

# CamTrace

**videosurveillance**

## Installation on a new machine

**For CT-Server : V9.16.x**

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For further information :

[www.camtrace.com](http://www.camtrace.com)

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# 1 Lexicon

**CT-Server** : CamTrace Server.

**Data disk** : disk used for data (recordings of cameras). It is often a hard disk (with or without RAID).

**System disk** : disk used for the OS. We recommend using SSD.

## 2 Purpose of the document

This document explains how to install CamTrace on a bare machine.

**If you have a server on which CamTrace has already been installed**, it is not necessary to read this document. You can start the setup process by reading the '**QuickSetup Guide**' found on the Camtrace website ('Resources' link, then '*Technical Documents*').

## 3 Preparing the CT-Server ISO image

The objective of this chapter is to transform a bare machine (without OS) into a CT-Server. The installation can be done on a physical machine or on a virtual machine.

### 3.1 USB KEY SPECIFICATIONS

Use a **good quality** USB key with a minimum size of 8 GB and a maximum size of 32 GB.

### 3.2 DOWNLOADING THE CT-SERVER ISO IMAGE

The ISO images of the CT-Server can be found on our FTP, accessible at :

Host : <ftp.camtrace.com>

Id : **camtrace**

Password : *Please send us email at 'contact@camtrace.com'.*

Port : **21**

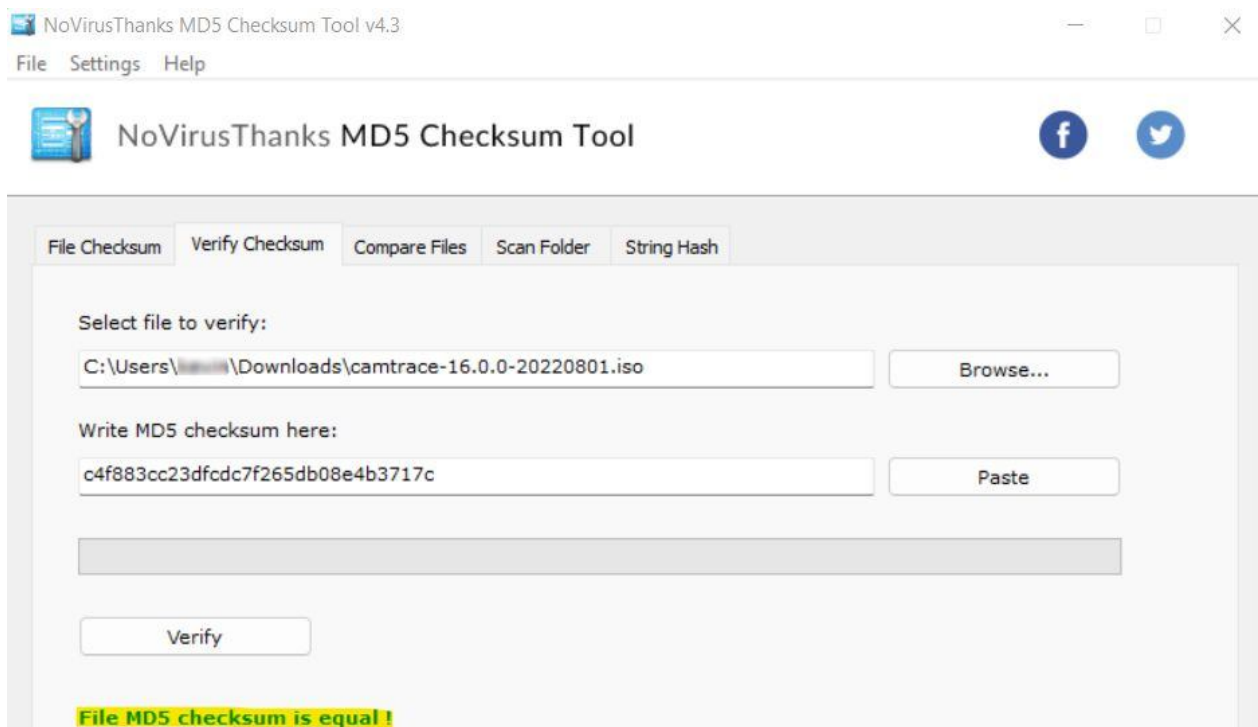
Path : **"/CamTrace\_VMS/Iso/V9/"**.

Download the ISO image **and the MD5 checksum**.

### 3.3 DOWNLOADING THE ISO BURNING TOOL

Download a software to burn the ISO image (e.g. [Rufus](#)) on USB key.

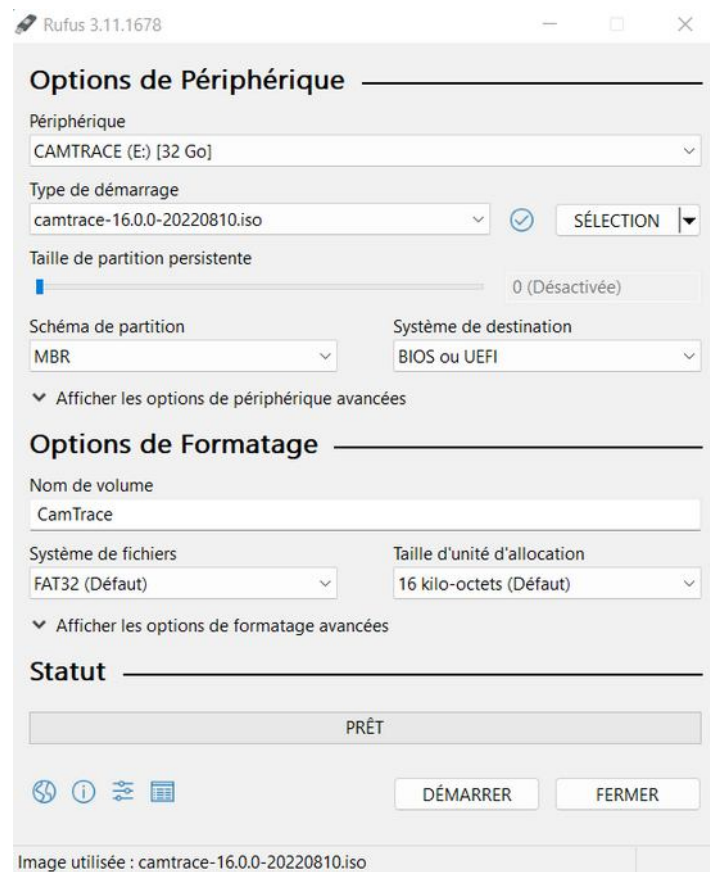
**Important:** Check the MD5 sum with one of the many MD5 checksum software (e.g. [MD5 Checksum Tool](#)). The MD5 is a crucial operation and it only takes a few seconds. If you do not check the MD5, **you might install a CT-Server using a corrupted ISO image.**



### 3.4 BURNING THE ISO IMAGE ON USB KEY

Launch the ISO burning software.

