Ubuntu Installation Presentation

Overview

Hardware

Extracting iso File

Simple Installation

Advanced Installations

Hardware Requirements

Most desktops and laptops built since 2010 with Pentium 4+ processors will work.

Minimum Requirements: 1 GHz x86 processor 1 GB system memory 5 GB disk space (15 GB is recommended) Video support capable of 1024 x 768 resolution Audio support Internet connection (not required but recommended)

Downloading and Extracting Installation File

Download latest version from http://www.ubuntu.com/download (Recommend LTS version)

You can elect the 64 bit or 32 bit version

Verify the integrity of the file using md5 sum or sha256 sum. On Windows download and install the file at this link: <u>http://www.nullriver.com/downloads/Install-winMd5Sum.exe</u> and follow the instructions on this page for Linux or Windows hash file verification, https://help.ubuntu.com/community/HowToMD5SUM

To Extract the Downloaded ISO file on Windows system use these resources:

Extract to DVD: On Win 7/8.x you should be able to right click on the file in the File Explorer program and select Burn Disk image. Your system must have a DVD burner and you will need a blank DVD

Extract to USB: <u>http://www.pendrivelinux.com/downloads/Universal-USB-Installer</u> This will download an exe file that you can install. When started it will allow you to select the downloaded iso file and burn it to a USB thumb drive that is 2+ GB in size. To use the usb thumb drive for installation your system must be capable of booting from the usb drive. Depending on your computer, you may need to change this at startup in your bios or boot order function.

Simple Install

This is an installation on a computer where you plan to use only Ubuntu on the system. With this and all the other installation options it is highly recommended to boot as a "Live CD" to test your system is compatible with Ubuntu.



Advanced Installs

This includes Dual Boot Ubuntu with Win 8.x, installing on removable USB Devices or installing in VirtualBox.

Win 8.x Dual Boot Install with UEFI

First, Win 8.x must be installed before installing Ubuntu.

Second, back up Win 8.x system and data files. (can use Backup and Restore program in System and Maintenance to create a system image)

Third, you need to use a program like the Disk Management Tool in Win 8.x to shrink the drive C partition to allow space for Ubuntu.



that is safe so accept the default.

You can also use Gparted after starting the Ubuntu Live CD to shrink your Win 8.x C OS partition and create the needed Ubuntu partitions, / (boot), /home and swap.

Linux partitions have a different naming system then Windows lettering.

IDE Hard drives are named hdX where X is one of the four letters a-d. Primary master is hda, primary slave is hdb, hdc is secondary master and hdd is secondary slave

SCSI/SATA drives are marked with sdX with X being any letter. So sdb1 would be the first (1) partition on the second (b) SCSI/SATA drive. So sda2 would be the second (2) partition on the first (a) SCSI/SATA drive.

