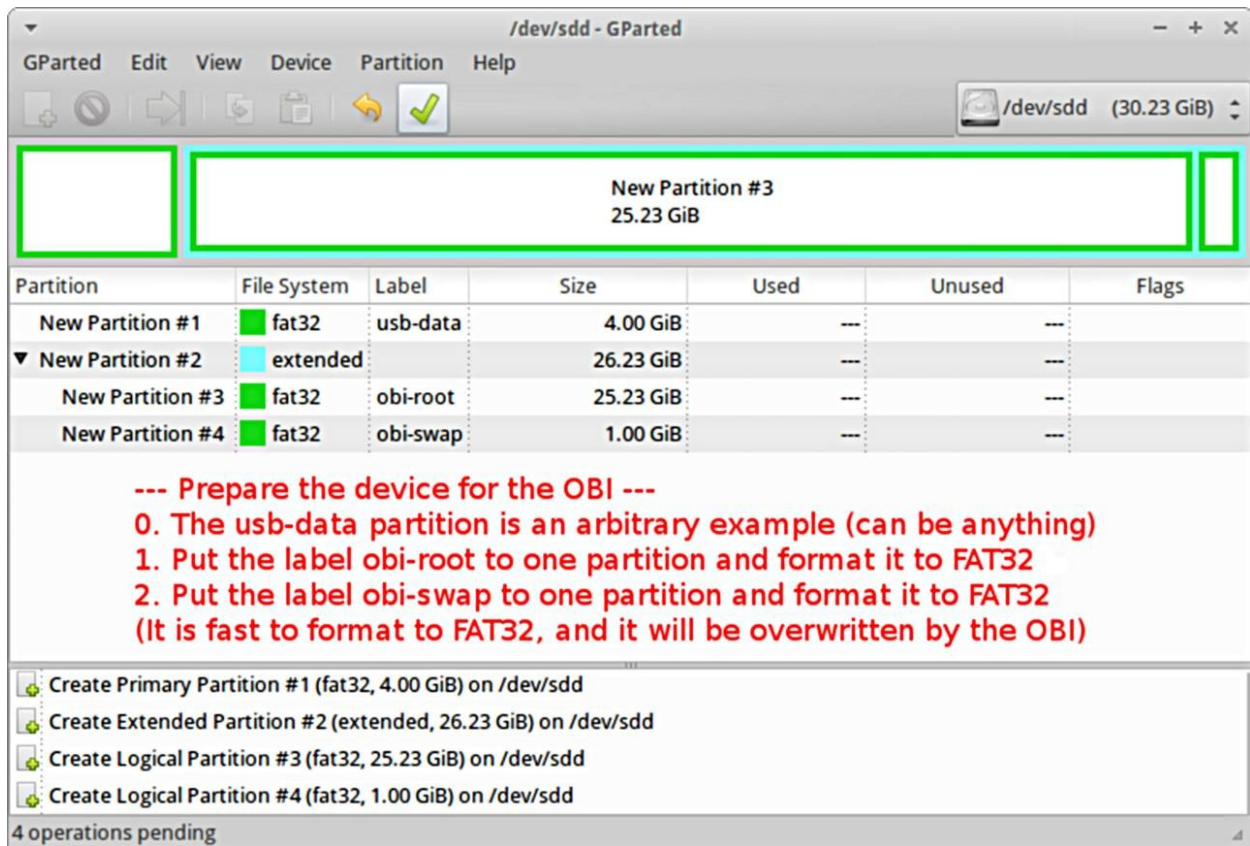
B1. **Make a USB drive with three FAT32 partitions.** If a data partition compatible with Windows is to be created, put it at the beginning of the drive. Then make an extended partition of the remaining space, and create two logical partitions, a big one for the root file system and a small one for swapping. Add the labels 'obi-root' and 'obi-swap' to the logical partitions. You can **skip the swap partition for pendrives** (and the OBI will create a system without swap). The labels will be used by the OBI to select the partitions automatically. The file systems of the root and swap partitions will be overwritten by the OBI. Click the tick symbol to perform the actions.

B2. **Make a dual boot system with Windows Vista.** There are probably two partitions. The main Windows partition must be **resized** (made smaller) to create space for linux. Windows needs about 20% free space to work well. **Eight GB would be minimum size for linux, but at least 20 GB would be recommended.**

B3. **Make a dual boot system with Windows 7.** Assuming there is an MSDOS partition table and four primary partitions, you must **delete one partition**. In HP computers, it is recommended to copy the content of the **HP-tools partition** to some other location (in the Windows partition or an external drive), and delete that partition.

