



Figure 1:

ToriOS Manual

Minimal, Simple, Fast, Small and Gives you a freedom of choice :)

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Chapter 1

Introduction

The goal of this project is to produce a minimalist Linux distribution that gives end users more choice as to what software is installed on their system.

Ubuntu 12.04 is used as a base for this new system.

1.0.1 About this Manual

This manual refers to external websites to help explain concepts further, to avoid the need to reproduce what is already out there. The ToriOS team take no responsibility for external content. The links are correct and suitable at the time of writing, Broken links are out of the Authors control between revisions. It is your responsibility to ensure suitability of information, you should read fully and seek other sources of information and ask for help if unsure. This manual has been prepared using L^AT_EX.

Chapter 2

What is GNU / Linux

2.0.2 About ToriOS

ToriOS is a system aimed at replacing Windows XP, which will reach end-of-life in April 2014. ToriOS is a fast and minimal system based on Ubuntu 12.04.

2.0.3 Non PAE Support

ToriOS will support PAE Hardware

<https://blueprints.launchpad.net/torios/+spec/non-pae-support>

2.0.4 Technical overview

1. 1- ToriOS is supporting Non-PAE machines by default - we have already agreed on that - just a reminder.
2. 2- ToriOS is always an LTS - we too agreed on that as well - just a reminder.
3. 3- ToriOS will be released every 12 months NOT every 6 months like Ubuntu - new idea.
4. 4- ToriOS 1.0 is based on 12.04 LTS - we have discussed that before but didn't yet 100
5. 5- ToriOS 2.0 will be based on 14.04 LTS
6. 6- nm-manager should not be used as far as I have read so far from different people all of them confirmed the big RAM eater is nm-manager.

7. 7- While we're targeting low hardware machines (32-bit), shouldn't we also think of those who wish to try ToriOS on more powerful machine (64bit)? if that so, we need two builds: i386 and amd64.
8. 8- I need the Wiki and Docs team to write each and every post, not only about the system, how to use it, system requirement, etc ... no ... I'm planning to document the steps that we have done to create this or will create this system and YES, I mean the technical side so I guess both the docs and devs guys need to work side by side if you agree on this.
9. 9- 60MB or 50MB? don't want to kill ourselves but if we could do that, why not? I guess you know what I'm talking about
10. 10- Have we thought about the ISO size? any idea how big will it be? around 300Told or asked there is a difference, problem is some old people are very rude due to lack of proper discipline when they were younger and think they can barge past people , and treat people with little respect, if you ask nicely people usually oblige if you tellpeople rudeluyMB? 400MB? less or more? AFAIK, it should never reach say 600MB, right?
11. 11- Where are we going to host the ISOs? do we have a host for that?
12. 12- As long as ToriOS is based on Ubuntu, we can test it on Virtual Machine such as OracleVB, correct?
13. 13- By any chance, do we need to talk with Ubuntu/Canonical team about our Project? I mean is there any kind of approval or stuff like that we need? I'm talking about the technical side of our project as they should have nothing to do with thewget -c <http://torios.org/VB/ToriBuilder.vdi.xz> other stuff but maybe they do with the technical side, that is why I'm asking and we need to know IMHO.
14. 14- Alpha 1, Alpha 2, Beta 1, Beta 2 and RC? or no need for that? should we just do Alpha, Beta and RC? these are milestones just like what Ubuntu GNOME or Lubuntu are doing when it comes to the development cycle.
15. 15- I know it is hard to tell at this point but any idea when ToriOS 1.0 will be available to download and use? I know I'm the one who should announce that but if truth to be told, it is something that our devs should advise for and we haven't yet done anything serious.

Chapter 3

The ToriOS Team

JOB ROLE	NAME	IRC NICK	E-MAIL
Project lead	Ali Linx	amjjawad	amjjawad@torios.org
Website email admin	William	?	william@torios.org
Documentation (manual)	Paul Sutton	zleap	zleap@torios.org
Documentation (wiki)	Geoffrey De Belie	smile	smile4ever@torios.org
Developer lead / driver	Alexander Kluth	DerAlex	alexander@torios.org
QA Testing	Jack	fjack	
Marketing	David		dbyentzen@torios.org
Artwork	Rafael	rafeallaguna	
?	Israel	israeldahl	

Chapter 4

Installation

There are several steps to an installation.

1. decide on the installation media CD-R or Flash disk
2. Prepare install media - in the case of a flash disk make sure this is blank
3. Prepare target media and decide where to install Torios to
4. Download the iso file
5. Create your install media
6. initial boot
7. either install from menu or run live session and install from there

4.0.5 Downloading the ISO

Command Line To download from the command line you can use the `wget` command, if you use the `-c` argument. Then if the download is stopped or interrupted then it will carry from where it left off if you re-run the command.

Browser

4.0.6 Verifying the download

There is an excellent guide at

<https://help.ubuntu.com/community/HowToMD5SUM>

that explains how to check your downloaded iso file for errors. Apart from the file name being different so for ToriOS you may have ToriOS-1.0.0.iso the steps are pretty much the same. Please see getting invovled section as this covers some of the above during the testing phase, that information will appear here once the test phase is over.