CParted Partition Editor	🗢 🖬 🎟 📲 11:35 AM 🤤	8 🔿 🗇 /dev	v/sda - GParte	d				
GParted Edit View Device Partition Help Monviola (465.76 CIB) -		GParted Edi	t View Devi	ce Partition H	Help			
/dev/das		0.	机晶胞	61			/dev/so	da (465.76 GiB) 🛟
444.11 G/B		nnn						
Partition File System Label Size Used Unused Flags /dev/sda1 Tat32 SYSTEM 300.00 MIB 36.72 MIB 265.28 MIB boot		/dev/sda4						
/devytda2 ndts Recovery 900.00 Mil 315.40 MilB S84.60 MilB Moden, diag /devytda3 0 wiknown 128.00 MilB mrtfres /devytda4 0 ffs 05 44415/ill 20 50/ill 414415/ill pmffdda								
/dev/sda6 nt/s 330.00 MiB 285.30 MiB 64.70 MiB hiden, diag /dev/sda6 nt/s Restore 20.07 G/B 846 G/B 11.53 G/B hiden, diag		Partition	File System	Label	Size	Used	Unused	Flags
	and the second	/dev/sda1	fat32	SYSTEM	300.00 MiB	36.72 MiB	263.28 MiB b	oot
		/dev/sda2 /dev/sda3		Recovery	128.00 MIB	315.40 MIB	584.00 MIB 1	nsftres
		/dev/sda4	ntfs	OS	444.11 GiB	29.50 GiB	414.61 GiB r	nsftdata
a operations pending		/dev/sda5	ntfs		350.00 MiB	285.30 MiB	64.70 MiB	idden, diag
		/dev/sda6	ntfs	Restore	20.01 GiB	8.48 GiB	11.53 GiB	idden, diag
-								
			and the second					
		o operations p	ending					
			v/sda - GParte	d				1
8 Resize/Move /dev/sda4		GParted Edi	t View Devi	ce Partition I	Help			
		DO.	416.16	6 1			/dev/so	a (465.76 GiB) *
			M 1 12 12				Jocific	
				/dev	/sda4		unallo	cated
Minimum size: 30210 MiB Maximum siz	e: 454771 MiB			341.	BO GIB		102.32	GiB
		Partition	File System	Label	Size	Used	Unused	Flans
Free space preceding (MIB): 0	T	/dev/sda1	fat32	SYSTEM	300.00 MiB	36.72 MiB	263.28 MiB	boot
New size (MiB): 350000 ‡			ntfs	Recovery	900.00 MiB	315.40 MiB	584.60 MiB	hidden, diag
		/dev/sda3		n	128.00 MiB	-	_	msftres
Free space following (MiB): 104771	÷	/dev/sda4	ntfs upalloca	OS	341.80 GIB	29.50 GIB	312.30 GiB	msftdata
Align to: MiB		/dev/sda5	ntfs	iceo	350.00 MiB	285.30 MiB	64.70 MiB	hidden, diag
Augireo.	*	/dev/sda6	ntfs	Restore	20.01 GiB	8.48 GiB	11.53 GiB	hidden, diag
Cancel	M Posizo/Mouo							
Cancer	Resizermove							
		🔰 Shrink /dev	/sda4 from 44	4.11 GiB to 341.8	30 GiB			
		1 operation pe	nding					
8 Create new Partition		😣 🖨 🗇 /dev	v/sda - GParte	d				
		GParted Edi	t View Devi	ce Partition H	telp			
		0.	机电电	-			/dev/so	da (465.76 GiB) 🗘
		000	2					
Minimum size: 1 MiB Maximum size: 10	4771 MiB			/dev/ 341.8	sda4 0 GiB			
Free space preceding (MIB): 0 Create as:	Primary Partition ‡	Partition	File Sy	ystem Label	Size	Used	Unused	Flags
New size (MiB): 26000 ‡		/dev/sda1	fat	32 SYSTEM	4 300.00 Mil	36.72 MiB	263.28 MiB	boot
File system:	ext4 ‡	/dev/sda2 /dev/sda3	ntr	known	128.00 MIE	3 315.40 MIB	584.00 MIB	moden, diag
Free space rollowing (MIB): 78771		/dev/sda4	ntf	s OS	341.80 Git	29.50 GiB	312.30 GiB	msftdata
Align to: MiB ‡ Label:		New Partitio	on #1 📕 ext	t4	25.39 Git	3	-	
		New Partitio	on #2	ux-swap	4.00 Git	3	-	
	Cancel Add	/dev/sda5	on #3 ext	is	72.92 GIE 350.00 Mie	285 30 MiR	64 70 Mie	hidden diag
		/dev/sda6	ntf	s Restor	e 20.01 Git	8.48 GiB	11.53 GiB	hidden, diag
				Townships		1		
		Shrink /dev	/sda4 from 44	4.11 GiB to 341.8	B) es (deutede			
		Create Prin	nary Partition a	#1 (ext4, 25.39 0 #2 (linux-swap. 4	1.00 GiB) on /dev/sda	da		