But **HP-tools** is small, and you need to **resize the main Windows partition**. Make it smaller to create space for linux. Windows needs about 20% free space to work well. **Eight GB would be minimum size for linux, but at least 20 GB would be recommended.**

B2 and B3 (continued). **Create an extended partition and two logical partitions**, a big one for the root file system and a small one for swapping. Add the labels 'obi-root' and 'obi-swap' to the logical partitions. **If you intend to hibernate, the swap should be at least the same size as the RAM** (in GiBibytes). Otherwise it can be smaller, maybe 512 MB or 1 GB.



The labels will be used by the OBI to select the partitions automatically. It is fast to format to FAT32, and the file systems of the root and swap partitions will be overwritten by the OBI. Click the tick symbol to perform the actions.

B1 – B3 (alternate). If it is hard to run a graphical desktop because the computer is very old or the graphics not compatible, it is possible to use a command line partitioning tool, for example parted, fdisk or cfdisk. But these tools are more difficult to use compared to gparted.

B4. **Make a dual boot system with Windows 8.** Assuming there is an UEFI system, you cannot use the One Button Installer. Make a CD/DVD/USB boot drive from a **64-bit Ubuntu flavour desktop iso file** and install from that. Use Boot-Repair to help make the system work.

<https://help.ubuntu.com/community/Boot-Repair>

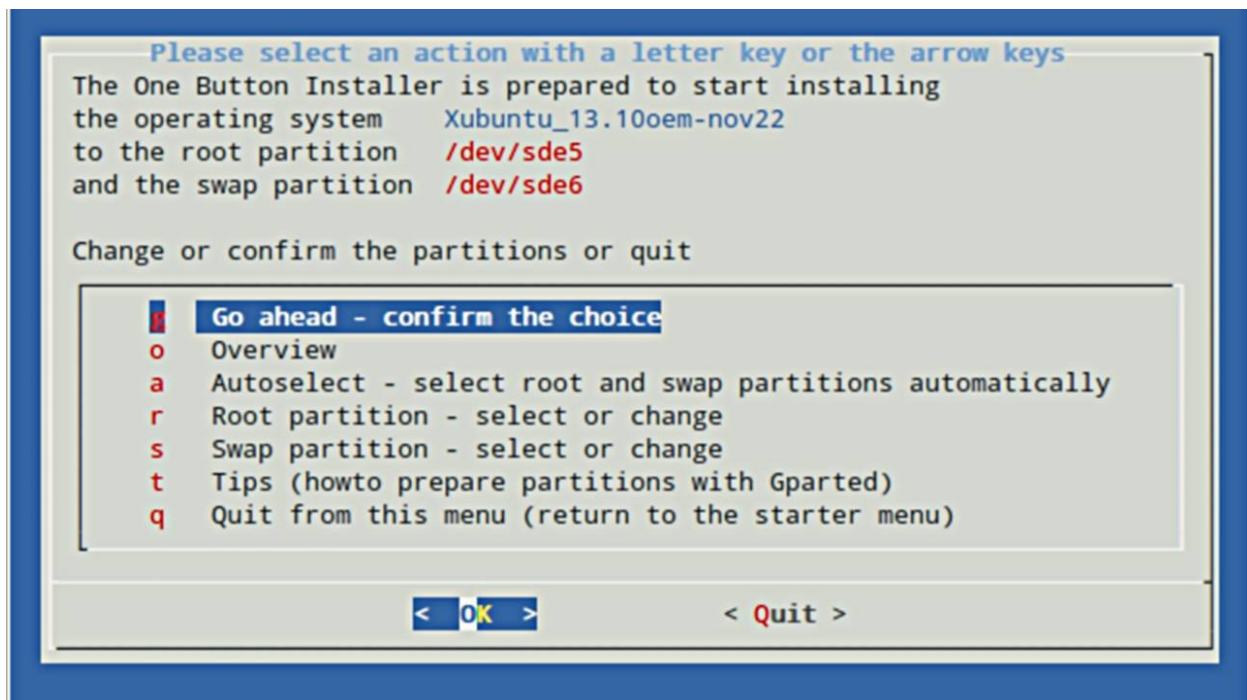
C. **Boot the computer from USB boot drive with the One Button Installer.**