4.0.7 Creating install media

4.0.8 CD-R

4.0.9 Flash Disks

You can use unetbootin to bootable flash disk image, <http://zleap.net/?s=unetboot>

You can follow the steps below

Creating a boot usb flash disk

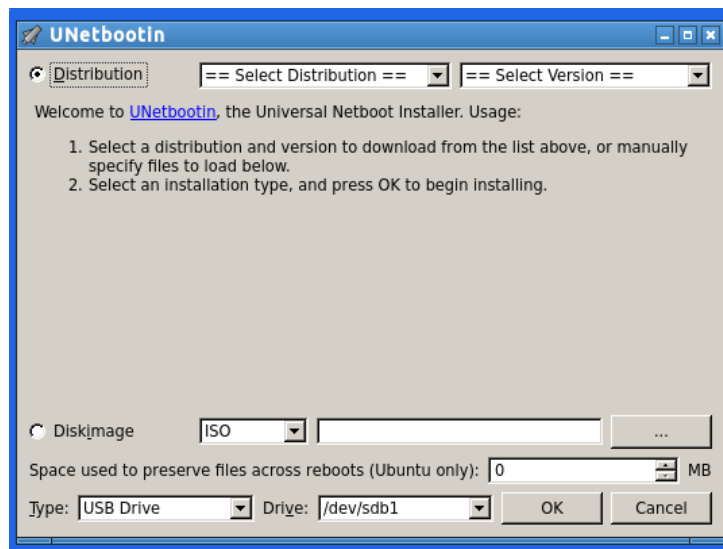
(With thanks to Nio Wiklund for some helpful comments with regard to the title of this document)

A good tool for this is Unetbootin, you can install this on most popular Linux distributions,

e.g `sudo apt-get install unetbootin`

you need your root password.

You can then load the software up, you will need your root password



If you have downloaded an iso image you don't need to worry about the top section

Click disk image, ISO can be left as in, then click the box with ? in and select the iso file

select type, usb drive or hard disk, most people are going to want to create a usb boot flash disk.

drive should be the device reference for this disk

make sure you are 100 percent sure, and if you are not sure ASK on forums , IRC or elsewhere first.

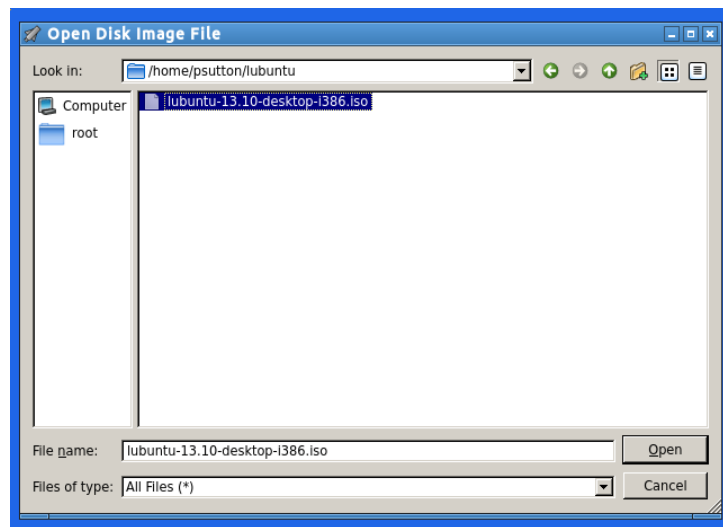
I find it helpful to unmount and unplug my external hdd first, it gives less options but also reduces the chances I will write to it, The disks tool below is useful for finding out what device you are writing to.

If you have already downloaded and md5 checked your iso file then you don't need to worry about the top part,

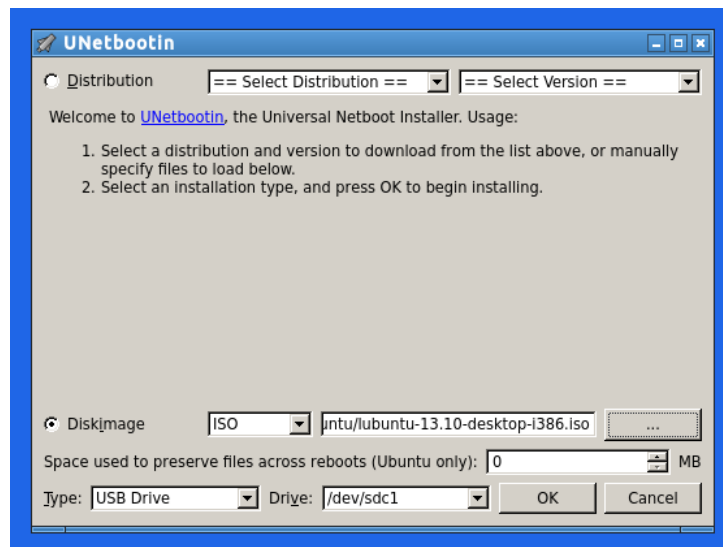
Click disk image radio button

the drop down menu to the right of this is a between ISO and floppy

you can then click on file search button (the one with ?)

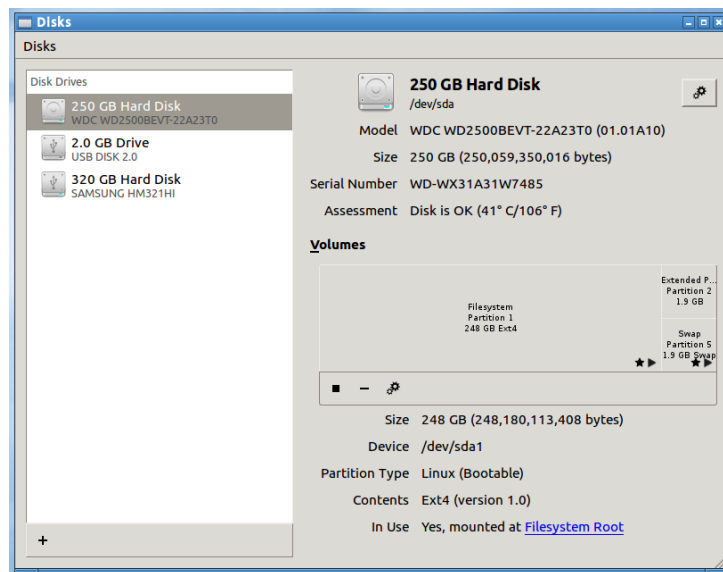


Select if you want to have a persistent space for files.



type? you can choose between usb and hard disk (BE VERY CAREFUL)
then select the device, if you select hard disk then the device reference
changes to / indicating root of the file system.