on /dev/sda

4 operations pending

Apply operations to device Are you sure you want to apply the pending operations? Editing partitions has the potential to cause LOSS of DATA. You are advised to backup your data before proceeding. Cancel Apply Now Apply them. Now Apply them. Of install Install Installation type Installation type Installation t	
Are you sure you want to apply the pending operations? Editing partitions has the potential to cause LOSS of DATA. You are advised to backup your data before proceeding. Cancel Apply Now Apply them. Now Apply them. Now Apply them. Cancel State of the set data and addition of set of the set data State of the set data and addition of set of the set data State of the set data and addition of set of the set data State of the set data and addition of set of the set data State of the set data and addition of set of the set data State of the set data and addition of set of the set data State of the set data and addition of set of the set State of the set of the set data and addition of the set State of the set of the set of the set of the set State of the set of the set of the set of the set State of the set of the set of the set of the set of the set State of the set of the set of the se	
Now Apply them. Something else Vec an create or relate partitions yourset(or choose multiple partitions for uburts. Qut Back After starting to installation select "Something Else for the partioning.	
Quit Back Control After starting to installation select "Something Else for the partioning. Imatall Imatall Installation type Stads (ntf) stads (ntf) <td< th=""><th></th></td<>	
Install Installation type sda3 (unknown) sda4 (ntfs) sda8 (linux-swap) sda9 (ext4)	ntinue
/dev/sds9 ext4 /home 2 78302 MB 1418 MB /dev/sds5 ntfs 367 MB 299 MB /dev/sds6 ntfs 2 21485 MB 9106 MB	
free space 0 MB + - Change New Partition Table Revert	
Device for boot loader installation:	
Quit Back Install Now	
•••••	
Important you want the bootloader installed to your primary drive in this case /dev/sda which would be the MBR	

When the installation is completed try booting into Ubuntu first (which will be the default in grub2. Make sure everything is working before rebooting and selecting Win 8 boot. The first time the checkdisk program may run. If the system fails to boot into Windows or Ubuntu, you may need to reboot back into the live Ubuntu CD and the boot repair program.

Use Alt-T to open a terminal:

Page 7 of 11

Run sudo add-apt-repository ppa:yannubuntu/boot-repair && sudo apt-get update

Then sudo apt-get install -y boot-repair **Boot Repair** -&& (boot-repair &) Repair the boot of the computer A message will appear saying boot repair is scanning your partitions Recommended repair (repairs most frequent problems) Create a BootInfo summary (to get help by email or forum) Advanced options About Quit Now click Recommended repair button and it will fix the most frequent problems. After a few minutes it will provide you with the commands that you need to run in the terminal to fix the problems (Remember we stressed the importance of making the Win 8 system backup when we started).

Installing Ubuntu on a USB portable Device

The installation of the Ubuntu OS on a USB device is very similar to installing it to a hard drive.

You will need a USB device with minimum of 4 GB but a 8+ GB is recommended.

If you are using a USB drive with the extracted Ubuntu iso install media, you will need a second USB drive to install the system.

Boot from the DVD or USB drive and start the installation. Insert your second USB drive.

When choosing installation type, select Something Else and choose your second USB drive. You can probably use the entire USB drive for the partition. Also, select the second USB drive to load the bootloader.

Complete the installation then reboot your system with your new USB Ubuntu drive.

Possible issues:

USB drive life may be reduced due to the many disk writes when using the drive as your Ubuntu OS. If you boot the USB drive on a system with different peripherals than the system that was used to install Ubuntu on the drive, you may experience problems with Ubuntu recognizing things like your wireless device, printer settings and video settings.

Installing Ubuntu in VirtualBox

VirtualBox can be used to run Ubuntu as a virtual machine on Windows, Mac or Linux systems.

This is an excellent way to run various Ubuntu flavors like Kubuntu or Xubuntu and could be used to test newer versions of Ubuntu.



Download the version that matches your OS from this link: <u>https://www.virtualbox.org/wiki/Downloads</u>

On Ubuntu you can install Virtualbox by adding a line to your /etc/apt/sources.list like this (14.04):

deb http://download.virtualbox.org/virtualbox/debian trusty contrib

Then download and install with this command

wget -q https://www.virtualbox.org/download/oracle_vbox.asc -O- | sudo apt-key add -