D. Select **advanced OBI level** at the starter menu, **install** and arrive at the 'confirm partition' menu.

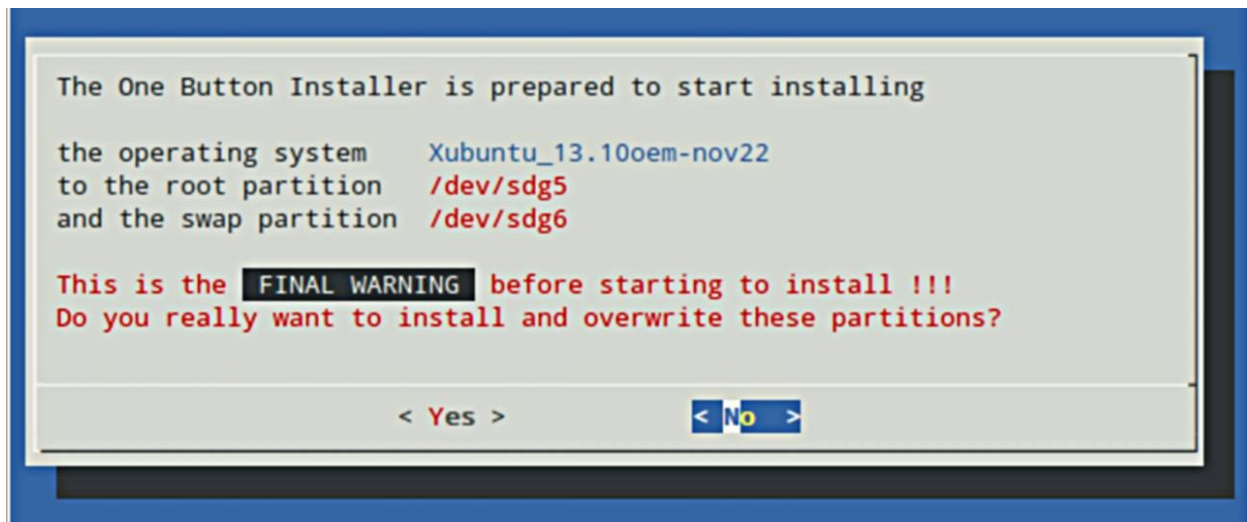
E1. If you have prepared partitions with labels 'obi-root' (and 'obi-swap'), you can 'Go ahead' and install directly, because the OBI identifies and selects those partitions.

E2. You can always ***select the root partition and an optional swap partition manually***. You arrive at menus, where the available partitions are printed with **black** letters. The current selections are indicated with **\*ROOT** and **\*SWAP**. If the selected partition for swap is already a swap partition, it is not changed, so it can be shared with other linux systems (new from v. 2.3)

After you have selected the root partition it is possible to 'Go ahead' and install.



F. There is also a screen with a **FINAL WARNING** before the installation starts.





Menu to select root partition

Select the Root partition with the arrow keys, scroll if necessary  
Available partitions black (set basic OBI level to select a device)

^( - )

Partition	Start	End	Size	Type	FSys	Label
/dev/sda1	32.3kB	85.9GB	85.9GB	prim	ntfs	win8dp
/dev/sda2	85.9GB	155GB	68.7GB	prim	ext4	precise64
/dev/sda5	155GB	163GB	8598MB	logic	swap	
/dev/sda6	163GB	198GB	34.4GB	logic	ext4	studio
/dev/sda7	198GB	213GB	15.0GB	logic	ext3	lfs
/dev/sda8	213GB	320GB	107GB	logic	ntfs	windata

Model ATA OCZ-AGILITY3 (scsi)

b Booted from device /dev/sdb: 60.0GB \*\*\*LIVE\*\*\*

Partition	Start	End	Size	Type	FSys	Label
/dev/sdb1	1049kB	3999MB	3998MB	prim	ext4	123ButtonInstall
/dev/sdb2	5370MB	15.5GB	10.1GB	prim	ext3	usb3-os
/dev/sdb3	15.5GB	15.8GB	341MB	prim	n.a.	