Select the ISO image, the USB key, and the following parameters :



Burning the ISO image on a USB key **will delete all data** located in the USB key.

## 4 Installation preparation

### 4.1 COMPATIBLE HARDWARE

Make sure you have compatible hardware before starting the installation from the USB key.

CamTrace is installed on a server machine with the following minimum requirements

- An x86 64bit 3 GHz processor,
- 16 GB of RAM,
- A hard disk for the OS of at least 256 GB; preferably an SSD (this disk will be called '**System disk**'),
- An independent data disk or RAID (this disk will be called '**Data disk**').
- A USB port,
- A gigabit Ethernet network port (two ports recommended).
- Keyboard, mouse, screen.

## 4.2 BIOS SETTINGS

**Important :** You must set the time of the BIOS—choose UTC+0 for the time, and set a correct date.

### 4.2.1 Type of BIOS

The CamTrace installation procedure is designed for UEFI BIOS. If your server offers a choice between a UEFI BIOS and the older legacy BIOS, always choose UEFI.

### 4.2.2 Boot order

In order for your server to boot from the USB key, it may be necessary to change the boot order. Generally, you need to press the SUPPR, F1 or F2 key when booting the machine to enter the BIOS; refer to your server (or motherboard) documentation.

### 4.2.3 Precautions in case of multiple disks

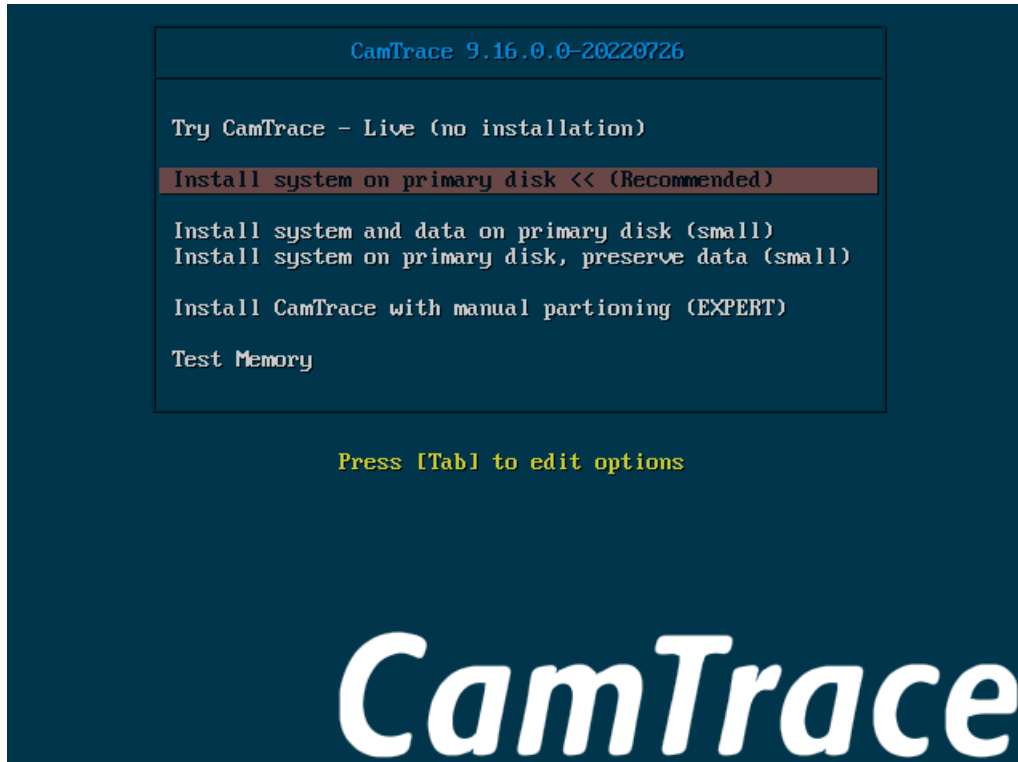
If all the disks in your server are on the same disk controller, it is best to put the disk intended to be the System disk in the first position (this is visible in the BIOS).

Similarly, if you have multiple controllers, be sure to put the System disk on the first controller (in the first position).

## 5 Installation

### 5.1 LOADING THE USB KEY

The first installation screen is identical to the one in the screenshot below :



*Note: If you are installing on a machine with a Legacy BIOS, the display is slightly different, the wallpaper is completely black.*

- **Try CamTrace - Live** : Live CD" mode, with no installation on disk (runs in RAM). This mode allows you to see if your hardware is compatible with CamTrace (if CamTrace starts and runs normally: your hardware is compatible), and allows you to troubleshoot CamTrace installation problems.
- **Install system on primary disk << (Recommended)** : **Choose this option, which is the default installation mode.**

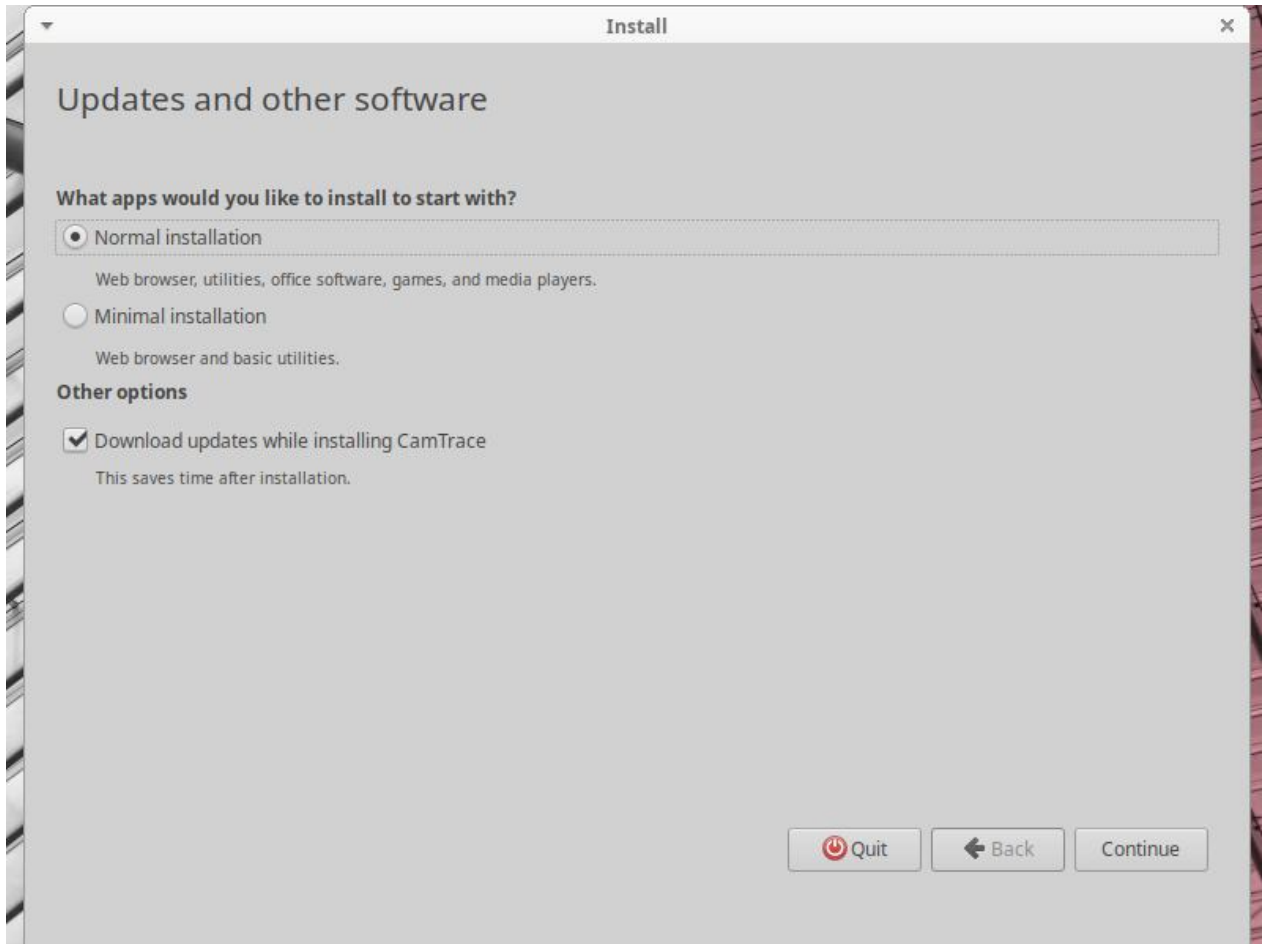
*Note: When the system is installed on a System disk independent of the Data disk(s), reinstallation of the system is possible without loss of data (camera records).*

