

# Labdoo.org “autodeploy” and “auto install content” scripts

These 2 **bash** scripts are designed to automate the installation of the images and the content of the Ubuntu 18 based labdoo systems, allowing to perform a complete end to end sanitation of the laptop in an unattended way.

## **autodeploy\_18.sh :**

shredding of the hard drive (optional)

restoration of the selected image

configuration of a new hostid

**[NEW] direct call to the install\_content\_labdoo.sh allowing a complete automated end to end deployment with a single step, including the installation of all the additional content, maximizing the capacity of the labdoo laptops to bring educative material**

## **install\_content\_labdoo.sh :**

restore all contents that fit on the HD (based upon a configurable “priority list” of the contents [web and xowa wikis] downloaded in the HD) that fit in the HD (leaving an acceptable [and configurable] margin of free space)

## Expected structure of the files on the USB Hard Drive

The default provided scripts are configured expecting the HARD DRIVE directory tree to follow the standard (Germany provided) labdoo content directory structure on the used USB Hard drive. Please check the wiki documentation to have more details on this.

If you want feel free to modify, add or remove contents based on your requirements by changing the configuration parameters at the start of the script

[For the autodeploy script also the possibility to use samba shared network filesystems as host of the images is contained in the script, just uncomment the required lines]



# autodeploy\_18.sh

## Configuration Parameters

You can use the default configuration, if you have the same structure described in the screenshot above (Standard images), If you want to customize it just need to configure the following information about the image files you are working with:

bits of the image [32,64]

language of the image [EN,ES,DE,FR,FR]

size: maximum size of the HD in wich this image can be installed (will be used by the script to decide what to install)

name of the folder hosting the image

```
#NOW IS WHERE YOU DEFINE YOUR IMAGES
#ARCHITECTURE, LANGUAGE, MIN_DISK_SIZE, NAME_OF_IMAGE they are the directories you have
AVAILABLE_IMGS=(
  "32,EN,20,PAE32_18_04_LTS"
  "64,EN,20,PAE64_18_04_LTS"
  "32,EN,80,PAE32_18_04_LTS_EN_80"
  "64,EN,70,PAE64_18_EN_65_JAV_65"
  "64,EN,160,PAE64_18_EN_150_JAV_130"
)
```

# Running the script

Once you have started with Labtix, you need to have access to the script (either copy it to the USB key you use to boot or the USB you restore your images from), actually you need to put **BOTH** scripts (autodeploy and install\_labdoo\_contents) into the same directory, since they call each other [maybe in the future releases of Labtix they will as well be included]



Run the script and answer carefully the questions (specially the first ones related to the units to delete and to restore from)

run the script as “bash autodeploy\_18.sh” !! since it is a bash script

```
LXTerminal
File Edit Tabs Help
root@labdooXX:~# cd Desktop/
root@labdooXX:~/Desktop# bash
root@labdooXX:~/Desktop# ls
About_Labtix          gparted.desktop      Labdoo_Installer.desktop
autodeploy_18.sh      gsmartcontrol.desktop lxterminal.desktop
autodeploy.desktop    hardinfo.desktop     psensor.desktop
Clonezilla.desktop   install_labdoo_contents.sh spacefm.desktop
root@labdooXX:~/Desktop# bash autodeploy
autodeploy_18.sh      autodeploy.desktop
root@labdooXX:~/Desktop# bash autodeploy_18.sh
Welcome to the LABDOO shredding and restoring tool! Thank you for helping the project
Select the DISK you want to DELETE and RESTORE your image in
Available DISKS:
Disk /dev/sda: 82.4 GiB
Disk /dev/sdb: 931.5 GiB
Disk /dev/sdc: 1.9 GiB
[Valid format: sda / sdb / sdc /...]
->
```

You will be as well asked about:

- Language to restore

```
LXTerminal
File Edit Tabs Help
Welcome to the LABDOO shredding and restoring tool! Thank you for helping the project
Select the DISK you want to DELETE and RESTORE your image in
Available DISKS:
Disk /dev/sda: 82.4 GiB
Disk /dev/sdb: 931.5 GiB
[Valid format: sda / sdb / sdc /...]
->sda
Select the DISK you want to use as SOURCE of the images to restore (please be aware that the script is expecting a determined folder structure, please read the instructions for further info)
Disk /dev/sda: 82.4 GiB
Disk /dev/sdb: 931.5 GiB
[Valid format: sda / sdb / sdc /... / (samba) ]
->sdb
PROGRAM WILL WORK USING /dev/sdb1 as SOURCE HD to read the images from and sda to be DELETED, if that is NOT the case, please exit immediately BEFORE YOU DELETE THE WRONG DISK
Press Ctrl-C to exit or Enter to continue<-
THESE ARE THE IMAGES that I can see in the directory. They should match the ones you have configured in the script
drwxrwxrwx 1 root root      4096 Jul 31 10:42 PAE32_18_04_LTS
drwxrwxrwx 1 root root         0 Aug  5 18:10 PAE64_18_04_LTS_EN_250
drwxrwxrwx 1 root root      4096 Aug  5 18:11 PAE32_18_04_LTS_EN_80
drwxrwxrwx 1 root root      8192 Aug  5 18:35 PAE32_18_04_LTS_ES
drwxrwxrwx 1 root root      4096 Aug 19 08:47 PAE64_18_04_LTS
CPU op-mode(s):      32-bit, 64-bit
OS is i686 and Processor is 64 bit. If you are using LABTIX You can go ahead
If you are using Parted Magic you should reboot in 64 Bit Mode. Otherwise your restore might not work (this problem is only seen in PartedMagic)
Press Ctrl-C to exit or Enter to continue<-
Disksize read by autodeploy script in Gb: 82
Architecture read: 64
Images CONFIGURED as Available
ARCHITECTURE, LANGUAGE, MIN_DISK_SIZE, NAME_OF_IMAGE
32,EN,40,PAE32_18_04_LTS
32,EN,80,PAE32_18_04_LTS_EN_80
32,ES,80,PAE32_18_04_LTS_ES
32,FR,80,PAE32_18_04_LTS_FR
64,EN,40,PAE64_18_04_LTS
64,EN,80,PAE64_18_04_LTS_EN_80
64,EN,160,PAE64_18_04_LTS_EN_160
64,EN,200,PAE64_18_04_LTS_EN_250
64,ES,80,PAE64_18_04_LTS_ES
64,FR,80,PAE64_18_04_LTS_FR
64,DE,120,PAE64_18_04_LTS_Refugees_DE

So which of these languages do you want to install? [ EN / DE / ES / FR ] <-
```

- Exact image to restore (system offers you, from those configured, the ones that suit the system architecture, the HD size and the selected language)
- New hostid to be set (if you have one, you can have it automatically set)
- possibility to skip the shredding (**ONLY Select if the laptop has already been erased previously or you are using a new HD, remember that deletion of data in donated laptops is mandatory**)

```

So which of these languages do you want to install? [ EN / DE / ES / FR ] <- EN
Images I CAN Deploy in this computer:
based on your ARCHITECTURE = 64, your LANGUAGE DECISION = EN and your DISK SIZE = 82 GB
ARCHITECTURE,LANGUAGE,MIN_DISK_SIZE.NAME_OF_IMAGE
0 - 64,EN,40,PAE64_18_04_LTS
1 - 64,EN,80,PAE64_18_04_LTS_EN_80

So Select the number representing the option you want to install [ 0 / 1 / ... ]
-> 0
SELECTED: PAE64_18_04_LTS
If you want to want to set already a host-id, it can be automatically set during restore, just need to give me the 4 last numbers Labdoo-00001xxxx
Write the xxxxx in labdoo-0000xxxxx if your input is empty, then the hostid will not be modified by this script <- 14567
14567
Selection registered
NEW host ID will be set to labdoo-000014567

-----
Do you want to avoid shredding? Remember that Labdoo.org commits to the deletion of all the contents on the laptops provided.
Dont choose this if you dont have a real good reason (brand new HD for example).
If you are COMPLETELY sure you want to skip disk deletion type exactly [Yes] (or 1 or 2) [NORMALLY JUST PRESS ENTER for normal Labdoo restoration]
->
-----

```

- languages for which you want to install additional content: put them comma separated, this will call the install\_labdoo\_content\_script.sh automatically, so that you will have all the additional content installed automatically, even in different languages!!
- what to do after the process is finished (I personally find it usefull sending the laptop to sleep, since it allows you to save power once finished, but also to wake it up afterwards and see how the process finished [as opposed of just having it shutted down])

```

-----
Do you want to avoid shredding? Remember that Labdoo.org commits to the deletion of all the contents on the laptops provided.
Dont choose this if you dont have a real good reason (brand new HD for example).
If you are COMPLETELY sure you want to skip disk deletion type exactly [Yes] (or 1 or 2) [NORMALLY JUST PRESS ENTER for normal Labdoo restoration]
->

-----
YOU CAN INSTALL ADDITIONAL CONTENTS!! Remember that you need to have the install_content_labdoo script properly configured and the contents to install stored in your SOURCE disk following the driectory tree structure (please check the documentation if you have any doubt)
Select comma separated values for the contents you want to install (empty if none) [ie: EN / SW,EN (Swahili+English) / ES,SW,EN (Spanish+Swahili+English) / ... ]
-> SW,EN
After everything finishes please select if you want the program to suspend or shutdown the machine
0) Do Nothing
1) PowerOff
2) Suspend
Select [ 0 / 1 / 2 ]<- 2