MOUNTD:b5 15.8GB 60.0GB 44.2GB logic ext4 ssd-grund \*SYSTEM

Model ATA WDC WD10EARS-00Y (scsi)

c Device /dev/sdc: 1000GB

Partition	Start	End	Size	Type	FSys	Label
/dev/sdc1	49.4MB	53.7GB	53.7GB	prim	ntfs	winxp
/dev/sdc5	53.7GB	75.2GB	21.5GB	logic	ext4	studio12.04
/dev/sdc6	75.2GB	83.8GB	8598MB	logic	swap	

MOUNTD:c7 83.8GB 1000GB 916GB logic ext3 multimed-2 \*MOUNTED

Model JetFlash Transcend 32GB (scsi)

d Device /dev/sdd: 31.6GB

Partition	Start	End	Size	Type	FSys	Label
/dev/sdd1	1049kB	3999MB	3998MB	primary	ext4	OneButtonInstall

e Device /dev/sde: 32.0 GB - no (wiped?) or bad partition table

Model SanDisk Cruzer Blade (scsi)

f Device /dev/sdf: 4005MB

Partition	Start	End	Size	Type	FSys	Label
ISOSYS:f1	32.8kB	685MB	685MB	prim	iso9660	Lubuntu 13.04 i386

Model JetFlash Transcend 32GB (scsi)

g Device /dev/sdg: 32.5GB

Partition	Start	End	Size	Type	FSys	Label
/dev/sdg1	1049kB	4296MB	4295MB	prim	fat32	usb-data
/dev/sdg5	4297MB	31.4GB	27.1GB	logic	fat32	obi-root *ROOT

v( + )

90%

<Root partition> < Quit >



Menu to select swap partition

Select the Swap partition with the arrow keys, scroll if necessary  
Available partitions black (set basic OBI level to select a device)

^( - )

/dev/sda1	32.3kB	85.9GB	85.9GB	prim	ntfs	win8dp
/dev/sda2	85.9GB	155GB	68.7GB	prim	ext4	precise64
/dev/sda5	155GB	163GB	8598MB	logic	swap	
/dev/sda6	163GB	198GB	34.4GB	logic	ext4	studio
/dev/sda7	198GB	213GB	15.0GB	logic	ext3	lfs
/dev/sda8	213GB	320GB	107GB	logic	ntfs	windata
Model	ATA OCZ-AGILITY3 (scsi)					
b Booted	from device /dev/sdb: 60.0GB ***LIVE***					
Partition	Start	End	Size	Type	FSys	Label
/dev/sdb1	1049kB	3999MB	3998MB	prim	ext4	123ButtonInstall
/dev/sdb2	5370MB	15.5GB	10.1GB	prim	ext3	usb3-os
/dev/sdb3	15.5GB	15.8GB	341MB	prim	n.a.	
MOUNTD:b5	15.8GB	60.0GB	44.2GB	logic	ext4	ssd-grund *SYSTEM
Model	ATA WDC WD10EARS-00Y (scsi)					
c Device	/dev/sdc: 1000GB					
Partition	Start	End	Size	Type	FSys	Label
/dev/sdc1	49.4MB	53.7GB	53.7GB	prim	ntfs	winxp
/dev/sdc5	53.7GB	75.2GB	21.5GB	logic	ext4	studio12.04
/dev/sdc6	75.2GB	83.8GB	8598MB	logic	swap	
MOUNTD:c7	83.8GB	1000GB	916GB	logic	ext3	multimed-2 *MOUNTED
Model	JetFlash Transcend 32GB (scsi)					
d Device	/dev/sdd: 31.6GB					
Partition	Start	End	Size	Type	FSys	Label
/dev/sdd1	1049kB	3999MB	3998MB	primary	ext4	OneButtonInstall
e Device	/dev/sde: 32.0 GB - no (wiped?) or bad partition table					
Model	SanDisk Cruzer Blade (scsi)					
f Device	/dev/sdf: 4005MB					
Partition	Start	End	Size	Type	FSys	Label
ISOSYS:f1	32.8kB	685MB	685MB	prim	iso9660	Lubuntu 13.04 i386
Model	JetFlash Transcend 32GB (scsi)					
g Device	/dev/sdg: 32.5GB					
Partition	Start	End	Size	Type	FSys	Label
/dev/sdg1	1049kB	4296MB	4295MB	prim	fat32	usb-data
/dev/sdg5	4297MB	31.4GB	27.1GB	logic	fat32	obi-root *ROOT
/dev/sdg6	31.4GB	32.5GB	1074MB	logic	fat32	obi-swap *SWAP

v( + )

90%

< Swap partition > Quit >

## j. The installed system

### *The old style:*

The original installed systems are similar to the original version of Lubuntu 13.04, basically the same as in

<http://help.ubuntu.com/community/InstalledSystemFakePAE>

so the **username is guru** and the **password is changeme**. You should change the password, but keep guru as the administrator user, and create new users instead of trying to change the name of guru. The original user can be the administrator's account.