### 5.2 KEYBOARD LANGUAGE SELECTION

A 'Keyboard layout' window will appear. Choose the language of your keyboard.

### 5.3 NORMAL OR MINIMAL INSTALLATION

On the 'Updates and other software' screen, you can use the default options:



*Note : Options 'Download updates while installing CamTrace' and 'Minimal installation' are not taken into account.*

## 5.4 INSTALLATION TYPE

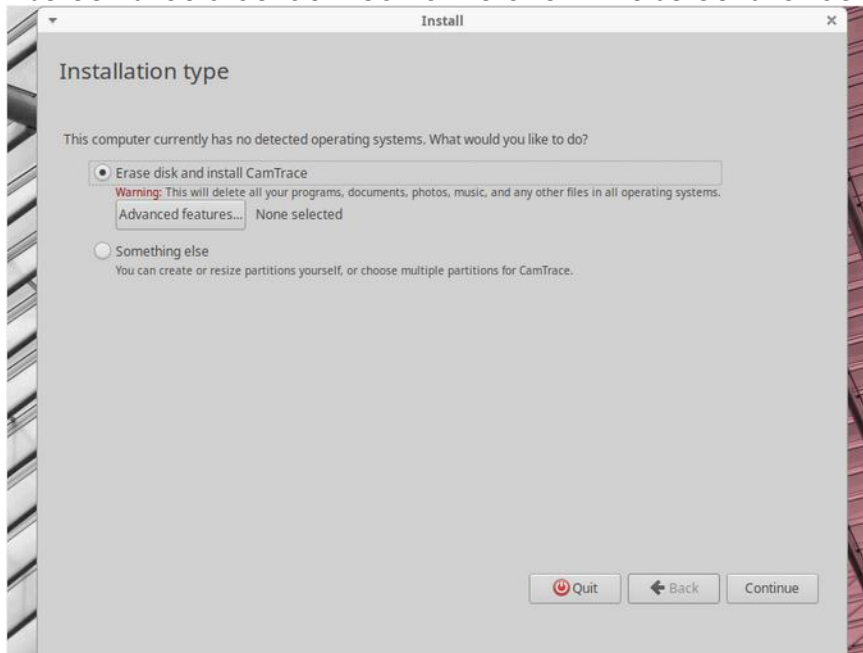
### At this stage, the interface changes according to two scenarios.

Refer to the You install CamTrace on a bare machine (without any OS previously installed) chapter or the You install CamTrace on a machine with existing OS : chapter depending on your situation.

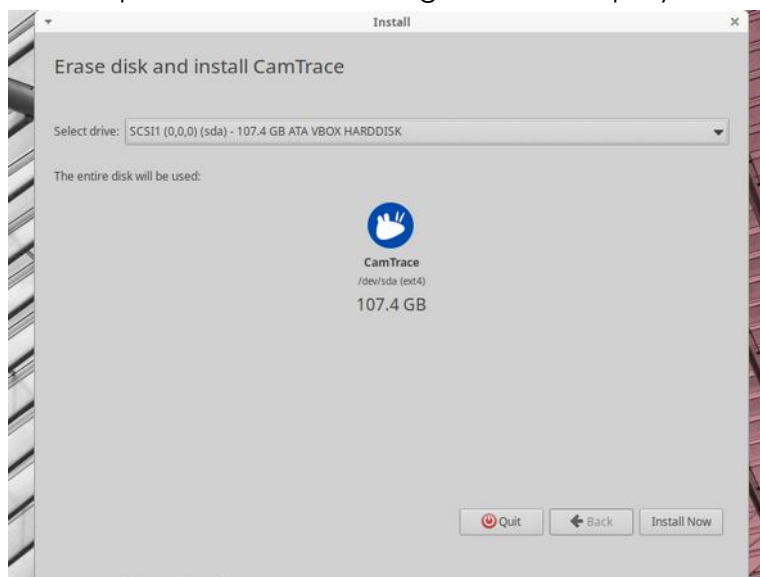
*Note : if your server has only one disk with a small capacity, the installation program will skip this step.*

#### 5.4.1 You install CamTrace on a bare machine (without any OS previously installed)

The installation screen should be identical to the one in the screenshot below :



Select "**Erase disk and Install CamTrace**" and click 'Continue'. This will erase any data on the disk. If you have multiple discs, the following screen is displayed:



You need to choose the **System disk** (usually the **SSD**), then 'Install Now'.