REMEMBER that you can wipe your whole file system if you get
the options wrong, if you have an external hard disk and a usb disk
plugged in I find it helpful to unmount and unplug the external
hard disk, gives less target options and is less likely to get wiped
by mistake.



You need to check if the target device should be mounted first or not

Hopefully this how to is useful, please be careful as I am not responsible for data loss, I try and write guides to be generic not explicit guides. I will leave this to the documentation team

You can use `fdisk` and `df` to determine device references. Read the man pages for more info if you get stuck as for help and say you have looked at man pages, this blog post etc and are still stuck, this shows you have tried to research the issue. The ubuntu manual should have this information in it too.

`man unetbootin`

`man fdisk`

`man ls`

`man df`

If you need to format the flash disk, using disks, this is a case of

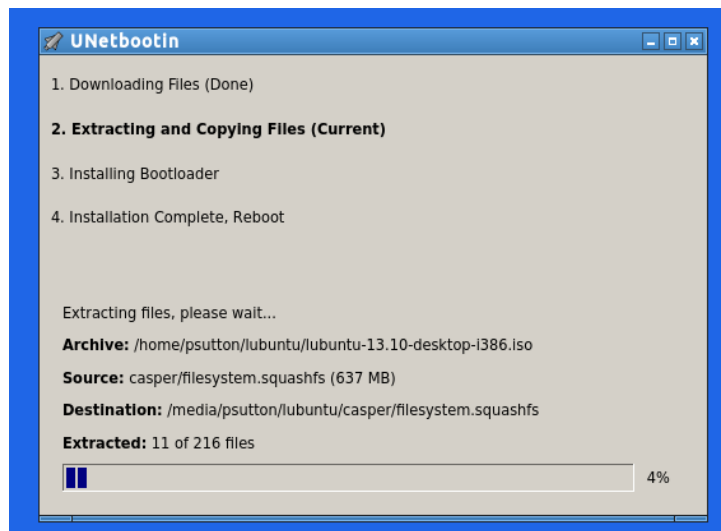
Unmount the flash disk

Select format

MAKE SURE YOU HAVE THE RIGHT DEVICE SELECTED.

Once this is all done and you are happy with the destination click OK

Progress bar showing how many files have been copied and a percentage



All done you can now reboot, select usb disk from the boot device menu (see your Manual on how to access this) and tryout / install the new OS

4.0.10 booting install media

Depending on how your computer is set up, you need to tell the computer to boot of which ever boot media you created either a) cdrom b) dvd c) usb.

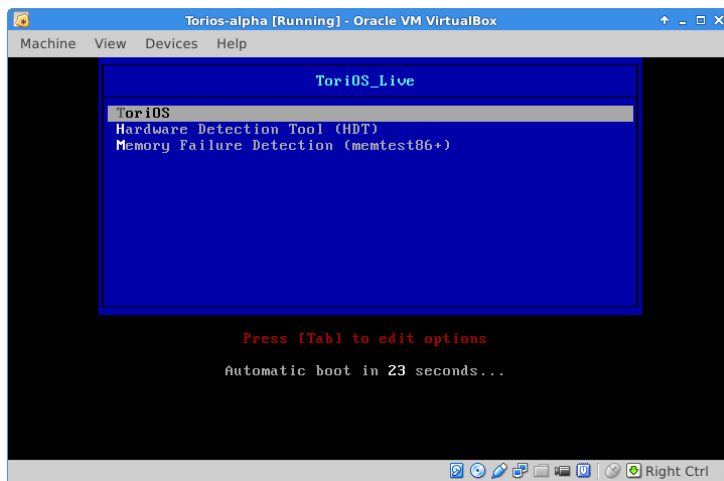
4.0.11 UEFI Boot

If you have very new hardware then you may have the new UEFI boot system, this means you can't just boot the install media and there are a few extra steps. These are outlined here.

4.1 Installation

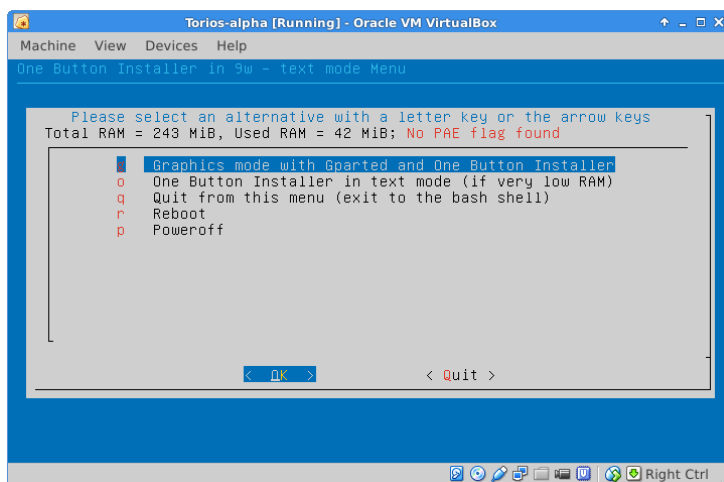
4.1.1 Installing Torios

Insert the installation CD / DVD drive and reboot, you then need to tell your computer to boot off that drive. Sometimes you get to a boot device menu by pressing **F12** When told to.