### *The new style*

**Lubuntu\_13.10oct30.tar.xz** and the other 13.10 systems (except Lubuntu Core Saucy) are prepared for the end user (via the OEM procedure) and you will **select the user id and password after the installation**.

### *Computer name*

If several computers are to be run in the same LAN, you should create individual computer names (in `/etc/hosts` and `/etc/hostname`).

## k. Update and upgrade and install programs

like you would with any normal installed Ubuntu based system.

If you are creating a **dual boot** system at the advanced OBI level, it is time now to make the other operating system(s) available at boot. Run the following command

```
sudo update-grub
```

## l. Tweaks and extra application programs

These extra application packages are installed in **Lubuntu 13.04**:

fake-pae  
htop  
touchpad-indicator  
ubuntu-tweak

The icon on the panel between the battery and the network symbols is the touchpad-indicator. Click on it to switch the touchpad on/off.

## ***Ubuntu flavours of version 13.10 prepared via OEM***

These systems are Kubuntu, Lubuntu, Ubuntu, Ubuntu-Gnome and Xubuntu (32-bit) without any tweaks except the package language-selector-gnome in Ubuntu-Gnome to help installing a new language.

There are several **Lubuntu 13.10** tarballs. There are pure Lubuntu versions and tweaked versions.

Lubuntu_13.10oct30.tar.xz	is prepared for the end user (via the OEM procedure)
Lubuntu_13.10oem-oct30.tar.xz	is prepared for OEM tweaking ( <b>password changeme</b> )

Lubuntu_13.10oct18-tweaked.tar.xz	is installed with user guru, <b>password changeme</b>
Lubuntu_13.10oem-oct28-tweaked.tar.xz	is prepared for OEM tweaking ( <b>password changeme</b> )

The tweaked versions have a simple **TT** (touchpad-toggle), available from a terminal window. Touchpad-indicator is not yet offered for Saucy. A line can be activated in `/etc/fstab` to mount a floppy drive. The Xorg acceleration method is changed to UXA (which helps with old Intel graphics) in the version dated oct18.

Edit (or create) `/etc/X11/xorg.conf` as follows: (there should be a tab before each line except the first and the last).

```
Section "Device"
    Identifier "Intel Graphics"
    Driver "intel"
    Option "AccelMethod" "uxa"
EndSection
```

Lubuntu's standard zRAM is used. These packages are installed in the OEM version dated oct28 (and the list is almost the same for the version dated oct18).

### **OEM**

TT alias touchpad-toggle

alias rm='rm -i'

the grub menu is shown (not hidden in a single boot system)

lxterminal in autostart (for the OEM user)

changed permissions of `/media/oem` to improve access to automounted devices (for the OEM user)

alias l='ls -l' (for the OEM user)

template in `fstab` to uncomment for floppy

htop

fake-PAE  
wooden-wall (changed default wallpaper)  
ubuntu-tweak  
lubuntu-restricted-extras  
pulseaudio and pavucontrol

**LubuntuCoreSaucy** is made from the **mini.iso** and contains Lubuntu Core with only one extra package, network-manager, to provide a portable wired network.

Only these extra packages are installed in **Precise Gnome Classic Tweaks**:

fake-pae, ubuntu-restricted-extras

These extra application packages are installed in **Precise Gnome Classic Tweaks OEM** and **Xubuntu-precise** and **KubuntuPrecise**

fake-pae  
htop  
touchpad-toggle  
ubuntu-tweak  
kubuntu-restricted-extras (only KubuntuPrecise)  
TT (touchpad-toggle), and htop are available from a terminal window.