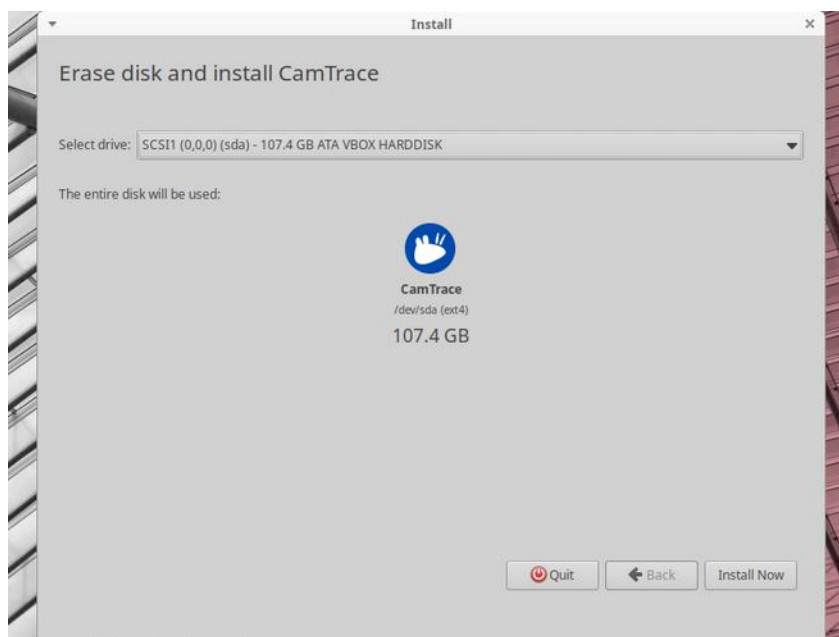
## 5.4.2 You install CamTrace on a machine with existing OS :

In this case, several options are available:

- 'Erase Ubuntu 22.04 LTS and reinstall',
- 'Install CamTrace 9.16.0.0 alongside Ubuntu 22.04 LTS',
- 'Erase disk and install CamTrace',
- 'Something else'.

Select "**Erase disk and Install CamTrace**" and click 'Continue'. This will erase any data on the disk.

If you have multiple disks, the following screen will appear:



You need to choose the **System disk** (usually the **SSD**), then 'Install Now'.

## 5.5 GEOLOCATION

The following screen appears.

*Note : If an 'ERROR !!!' popup appears with the following message : 'Partition(s) X on dev/sda have been written, but we have been unable to inform the kernel of the change, probably because it/they are in use. As a result, the old partition(s) will remain in use.', this may be due to the presence of an OS on the machine (e.g. if you reinstall CamTrace on a Windows machine). In this case, it is necessary to boot into Live CD mode and destroy all existing partitions with GPARTED, see GPARTED utility, deleting partitions on a system disk.*

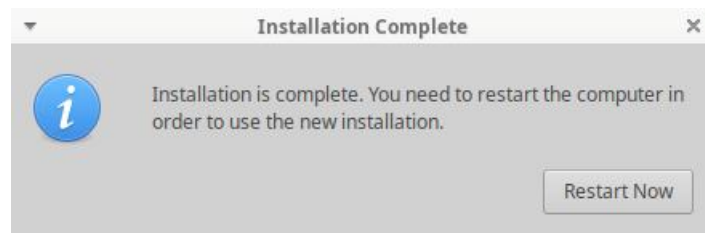
Click on the map to set your location:



The installation continues with the following display:



When processing is complete, the following message appears:



Click on 'Restart Now'. The following screen appears:

```
Unmounting /run/snapd/ns/firefox.mnt...
Unmounting Mount unit for bare, revision 5...
Unmounting Mount unit for core20, revision 1405...
Unmounting Mount unit for firefox, revision 1232...
Unmounting Mount unit for gnome-3-38-2004, revision 99...
Unmounting Mount unit for gtk-common-themes, revision 1534...
Unmounting Mount unit for snapd, revision 15177...
Unmounting /tmp...
[FAILED] Failed unmounting /cdrom.
[ OK ] Unmounted /rofs.
[ OK ] Unmounted /run/credentials/systemd-sysusers.service.
[ OK ] Unmounted /run/snapd/ns/firefox.mnt.
[ OK ] Unmounted Mount unit for bare, revision 5.
[ OK ] Unmounted Mount unit for core20, revision 1405.
[ OK ] Unmounted Mount unit for firefox, revision 1232.
[ OK ] Unmounted Mount unit for gnome-3-38-2004, revision 99.
[ OK ] Unmounted Mount unit for gtk-common-themes, revision 1534.
[ OK ] Unmounted Mount unit for snapd, revision 15177.
[ OK ] Unmounted /tmp.
```

Then the following message is displayed (see in red below):

```
[ OK ] Unmounted /tmp.
Unmounting /run/snapd/ns...
[ OK ] Unmounted /run/snapd/ns.
[ OK ] Stopped target Swaps.
Deactivating swap /target/swapfile...
[ OK ] Deactivated swap /target/swapfile.
Unmounting /target...
[ OK ] Unmounted /target.
[ OK ] Stopped target Preparation for Local File Systems.
[ OK ] Reached target Unmount All Filesystems.
Stopping Monitoring of LVM2 mirrors,...c. using dmeventd or progress polling...
[ OK ] Stopped Create Static Device Nodes in /dev.
[ OK ] Stopped Create System Users.
[ OK ] Stopped Remount Root and Kernel File Systems.
[ OK ] Stopped Monitoring of LVM2 mirrors, ...etc. using dmeventd or progress polling.
[ OK ] Reached target System Shutdown.
Starting Shuts down the "live" preinstalled system cleanly...
Please remove the installation medium, then press ENTER:
```

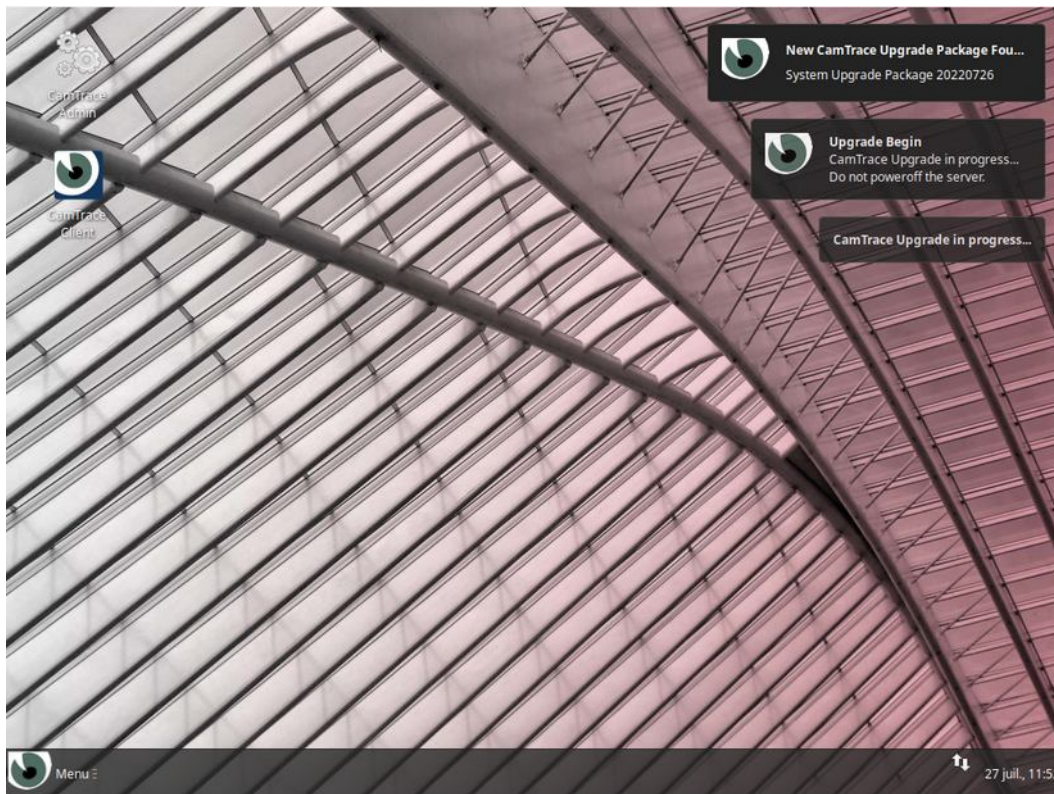
Physically remove the USB key from the server. Then press the 'Enter' key.