```

And now, everything is set...you can go to do something different and come after some hours to enjoy the freshly install and FULL CONTENT deployed brand new labdoo laptop

```
-----  
  These are the current values, you might want to write them down  
-----  
Nr of CPU cores: 3  
CPU max Freq: 1799.999 [MHz]  
HD Size: 88 [Gb]  
MEM_size_Mb: 3106 [Mb]  
Serial Number:  
-----  
Removing data from sda will start now. It will last a while...  
shred: /dev/sda: pass 1/3 (random)...  
shred: /dev/sda: pass 1/3 (random)...1.8GiB/83GiB 2%  
shred: /dev/sda: pass 1/3 (random)...3.2GiB/83GiB 3%  
shred: /dev/sda: pass 1/3 (random)...4.2GiB/83GiB 5%  
shred: /dev/sda: pass 1/3 (random)...5.3GiB/83GiB 6%  
shred: /dev/sda: pass 1/3 (random)...6.4GiB/83GiB 7%
```

## install\_content\_labdoo.sh

This script is totally automated and does not require any input from the user, if you like the configuration (or after you have setted to your taste) you just have to invoke it.

It will deploy the contents, adapt the index.html file so that only the installed content is showd in firefox and run once again the “set permissions correctly” script to avoid permission problems.

**It will help you make sure that the students get all the possible content, after all, it was not so easy to bring the laptop to them**

This script, as explained before is also called by the autodeply script, so if you executed it during the initial restoration there is no need to use it again...you are good to go

### Configuration Parameters

The script is as told above configured expecting that your HD has all the contents deployed following the German HD standard directory structure (please review that part or submit any doubt you might have)

If you want to change the priority with which the contents are deployed, please edit the configuration yourself, in the beginning of the file

```

#####

#ALL THE PARAMETERS ARE RELEVANT
#1 Priority of installation
#2 How i look for it when removing it from the HTML file
#3 Where should the script look for it
#4 Where is it located
#5 Size when uncompressed

HD_AVAILABLE_CONTENT_EN=(
"1,RACHEL-EN,wikis/EN/RACHEL-EN,wiki-archive/wikis/EN/en-rachel.tar.gz,28000"
"2,en-rachelcourses,wikis/EN/en-rachelcourses,wiki-archive/wikis/EN/en-rachelcourses.tar.gz,24000"

"3,en.wikibooks.org,xowa/wiki/en.wikibooks.org,wiki-archive/xowa-wikis/en.wikibooks.org,292"
"4,en.wikinews.org,xowa/wiki/en.wikinews.org,wiki-archive/xowa-wikis/en.wikinews.org,165"
"5,en.wikipedia.org,xowa/wiki/en.wikipedia.org,wiki-archive/xowa-wikis/en.wikipedia.org,45100"
"6,en.wikiquote.org,xowa/wiki/en.wikiquote.org,wiki-archive/xowa-wikis/en.wikiquote.org,198"
"7,en.wikisource.org,xowa/wiki/en.wikisource.org,wiki-archive/xowa-wikis/en.wikisource.org,5000"
"8,en.wikiversity.org,xowa/wiki/en.wikiversity.org,wiki-archive/xowa-wikis/en.wikiversity.org,177"
"9,en.wikivoyage.org,xowa/wiki/en.wikivoyage.org,wiki-archive/xowa-wikis/en.wikivoyage.org,176"
"10,en.wiktionary.org,xowa/wiki/en.wiktionary.org,wiki-archive/xowa-wikis/en.wiktionary.org,4100"

"11,en-women-in-african-history,wikis/EN/en-women-in-african-history,wiki-archive/wikis/EN/en-women-in-african-history.tar.gz,1"
"12,en-coreknowledge,wikis/EN/en-coreknowledge,wiki-archive/wikis/EN/en-coreknowledge.tar.gz,2400"
"13,en-iicba,wikis/EN/en-iicba,wiki-archive/wikis/EN/en-iicba.tar.gz,29"
"14,en-catdogbooks,wikis/EN/en-catdogbooks,wiki-archive/wikis/EN/en-catdogbooks.tar.gz,256"
"15,en-wassce,wikis/EN/en-wassce,wiki-archive/wikis/EN/en-wassce.tar.gz,20"
"16,en-mustardseedbooks,wikis/EN/en-mustardseedbooks,wiki-archive/wikis/EN/en-mustardseedbooks.tar.gz,39"
"17,en-afristory,wikis/EN/en-afristory,wiki-archive/wikis/EN/en-afristory.tar.gz,480"
"18,en-algebra2go,wikis/EN/en-algebra2go,wiki-archive/wikis/EN/en-algebra2go.tar.gz,1200"
"10019,en-fantasticphonics-adult,wikis/EN/en-fantasticphonics-adult,wiki-archive/wikis/EN/en-fantasticphonics-adult.tar.gz,7400"
"20,en-fantasticphonics-child,wikis/EN/en-fantasticphonics-child,wiki-archive/wikis/EN/en-fantasticphonics-child.tar.gz,3200"
"21,en-GCF2015,wikis/EN/en-GCF2015,wiki-archive/wikis/EN/en-GCF2015.tar.gz,12000"
"22,english_language_training,wikis/EN/english_language_training,wiki-archive/wikis/EN/en_language_training.tar.gz,868"
"23,en-openstax,wikis/EN/en-openstax,wiki-archive/wikis/EN/en-openstax.tar.gz,2900"
"24,en-saylor,wikis/EN/en-saylor,wiki-archive/wikis/EN/en-saylor.tar.gz,4300"
"25,en-tanzanian_exams,wikis/EN/en-tanzanian_exams,wiki-archive/wikis/EN/en-tanzanian_exams.tar.gz,43"
"26,en-boks-videos,wikis/EN/en-boks-videos,wiki-archive/wikis/EN/en-boks-videos.tar.gz,5500"
#wikipedia for schools is included in RACHEL Therefore included with huge size so that it is NEVER installed
"27,wikipedia_for_schools-en,wikis/EN/wikipedia_for_schools-en,wiki-archive/wikis/EN/en-wikipedia_for_schools.tar.gz,6400000000"