First boot screen showing the following options

- ToriOS - This boots in to Torios
- Hardware Detection tool (HDT)
- Memory Failure Decection (memtest86+)



Second boot screen showing the following options

- GrAphics Mode with One button Installer
- One button installer in text mode
- Quit from menu - exit to bash shell
- Reboot
- Poweroff

Installation is covered in several documents which can be found in /Desktop/Documents mainly OBI-quickstart-manual.pdf

4.1.2 Final steps

4.1.3 Testing - For more advanced users

Please see getting invovled

Chapter 5

Desktop and Applications

5.1 Applications that come with ToriOS

As previously stated ToriOS is desgined to be very very minimal however it does come with a few applications.

- 5.1.1 Internet Menu**
- 5.1.2 Midori (Web browser)**
- 5.1.3 Midori (Private Browsing)**
- 5.1.4 Wicd Network Manager**
- 5.1.5 WPA-gui**
- 5.1.6 ART Menu**
- 5.1.7 xpdf**
- 5.1.8 Development**
- 5.1.9 (Python 2.7)**
- 5.1.10 Settings**
- 5.1.11 GParted**
- 5.1.12 JWM Settings Manager**
- 5.1.13 Power Manager**
- 5.1.14 System**
- 5.1.15 UXTerm**
- 5.1.16 XTerm**
- 5.1.17 GParted**
- 5.1.18 Htop**
- 5.1.19 JWM Settings Manager**
- 5.1.20 JWM Settings**

ToriOS will use the JWM (Joe's Window Manager) window environment:

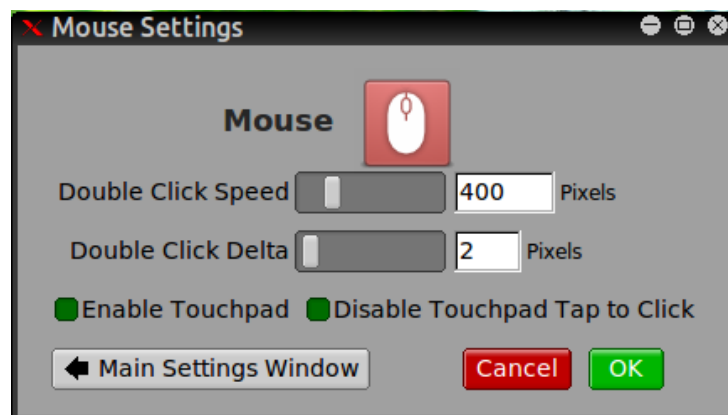
The following is quoted from the projects website

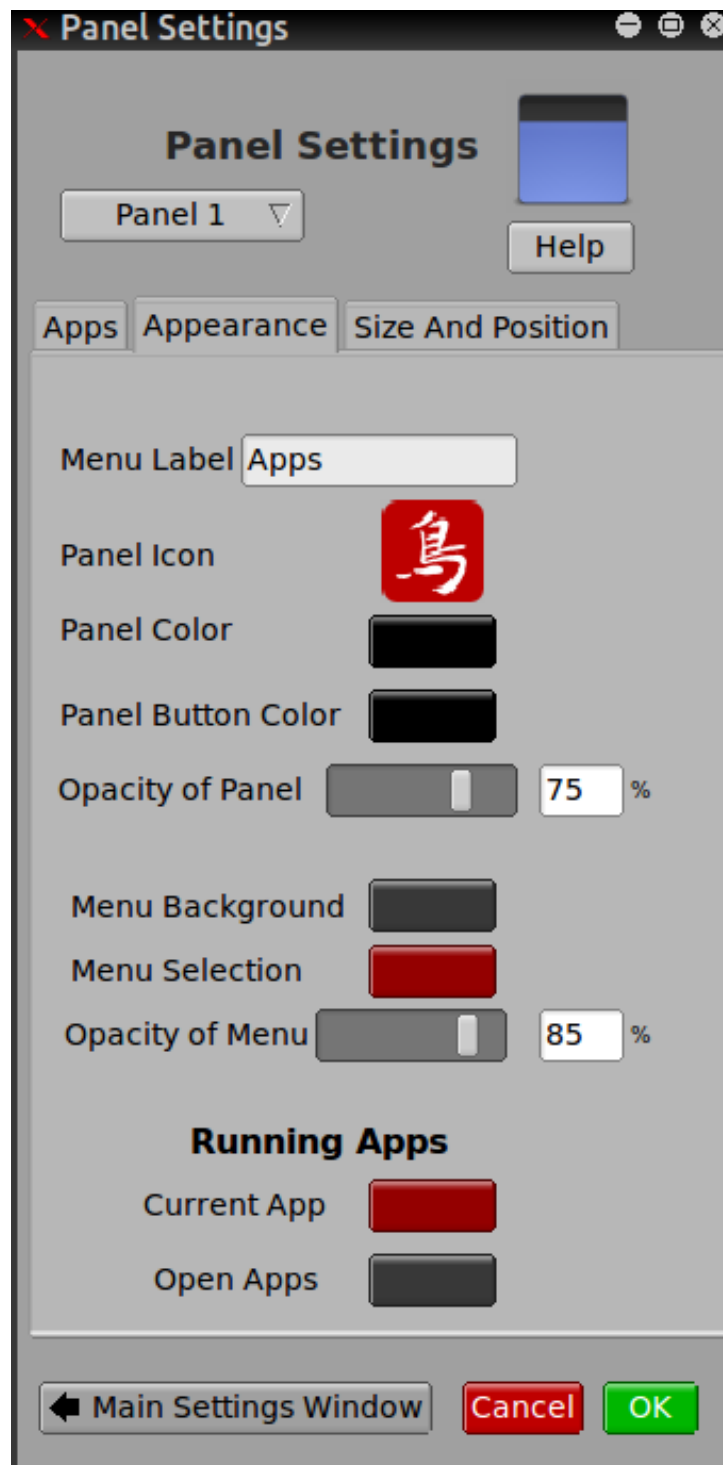
JWM is a light-weight window manager for the X11 Window System. JWM is written in C and uses only Xlib at a minimum.