## 5.6 CT-SERVER REBOOTING

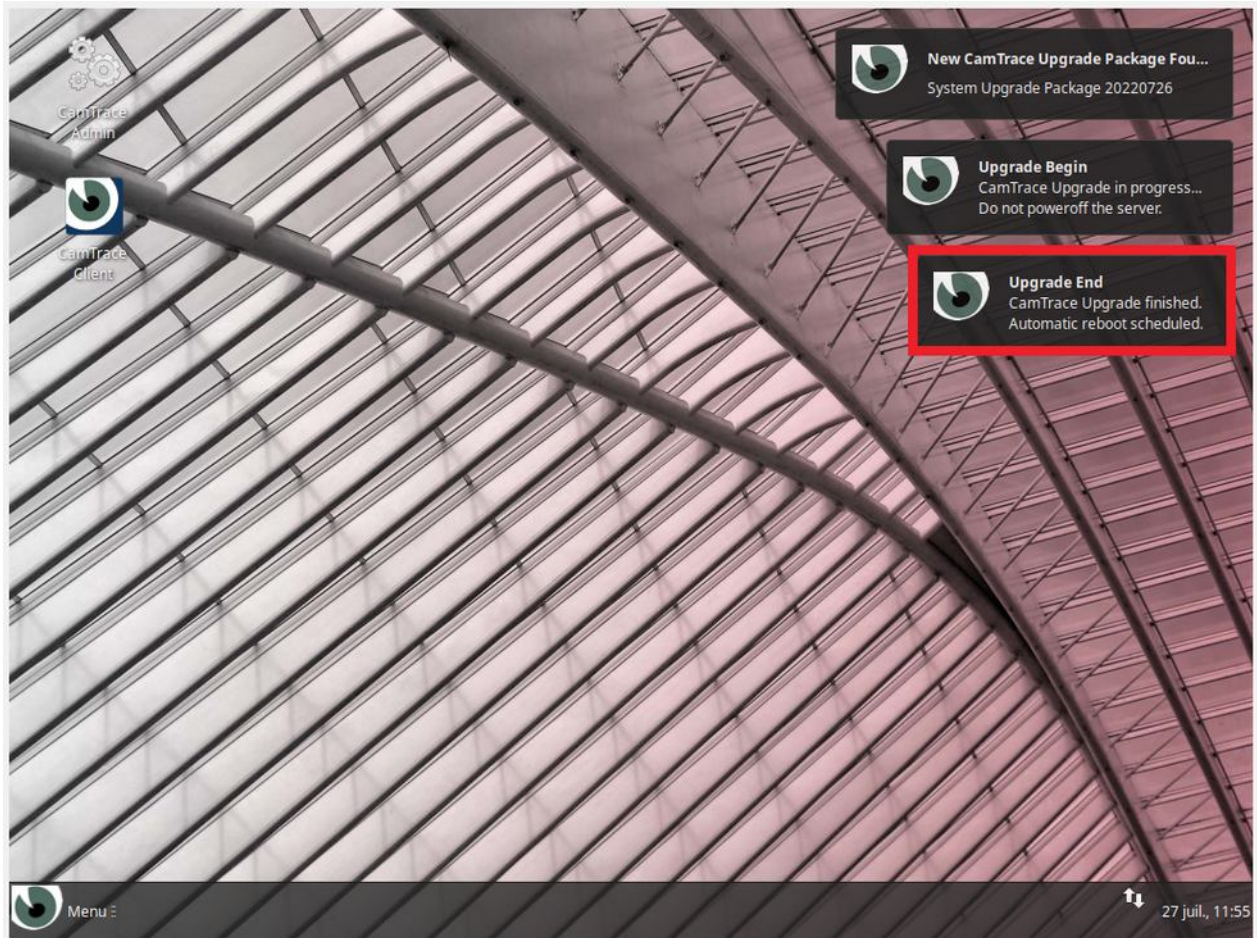
When restarting the CT-Server, it is recommended to enter the BIOS again to change the boot order. It is not recommended to leave the USB key as N°1 boot order; it is better to choose the System disk as N°1 boot order. When the CT-Server reboots, the following screen is displayed:



Then the OS desktop appears. Wait for the updates to finish. Popups appear in the upper right corner of the screen (these updates are included with the ISO image, there is no need for an internet connection):

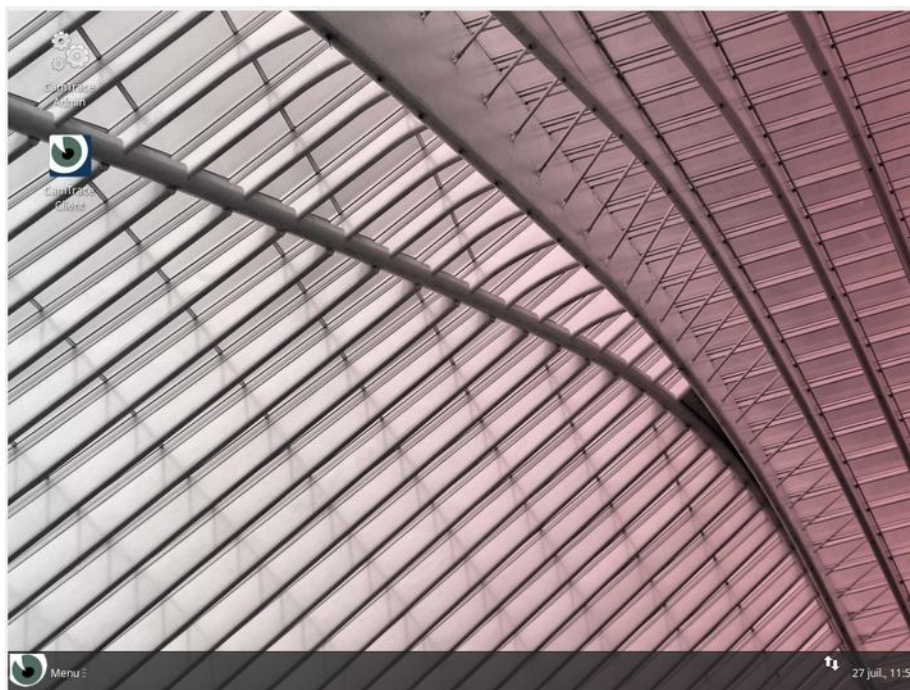


When the updates are complete, the following message is displayed (see below):



In some cases, the CT-Server restarts one last time.