```

You might change at your will the priority order on which you want to have things deployed (until HD is full), I have given priority to the wikis and the Rachel contents as well as the “women in Africa history”, but you might change it at will (do not assign same number to different contents, otherwise one of them will be skipped)

Dont worry about the size, the script will try to install everything (if only 10 Gb are avialiable, and the first thing you have selected takes 20G, it will not break, will just skip it, and see if the next content in your priority list fits)

The installation will leave allays the space configured as **MB\_TO\_BE\_LEFT** as free, you might change this value as well (when invoked from autodeploy, this size is set to 10.000 Mbs)

## Using the script

This script has been specially redesigned to be called automatically from the autodeploy script. If you want to execute it separately you need to enter the following parameters:

```
LXTerminal
File Edit Tabs Help
root@labdooXX:~/Desktop#
root@labdooXX:~/Desktop#
root@labdooXX:~/Desktop#
root@labdooXX:~/Desktop#
root@labdooXX:~/Desktop# bash install_labdoo_contents.sh

ERROR!!!!!!!!!!!!!!
  ADDITIONAL LABDOO CONTENT INSTALLER Called with wrong paramters, please use:

sudo bash install_contents.sh -l <language> -s <source contents> -d <destination
contents> -f <MBs to be left free during restoration>
Language should be one of [ES / EN /FR... ]
source contents should be shoud be one something similar to [/media/labdoo/233D
BC957DA13B4D/labdoo/contents] and has to be an existing directory
destination needs to be one either [/home/labdoo/Public] or [/mnt/home/labdoo/P
ublic] and has to be an existing directory
MBs to be left free...well it should be an integer - but big enough, take into a
ccount that lubuntu 18 needs place to grow the swap, and the user will need plac
e to store his files

P...breaking...

root@labdooXX:~/Desktop# bash install_labdoo_contents.sh -l EN -s /media/TOSHIBA
/ -d /home/labdoo/Public -f 5000
```

And go for a cup of coffe....

DISCLAIMER: we are under constant development

Please visit [labdoo.org](http://labdoo.org) to keep up with the new developments and submit your ideas in the forums (and report any bug you may find)

Please feel free to modify any script to adapt to your requirements and preferences

This documentation is made for the version 0.48 of the scripts, please check in the first lines of the scripts wich version you are working with, since it may differ