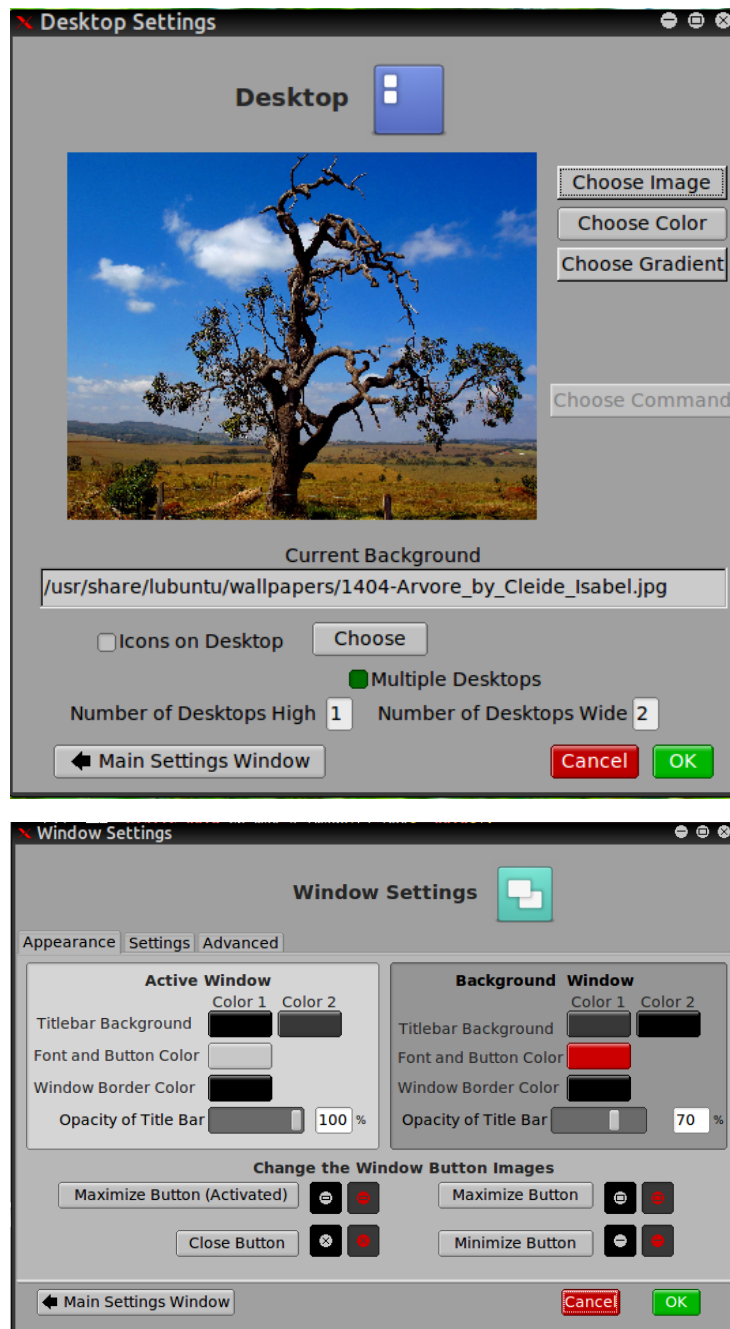
Because of its small footprint, JWM makes a good window manager for older computers and less powerful systems, such as the Raspberry Pi, though it is perfectly capable of running on modern systems. JWM is included in small Linux distributions such as Puppy Linux and Damn Small Linux, and it is available as a separate package in many other distributions.

<http://www.joewing.net/projects/jwm/> Torios jwm development lead Israel
israel@torios.org

JWM Settings manager





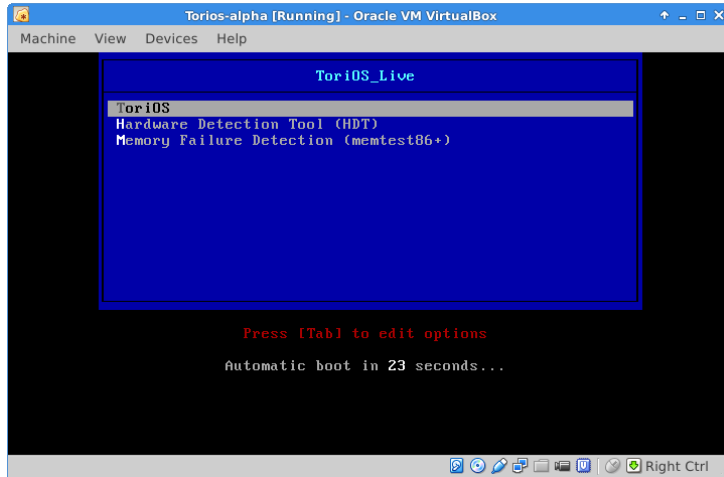


Windows Themes Autostart

5.1.21 Installing Torios

Insert the installation CD / DVD drive and reboot, you then need to tell your computer to boot off that drive. Sometimes you get to a boot device