These extra application packages are installed in **LXLE** and available from a terminal window:

htop (installed in all versions)  
touchpad-toggle (installed only in lxle-2013-08-19.tar.xz)  
oem-config and oem-config-gtk (installed for OEM only in lxle32-12.04.4-oem{0,1}.tar.gz)

No extra application packages (except OEM) are installed in the updated LXLE tarballs

**lxle32-12.04.4-oem0.tar.gz**  
**lxle32-12.04.4-oem1.tar.gz**

These extra application packages are installed in **Bodhi**:

evince  
gpview  
htop  
libreoffice  
touchpad-indicator  
vlc

These extra packages are installed in **Bento-OEM**:

oem-config  
oem-config-gtk  
language-selector-gnome

This extra package is installed in **LubuntuTrusty-oem-feb12** and **XubuntuTrusty-oem-feb13**

fake-pae

Notice that these Trusty Tahr tarballs are made from daily builds of pre-beta versions.

The two flavours of **10.04 LTS** are offered for comparison for users, who hesitate to upgrade to a current version. It can be worthwhile testing drivers for hardware, speed and usage of RAM. I do not recommend using them for production, because they lack security updates of the desktop program packages (only the packages in common with Ubuntu Server have support until April 2015).

### **Lubuntu 14.04 LTS non-pae**

[https://help.ubuntu.com/community/OBI/Lubuntu\\_14.04\\_OEM-nonPAE](https://help.ubuntu.com/community/OBI/Lubuntu_14.04_OEM-nonPAE)  
[https://help.ubuntu.com/community/OBI/Lubuntu\\_14.04\\_EndUser-nonPAE](https://help.ubuntu.com/community/OBI/Lubuntu_14.04_EndUser-nonPAE)

```
Lubuntu_14.04oem-npae.tar.xz          # in OEM mode, password: 123456
Lubuntu_14.04_eu-npae.tar.xz         # OEM: ready for the end user

Lubuntu_14.04oem-npae5.tar.xz        # in OEM mode, password: 123456
```

- updated and dist-upgraded to July 7 2014 which means that nm-applet works without a tweak (so the tweak was removed)

- contains both non-pae and generic-pae kernels, the non-pae kernels are dated June 28 2014

[autostart]  
lxterminal

[aliases]  
alias TT='touchpad-toggle'  
alias l='ls -l --group-directories-first'  
alias rm='rm -i'

[programs]  
touchpad-toggle

## ***Trusty-nonpae-txt5***

**Trusty-nonpae-txt5.tar.xz**                      **# user: guru, password: changeme**

contains an Ubuntu minimal system with a non-pae kernel and text screen.  
It looks like the pictures in this link

[https://help.ubuntu.com/community/9w/ScreenShots#Example\\_of\\_installed\\_system](https://help.ubuntu.com/community/9w/ScreenShots#Example_of_installed_system)

You can install a graphical window manager or desktop environment from the installer menu.

- updated and dist-upgraded to July 5 2014
- contains a non-pae kernel dated June 28 2014
- boots to text-mode menus using dialog

[programs]  
dialog  
clean-myself.bash  
text-mode-menu  
text-mode-installer  
truncate-log

## **m. Install a new language**

The end user is given the opportunity to select language, but it will not be installed properly at the installation via the OEM dialogue (at least not Swedish, that I tested). But when the user selects (from the main menu in Lubuntu)

### ***Preferences--Language Support***

and installs the relevant language, it will work after the next reboot.

*The **Trusty** pre-beta versions need the **keyboard layout** to be set separately: 'add language' in Xubuntu and 'select input method' (and select your language) in Lubuntu.*

## **n. The mount options noatime and discard**

If the drive is a **hard disk drive**, use **no** mount options **noatime** or **discard** in **/etc/fstab**

An **SSD** should have **noatime** and can have **discard** in **/etc/fstab**

A **simple flash drive** (USB pendrive or flash card) should have **noatime** in **/etc/fstab**

## **o. The swap partition**

If on flash memory, this swap partition is only for rare peaks in memory usage. You are recommended to add a swap partition on an internal hard disk drive if swap will be used regularly. That HDD swap partition should be addressed in **/etc/fstab** instead of the one on the flash drive.

## **p. Observe the end of life of each version and flavour of Ubuntu**

Ubuntu and Kubuntu 12.04 LTS are supported until April 2017, and Xubuntu 12.04 LTS is supported until April 2015, but Lubuntu 12.04 has passed end of life. The whole version 13.04 has passed end of life and 13.10 passes end of life in July 2014.

Instead of running a version without support, ***please make a fresh installation of or upgrade to 14.04 LTS***, where Ubuntu and Kubuntu are supported until April 2019, Lubuntu and Xubuntu are supported until April 2017.

