

Figure 1:

ToriOS Manual

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

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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 LATEX.

What is GNU / Linux

2.0.2 About ToriOS

ToriOS is a system aimed at replacing Windows XP, which has reached endof-life as of 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

About Tori OS - Tori Operating System Overview:

- Low memory and resource requirements
- Low disk space
- Low package overheads (you get to build your own system from a very minimal install base)
- Built with Ubuntu 12.04LTS as a base , and completely compatible with many thousands of free and paid apps.
- A modern OS with up-to-date security built-in, as well as compatible with older processors and video graphics cards
- Free and open source
- A secure replacement for older unsupported versions of Microsoft Windows Operating System

The ToriOS Team

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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 interupted 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 unetbootln to bootable flash disk image, http://zleap.net/?s=unetboot You can follow the steps below

Creating a boot usb flash disk

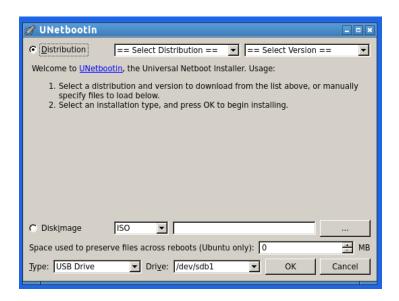
(With thanks to Nio Wiklund for some helpful comments with regard to the title of this document)

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

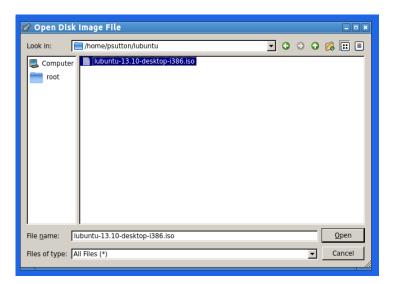
make sure you are 100 percent sure, and if you are not sure ASK on forums, IRC or elsewhere first.

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.

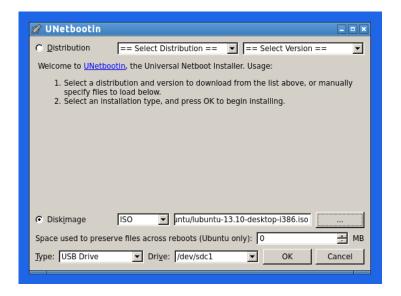
If you have already downloaded and md5 checked your iso file then you don?t need to worry about the top part,

Click disk image radio button

the drop down menu to the right of this is a betweet ISO and floppy you can then click on file search button (the one with?)

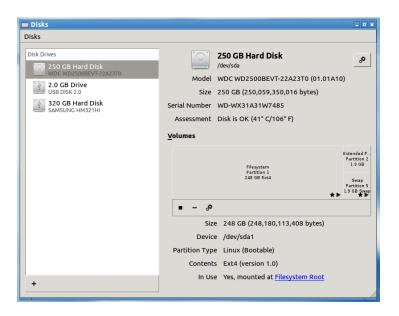


Select if you want to have a persistent space for files.



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 chances 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

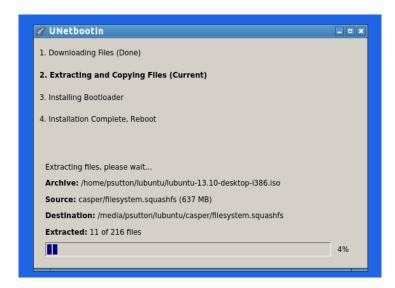
If you need to format the flash disk, using disks, this is a case of Unmount the flash disk

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**

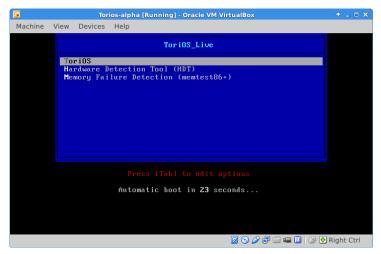
If you have very new hardware then you may have the new UEFI boot system, this means you can't just boot the install media and there are a few extra steps. These are outlined here.

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4.1 Installation

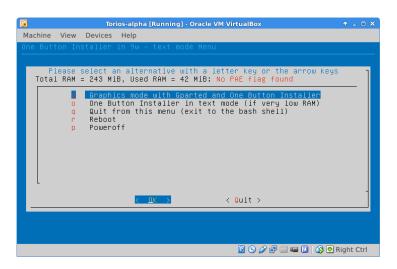
4.1.1 Installing Torios

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 $\bf F12$ 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

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
- $5.1.7 \quad xpdf$
- 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

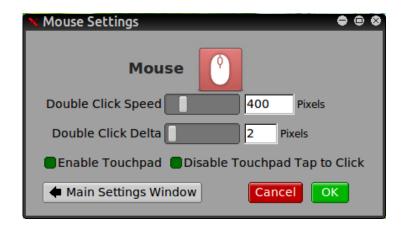
JWM is a light-weight window manager for the X11 Window System. JWM is written in C and uses only Xlib at a minimum.