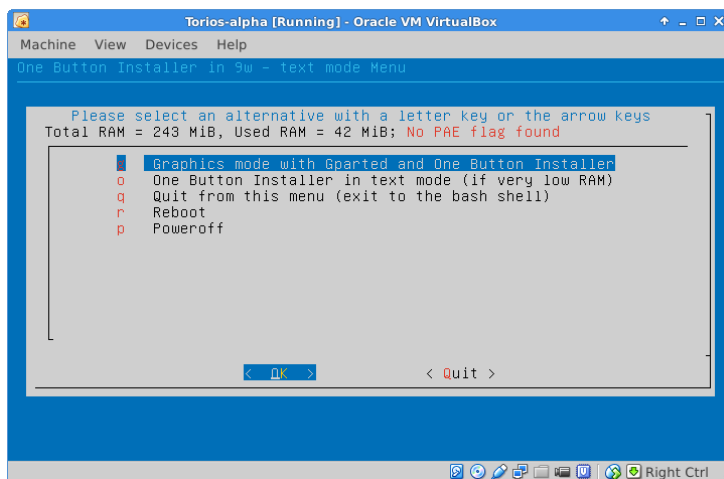
menu by pressing **F12** When told to.



First boot screen showing the following options

- ToriOS - This boots in to Torios
-)Hardware Detection tool (HDT
- Memory Failure Decection (memtest86+

The First letters of these are highlighted so you can just press the corresponding keyboard letters to choose that option



Second boot screen showing the following options

- Grphics Mode with One button Installer

- One button installer in text mode
- Quit from menu - exit to bash shell
- Reboot
- Poweroff

5.1.22 System

5.1.23

Chapter 6

Get Involved

- Create a Launchpad Account [1]
- Join the Team [2]
- Subscribe to mailing list [3]
- Send an e-mail to the list to introduce yourself
- Choose where you would like to help [4]

1. <https://help.launchpad.net/YourAccount/NewAccount>

2. <https://launchpad.net/torios>

3. <https://help.launchpad.net/Teams/MailingLists> - see subscribing

4. <https://blueprints.launchpad.net/torios/+spec/recruit-contributors>

5. weekly meetings in IRC on freenode : [irc.freenode.net](irc:freenode.net) channel torios
<http://torios.org/news/team-weekly-meetings/>

https://www.youtube.com/watch?v=P_r2hHqyUa4

http://www.youtube.com/watch?v=PtVxDv_vy8w

6.0.24 testing - ISO

PLEASE READ IMPORTANT NOTICE ON NEXT PAGE REGARDING TESTING

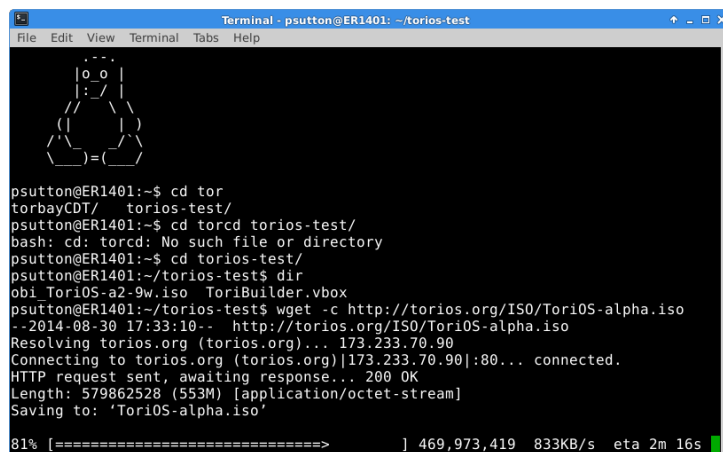
As of Week ending 30 / 8 / 2014 Torios is in Alpha 1 this can be downloaded from the website download page

<http://torios.org/iso.html>

direct link to iso

torios.org/ISO/ToriOS-alpha.iso

or with wget



```

psutton@ER1401:~$ cd tor
torbayCDT/  torios-test/
psutton@ER1401:~$ cd torcd torios-test/
bash: cd: torcd: No such file or directory
psutton@ER1401:~$ cd torios-test/
psutton@ER1401:~/torios-test$ dir
obi_ToriOS-a2-9w.iso  ToriBuilder.vbox
psutton@ER1401:~/torios-test$ wget -c http://torios.org/ISO/ToriOS-alpha.iso
--2014-08-30 17:33:10--  http://torios.org/ISO/ToriOS-alpha.iso
Resolving torios.org (torios.org)... 173.233.70.90
Connecting to torios.org (torios.org)|173.233.70.90|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 579862528 (553M) [application/octet-stream]
Saving to: 'ToriOS-alpha.iso'

81% [=====] 469,973,419 833KB/s eta 2m 16s

```

`wget -c http://torios.org/ISO/ToriOS-alpha.iso`

or from torrent

(available soon)

MD5SUM: md5sum = 9648e831912248d19cd8b115da24ea6b

- save the above to a file e.g MD5SUMS
- place this in the SAME LOCATION as the iso file
- type `md5sum -c ToriOS-alpha-iso`

- (checking may take a while and you should get an OK if it checks out)
- any problems please ask

Known issues (2014-Aug-29):

- Menu does not display items that do not use a desktop file
- Missing features in the Settings Manager
- USB mounting support ONLY (no CD/DVD mounting unless using a terminal)
- Hardly any apps installed (this is a feature) :D
- Menu categories do not support localization yet, though all desktop files that have it are supported in the menu

This uses the OBI installer.