## **q. If you want to change the name of the computer and add a new user**

Changing the name of the computer should be easy. It is enough to edit **/etc/hostname** and **/etc/hosts**. But it is easier to create a new user instead of changing the existing user. **But don't remove the original one unless the new user is member of the sudo group and you have verified that it is able to perform system tasks.** This issue may arise for the systems, where the user guru is preinstalled.

## **r. Make tarball**

It is very easy to make your own tarballs. But as before, it requires a simple configuration, only one partition for the system and one for swap. Run mktbl from the shell if you want something more advanced than the default.

The One Button Installer comes with tarballs to install from, but you can make your own tarballs.

- Install a system and tweak it until you are satisfied!
- Avoid personal files and proprietary drives!
- Then you can simply make a tarball of the system, and the One Button Installer can use that tarball to install it into other computers.

```

$ sudo ./mktbl
-----
Usage:  sudo ./mktbl [source-partition] [compression] [filename]
Default: sudo ./mktbl /dev/sda1 xz ball
The file extension tar.xz or tar.gz is added automatically
Example: sudo ./mktbl /dev/sdb5 gzip myversion-123
Run from bash if not default
-----
The default is xz compression because it is often 20% or more
efficient (smaller files) compared to gzip for gz files.
-----
Run sudo ./mktbl to make a tarball of the files in /dev/sda1
You may need to delete some existing tarballs,
'*.tar.gz' and '*.tar.xz' from the home directory
to make space for the new tarball
ls: cannot access /tarballs/*.tar.[gx]z: No such file or directory
These main commands are prepared:
mount /dev/sda1 /mnt
cd /mnt
tar -cvJf /tarballs/ball.tar.xz .
Do you want to continue? (y/n)

```

## s. One Button Installer on an arbitrary drive size

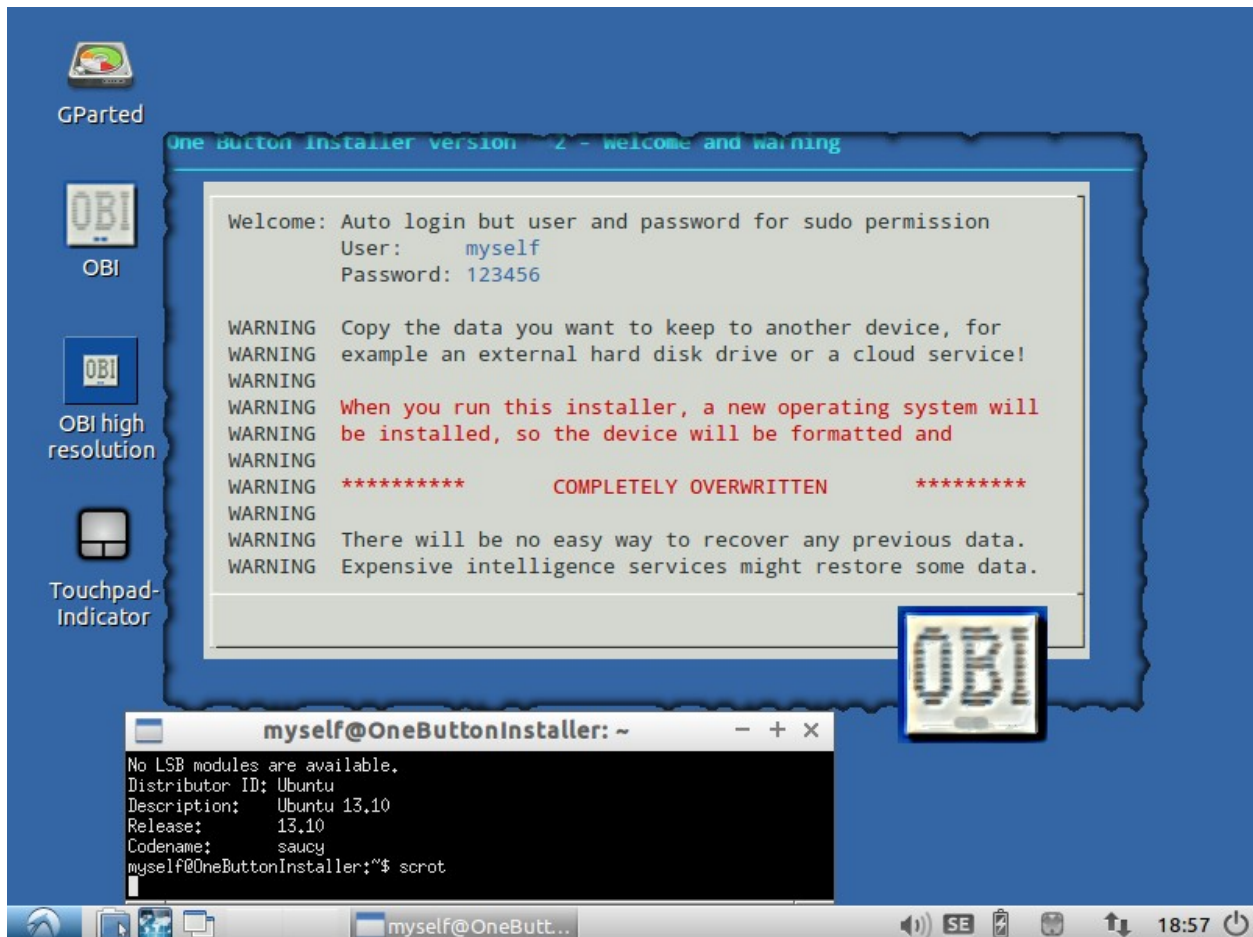
There is also a possibility to install (as a second step) the OBI to a bigger drive and use all of it: for example a big USB pendrive (16GB or 32GB), or an external HDD or SSD (connected via USB or eSATA). This means that it can contain a rather big library of tarballs, or big tarballs, and can be used either to install from a *large selection of tarballs, or to make and store backups* as tarballs.