CamTrace SIRION 16 is now installed:



## 5.7 CT-SERVER SETUP

Click on the 'CamTrace Admin' icon at the top left of the screen to launch the administration interface of your CT-Server.

Refer to the '**QuickSetup Guide (V16)**' to continue with the setup.

## 6 LiveCD mode

The boot menu of the USB key offers the option to boot your server in LiveCD mode. This mode can be useful **if you encounter errors with your installation** (e.g. black screen when launching the OS), or **if you want to make sure that your hardware is compatible** with CamTrace Sirion 16.

### 6.1 LAUNCHING THE LIVECD MODE

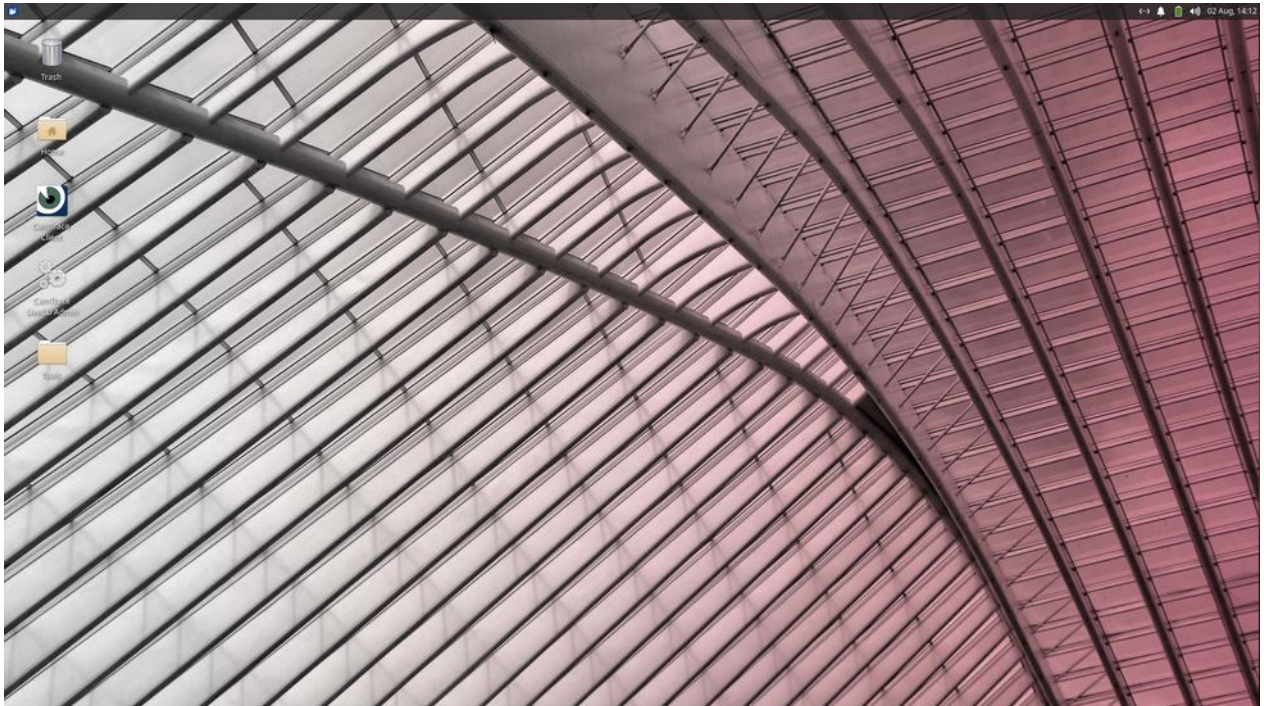
In LiveCD mode CamTrace runs in your computer's RAM, it is not installed on the computer's disk.

This LiveCD mode allows :

- to run CamTrace without having to install it on the server, for demonstration or hardware compatibility test,
- to intervene on a CamTrace server for maintenance operations,
- to prepare a server before installing CamTrace (e.g. to reset disks used by an older version of CamTrace),
- to force boot on a PC that does not have a UEFI BIOS.

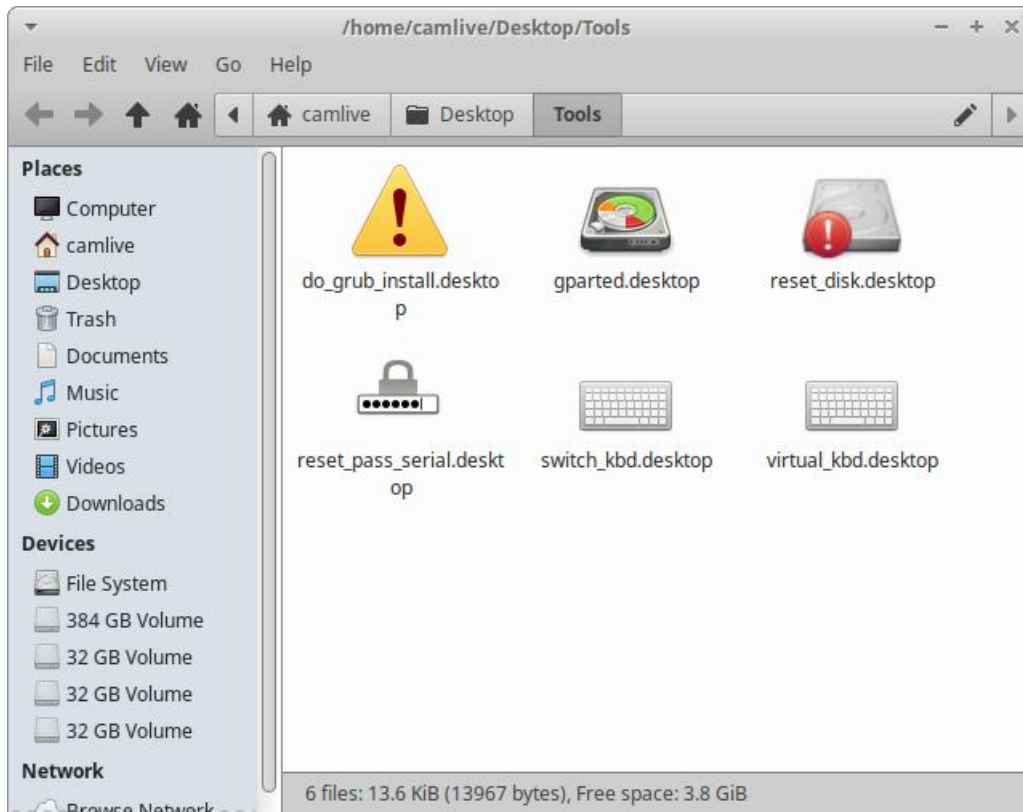
To boot into LiveCD mode, please select the first entry in the boot menu by highlighting it, then press "Enter".