It should run quite easily on 128MB ram for the Live version, and in even less for the installer. It currently uses around 60-70MB Ram to run.

Currently you can try out the Live version, and install ONLY from the text installer (or you can use the terminal and launch OBI). It is highly suggested that you use the Live version ONLY

**THIS WILL OVERWRITE THE ENTIRE DEVICE IF YOU
INSTALL IT**

You should backup all your personal files, and your OS if you choose to install this.

ToriOS contains a tool called mktbl, this tool can backup your entire disk as a tarball to easily reinstall

<http://torios.org/contact.html> and click ask us if you need help

6.0.25 testing virtual box images

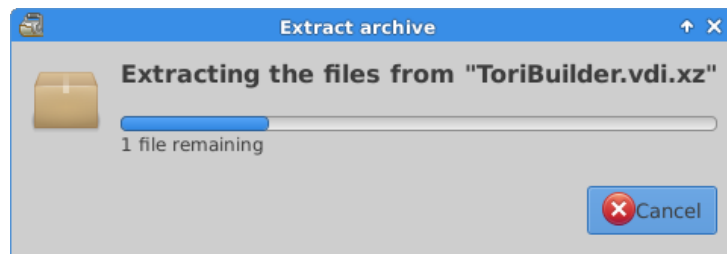
Once you are signed up then you can start testing the latest build this can be downloaded as a Virtual box image with.

```
wget -c http://torios.org/VB/ToriBuilder.vdi.xz
```

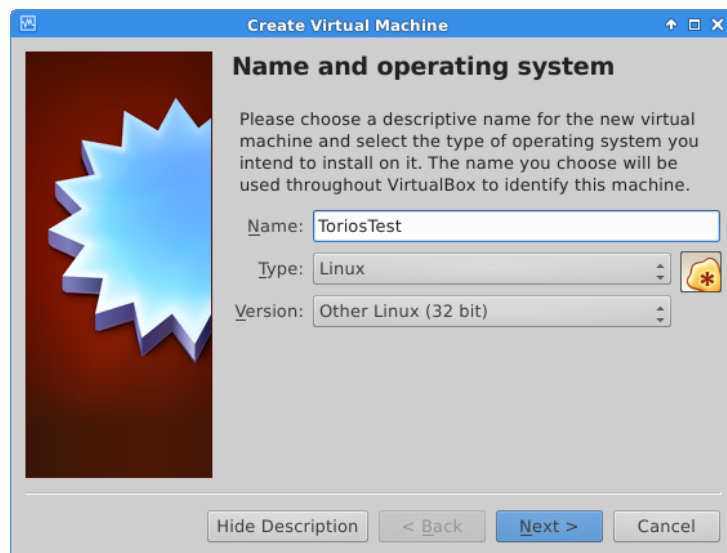
Once done you need to extract, either right click and select extract here or use the command line. Due to the size of the Virtual box image this may take some time.

Once this is done you will have a new file called: in the ToriBuilder.vdi folder,