You can increase the size of the partition with **gparted** or download the following tarball and copy it to the **/tarballs** directory and install the OBI to a bigger drive.

**OneButtonInstaller\_blank-noswap\_xx.tar.xz**



## t. One Button Installer with graphical desktop environment



Starting with version 2.2 there are different flavours of the OBI.

### 1. The original text mode flavour, expanded from a compressed image file to 4 GB.

No major changes compared to version 1.2 are visible during normal usage. The basic operating system is upgraded from (Ubuntu mini iso) 13.04 to 13.10, and there are a number of bug fixes plus some modifications (that are mainly useful in the graphical flavour). This is the best option for very old or small systems, where it is important to keep the foot-print of the One Button Installer as small as possible. It is also the best option for the basic OBI level.

### 2. The graphical DE flavour, expanded from compressed image files to 7.8 GB.

The main reason for this flavour is to provide **a unified desktop environment (DE) to edit partitions with gparted and install an operating system with the OBI scripts** from a tarball at the advanced OBI level. There are desktop launchers for the standard tasks (including one to

turn off the touchpad to avoid running commands by mistake) and the help documents are available in the folder Documents.

No major changes compared to version 1.2 are made to the One Button Installer scripts, but there are a number of bug fixes plus some modifications mainly for running in the graphical desktop environment.

Lubuntu 14.04 LTS is the basic operating system for this flavour of the OBI from version 2.5.

## u. Note about portability

Tarballs made with the OBI based on Ubuntu 13.04 and 13.10 are portable between these versions, but the tarballs are not portable to and from Ubuntu 12.04 LTS 'Precise'. The [OBI-9w](#) installer has another tarball format and the tarballs are not portable between the standard OBI and the OBI-9w.

## v. 'floppy-off' when the One Button Installer is very slow

This tweak helps, when `blkid` and `fdisk -lu` are very slow

<http://unix.stackexchange.com/questions/53513/linux-disable-dev-fd0-floppy>

On Ubuntu, the floppy driver is loaded as a module. You can blacklist this module so it doesn't get loaded:

```
echo "blacklist floppy" | sudo tee /etc/modprobe.d/blacklist-floppy.conf
sudo rmmod floppy
sudo update-initramfs -u
```

Immediately and upon rebooting, the floppy driver should be banished for good.

## w. Non-pae versions for very old computers in 14.04 LTS

If you are running in a computer with a Celeron M or Pentium M CPU, you need not install fake-PAE, instead you can use the boot option **forcepae** in 14.04 LTS.

There is also a non-pae version of the OBI, there is the [OBI-9w ISO file installer](#) and there are non-pae tarballs. See this wiki page describing how to use the 9w installer.

<https://help.ubuntu.com/community/9w>