After the boot sequence, the LiveCD mode desktop appears:



## 6.2 'TOOLS' FOLDER EXPLAINED

The 'Tools' folder on the desktop (see below) contains the following utilities:



*do\_grub\_install.desktop* : allows to force the boot (reboot required) on a server without UEFI BIOS.

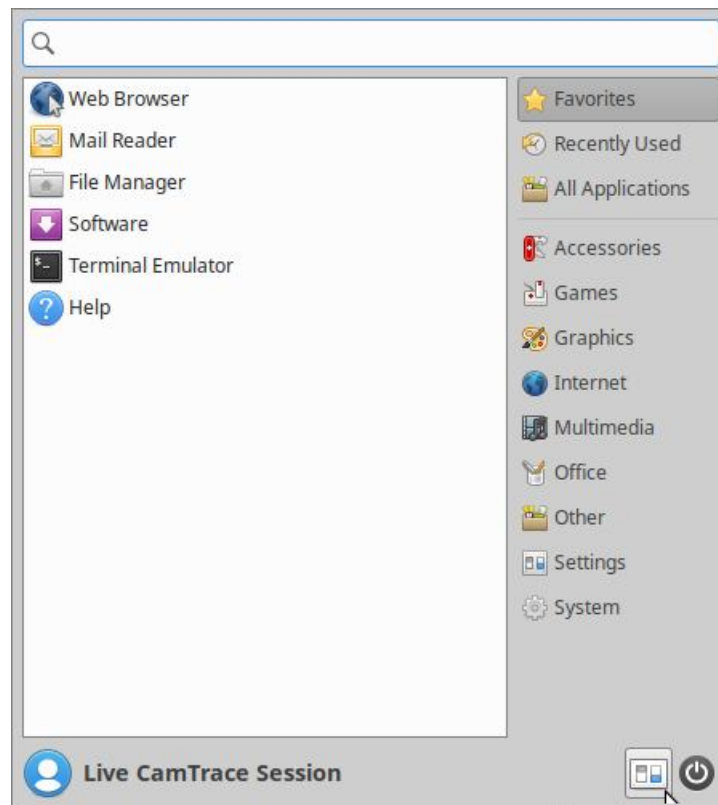
Just double click on the icon and choose the boot disk (proposed by default).

*reset\_disk.desktop* : allows to reset a disk which was formatted with an old CamTrace system. **Warning:** this procedure destroys all the data on your disks.

*gparted.desktop* : allows to intervene on the partitions of a disk.

### 6.3 KEYBOARD MODIFICATION IN LIVECD MODE

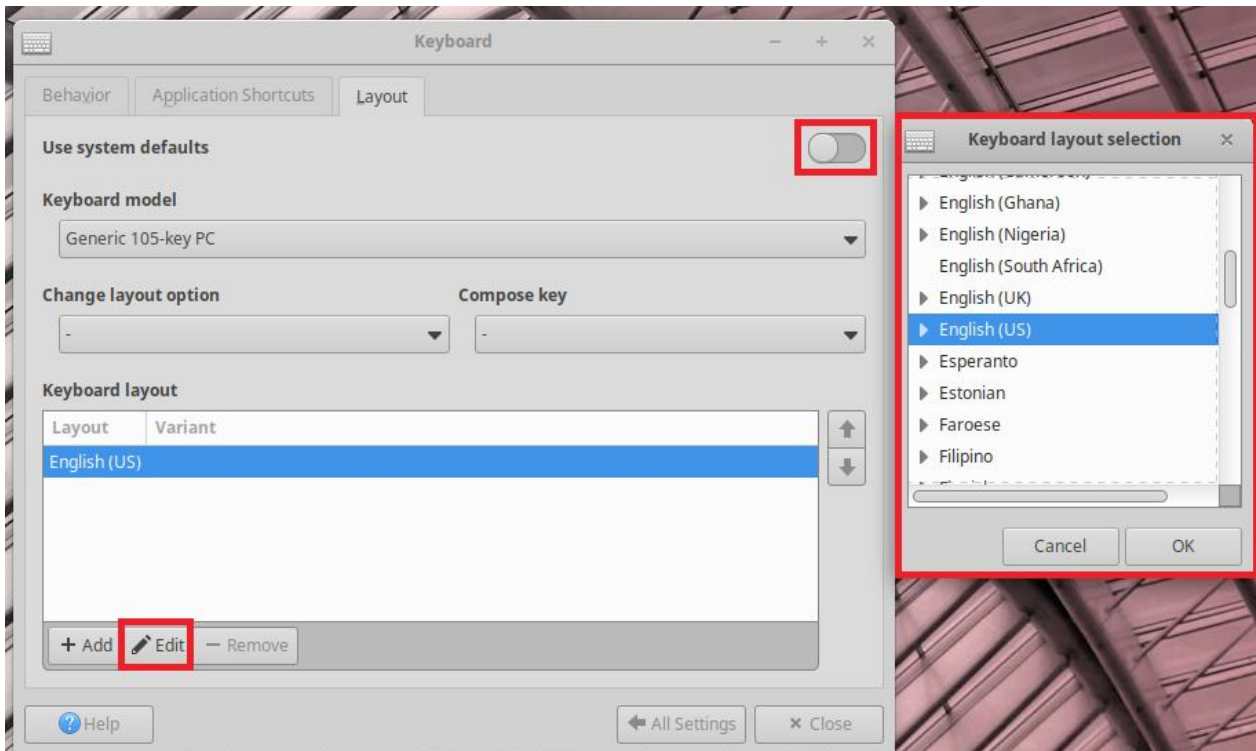
By default, LiveCD mode uses an English keyboard. To change the keyboard layout, click on the Start menu icon (top left of the OS), then click on the 'Settings' icon (see below):



In the 'Settings' window, choose 'Keyboard':



In the "Keyboard" settings, go to the "Layout" tab, uncheck the "Use system default" box and then click on the "Edit" button at the bottom of the screen. You can choose the keyboard layout that matches your hardware (see below):



## 6.4 GPARTED UTILITY, DELETING PARTITIONS ON A SYSTEM DISK

### 6.4.1 What is GPARTED ?

The gparted utility can be used to view and modify the partitions on a disk, for example to erase all data on a disk.