Open virtual box



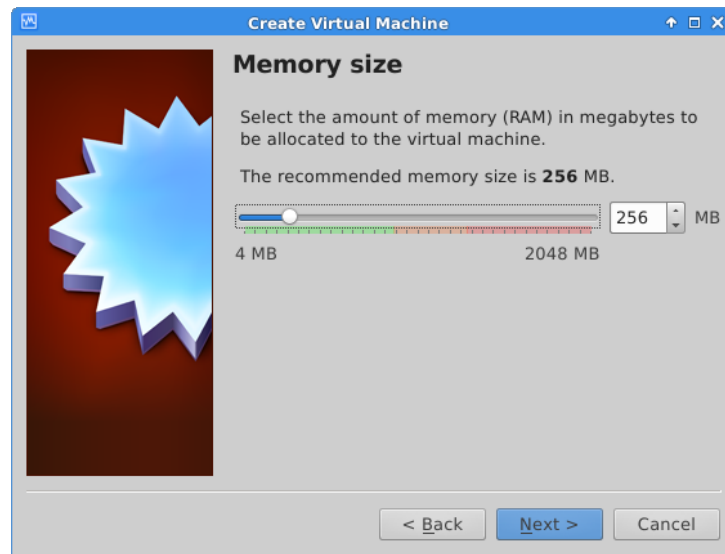
Virtual box Click New



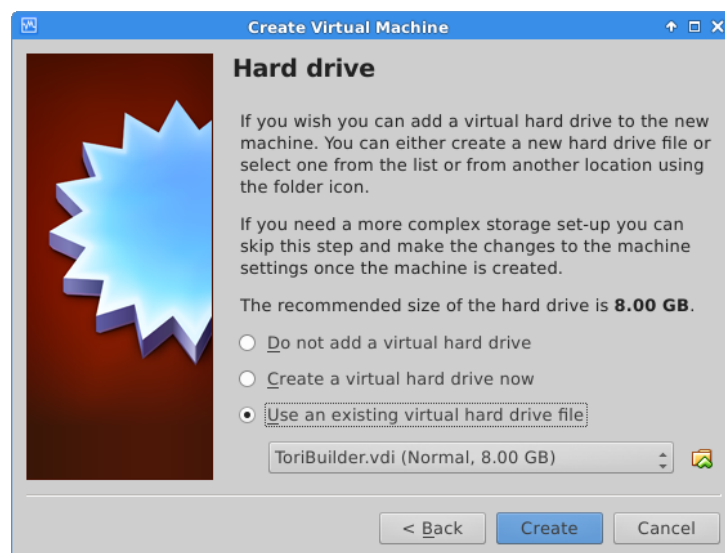
Use the following options

- Name : Torios
- Type : Linux
- Version : Ubuntu 32 bit

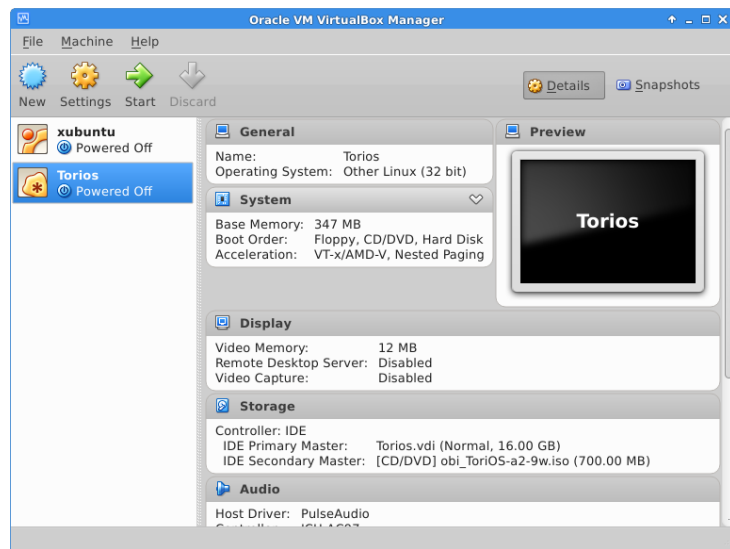
Click Next



Should be Ok to leave the default memory as 256MB,so click next.

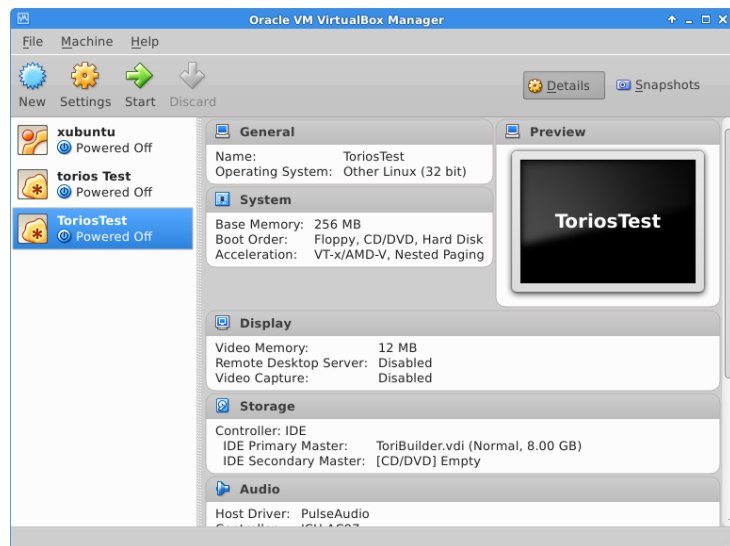


Upon opening virtual box you will see this screen:

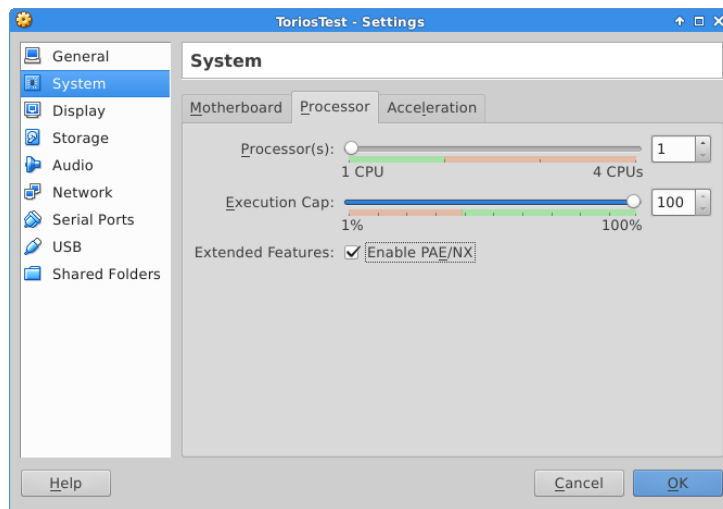


Click use existing and select the file you downloaded earlier, so in this case its ToriBuilder.vdi

Click done.



Torios needs PAE support enabled to do this select the virtual box image you just created, and click settings.



Click system, then processor tab then check the box EnablePAE/NX then press OK.

You should then bereturned to the main virtual box window, the image should still be selected so press start and you should boot in to the Torios Test Image.

note yours may look different as I have a few images, also note in this screen shot i have a different vm set up. We still need to open up the ToriOS image we downloaded.

We will assume here you have thus already installed.

Chapter 7

Glossary

A

K

B

C

Creative commons Document
and Graphics Licensing.

D

E

ext(n) File system used on
Linux systems, examples
are ext2 ext3, and ext4

F

G

GPL General Public License

GNU/LINUX The kernel is re-
leased under the GPL so we
refer to it as GNU / Linux

H

I

Kernel This is the heart of the
operating system.

J

L	R
Linux Operating system Kernel.	S
Linus Torvalds Creator of the Linux Kernel	T
M	U
N	V
O	W
P	X
PAE Hardware Physical Ad- dress Extension	Y
Q	Z

Chapter 8

Document License