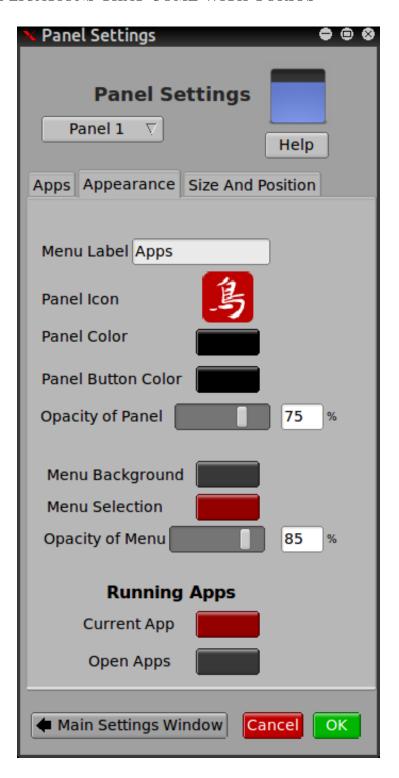
Because of its small footprint, JWM makes a good window manager for older computers and less powerful systems, such as the Raspberry Pi, though it is perfectly capable of running on modern systems. JWM is included in small Linux distributions such as Puppy Linux and Damn Small Linux, and it is available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

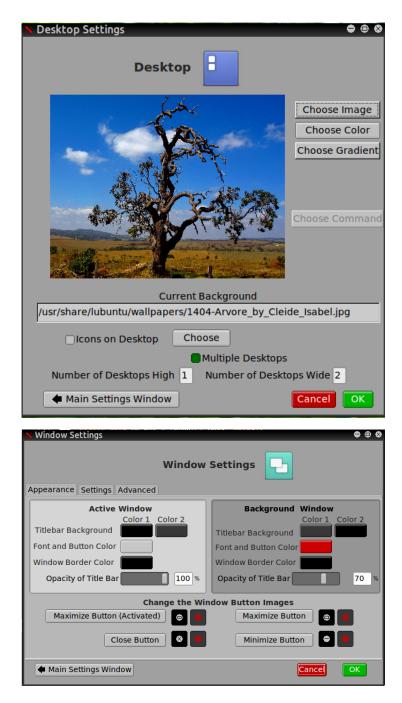
 $http://www.joewing.net/projects/jwm/\ Torios\ jwm\ development\ lead\ Israel israel@torios.org$

JWM Settings manager







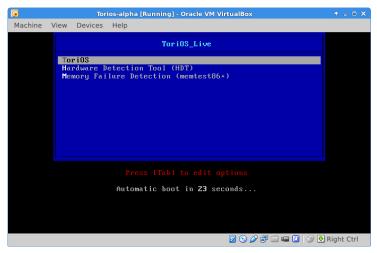


Windows Themes Autostart

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

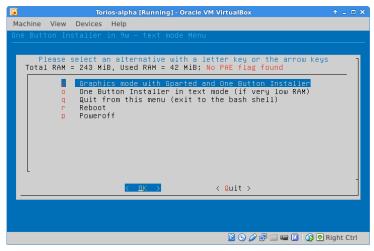
menu by pressing $\mathbf{F12}$ When told to.



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
- $\bullet\,$ Quit from menu exit to bash shell
- Reboot
- Poweroff

5.1.22 System

5.1.23

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 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

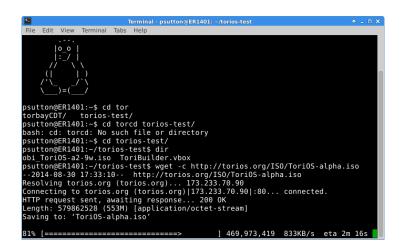
As of Week ending 30 / 8 / 2014 Torios is in Alpha 1 this can be downloaded from the website download page

http://torios.org/iso.html

direct link to iso

torios.org/ISO/ToriOS-alpha.iso

or with wget



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-alpla-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

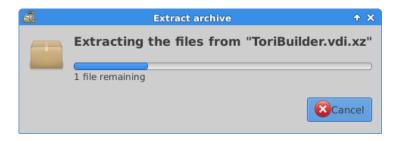
Once you are signed up then you can start testing the latest build this can be downloaded as a Virtual box image with.

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



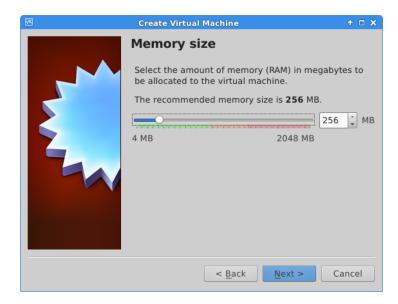
Use the following options

• Name: Torios

• Type: Linux

• Version: Ubuntu 32 bit

Click Next



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

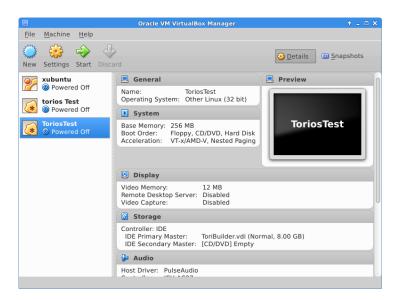


Upon opening virtual box you will see this screen:

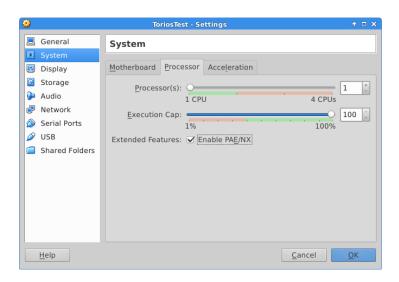


Click use existing and select the file you downloaded earlier, so in this case its ToriBuilder.vdi

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.

Glossary

\mathbf{A}	K
В	
\mathbf{C}	
Creative commons Document and Graphics Licensing.	
D	
${f E}$	
ext(n) File system used on Linux systems, examples are ext2 ext3, and ext4	
\mathbf{F}	
G	
GPL General Public License	
GNU/LINUX The kernel is released under the GPL so we refer to it as GNU / Linux	
H	
I	Kernel This is the heart of the
J	operating system.

L	\mathbf{R}		
Linux Operating system Kernel.			
Linus Torvalds Creator of the Linux Kernel	${f T}$		
M	U		
N	\mathbf{V}		
O	W		
P	X		
PAE Hardware Physical Address Extension	\mathbf{Y}		
Q	\mathbf{Z}		

Chapter 8 Document License