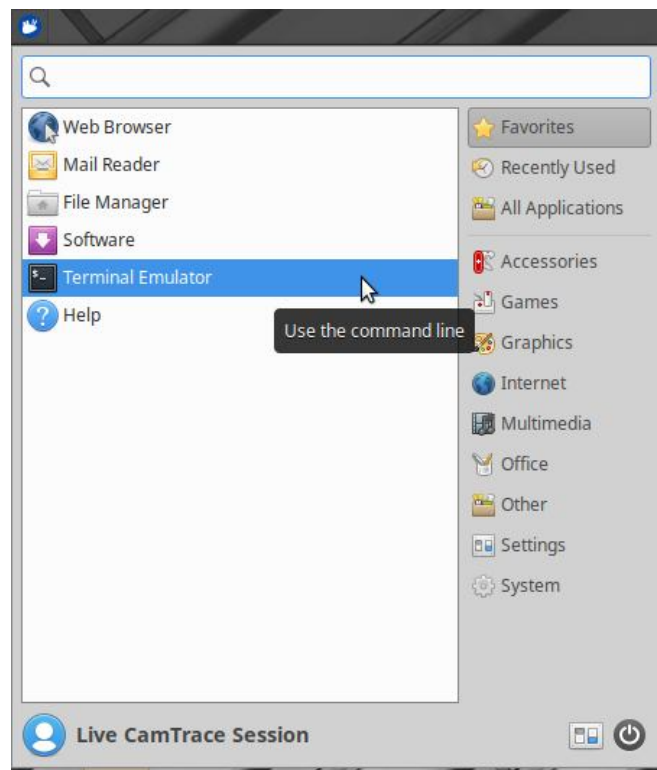
Alternatively, you can use the disk manufacturers' formatting tools to perform a true disk reset.

To view the partitions you can use the gparted utility as it appears in the "Tools" folder. Once the utility is open you can access the different disks by clicking on "gparted" and then on "devices".

### 6.4.2 Launching GPARTED as root

To intervene on the partitions, it is necessary to launch gparted as 'root' user.

To launch a command line terminal, click on the Start menu icon (top left of the OS), then choose 'Terminal Emulator' (see below):



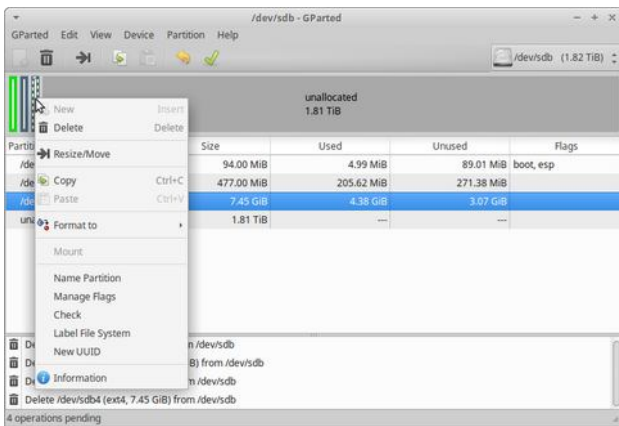
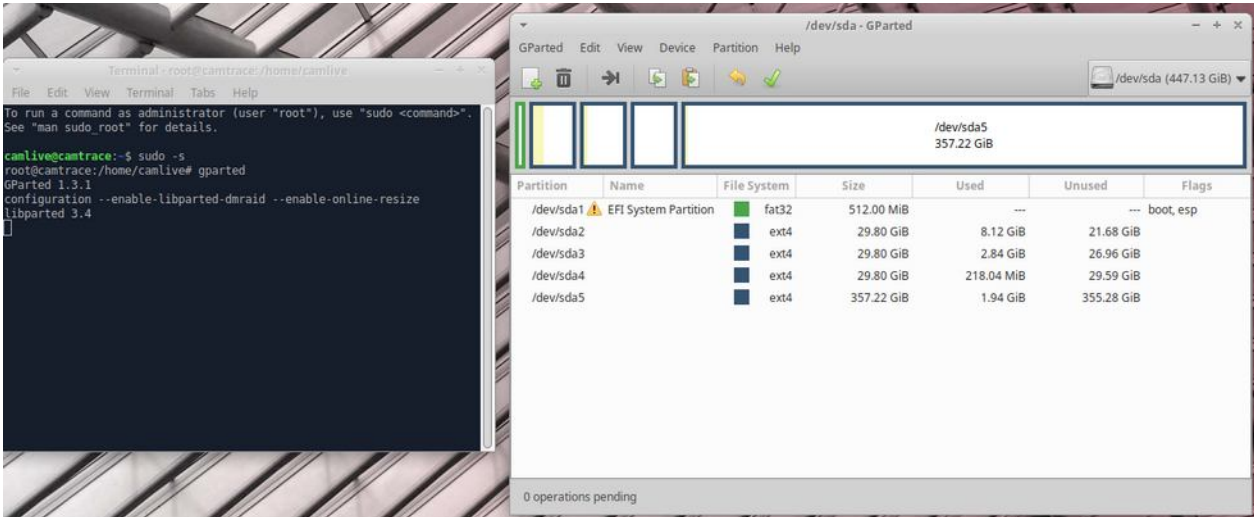
In the terminal emulator, type the command

**sudo -s**

to become root. Then type :

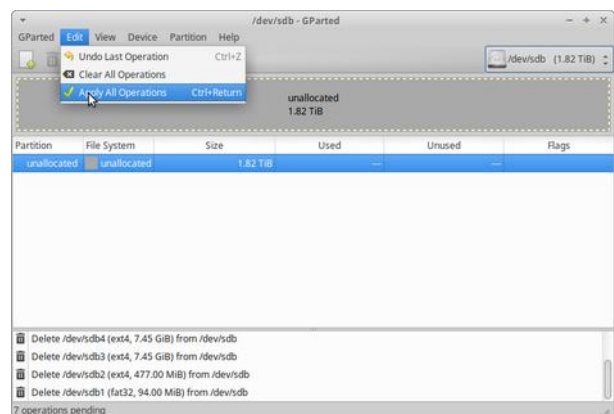
**gparted**

to launch the 'GParted' software (see below):

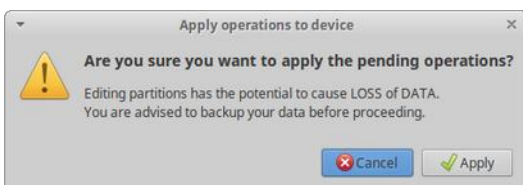


Choose the partitions to be deleted, starting with the last ones.

Generally, all partitions are deleted to prepare the disk for a new installation.



Once all the partitions have been deleted, you must validate by choosing "Edit" then "Apply all operations".



The system asks for a final confirmation: click on "Apply".

For further information :

**[www.camtrace.com](http://www.camtrace.com)**