# A Look at the Ubuntu Installer



Thorsten Wilms 2008-01-07

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#### Start or install Ubuntu

Start Ubuntu in safe graphics mode Install with driver update CD OEM install (for manufacturers) Check CD for defects Memory test Boot from first hard disk

F1 Help F2 Language F3 Keymap F4 VGA F5 Accessibility F6 Other Options



What if the user can't read English? It should be considered to start with language selection before presenting anything else.

Language and keymap menus should allow type-ahead (hit D for a language starting with D).

*F4 VGA* reads like it's about VGA options. F2 and F3 are followed by labels, not the chosen option, so the same should apply here. *VGA -> Resolution* 



*F6 Other Options*: The generic name doesn't help the user to build any expectations. A better name might be *Edit boot options*. This is a switch, not a menu and works on a different level than the other F options. A *[X]* in front of the label could be used to mimic a check box. But as things are, this option can't be turned off again!

#### Bug #164822

In some cases, F1 shows a strange table instead of *Help*. It seems to be random, but it could be that hitting F6 increases the chances.

	-data			prog
:	att va		a:	65a4.55
:			Ь:	65d4.15
:			c:	65cb.15
Θ:	66.	1	d :	65bd. 5
1:	ЗЪ000000.	1	e:	584e.15
2:	823ca.	4	f:	582f.5
3:	Θ.		10:	33b1.65
4:	1.	1	11:	337c.25
err ip :	8 3392:		1b.7	



Bug # 38526: LiveCD: boot screen function key confusion

Welcome	to Ubuntu!	
	a live CD–ROM for Ubuntu Was built on 20071016.	
HELP INDE		Writing Esc might increase the chances
KEY TOP	PIC	of the user finding the key.
⊲ <mark>E1</mark> ≻ Thi	is page, the help index.	
<f2> Pre</f2>	erequisites for running Ubuntu.	
<f3> Boo</f3>	ot methods for special ways of using this	s C/
<f4> Add</f4>	ditional boot methods; rescuing a broker	17 1.
ZEEN One	ecial hoot narameters overview	

∕o system.

If the Help menu is up, all F keys except F1 have another meaning. So

<F6> Special boot parameters for special mach

the legend on the bottom should be hidden.

- <F7> Special boot parameters for selected di/ \_\_ontrollers.
- <F8> Special boot parameters for the boots/
- <F9> How to get help.
- <F10> Copyrights and warranties.

Press F2 through F10 for details, or Escape to exit help.

F1 Help F2 Language F3 Keymap F4 VGA F5 Accessibility F6 Other Options



The user must know / figure out the use of F keys, arrow keys, Escape and Enter. An attempt at providing some help:



## Live system

#### Language

The live system doesn't pick up the choice of key-map from text mode, but defaults to English instead. The installer ignores both the text mode choice and the live system preference.

#### Live vs installer

I think the CD suffers from trying to be both installation medium and live system. For me, mounting drives showed to be risky:

- In one case, the installer failed, reporting a drive still mounted. but *mount* listed no such drive.

- I lost screenshots I saved to a mounted drive. They were gone after quitting the installer, I think.

(No reports, because I'm not sure enough about my exact steps)

8

Bug #61050

For installation, it would be better to:

- start the installer automatically
- hide all irrelevant preferences
- hide all productivity applications that make only sense if you can save to somewhere

A good live system should have:

- drive icons for easy mounting
- an option to save preferences to disk (or to make a package for online storage)

#### Disks

In *Computer*, the drives are listed with names like *14.0 GB Volume*. Seeing the size is helpful, but not enough to identify drives that are named by the hda/sda convention elsewhere. Mounted disks are labelled *disk*, *disk*-1 ... . Too generic and no connection with previous name. Also counting from zero, which should be left in the coding realm.

#### **User Switching**

The User Switcher applet shouldn't appear with only one user.

## Installer

43 x ===	Install 📃 🗆 🗙
عربي	Melcome
Беларуская Български बाःला	Ready to install? Once you answer a few questions, the contents of the live CD can be installed on this computer so you can run the system at full speed and without the CD.
Bosanski	Answering the questions should only take a few minutes.
Català Čeština	Please choose the language used for the installation process. This language will be the default language for the final system.
Dansk	
Deutsch	
Ελληνικά	
English	
No localization	
Esperanto	
Español	
Eesti	
Euskaraz	
Suomi	
Français	If you have Internet access, read the release
Galego	notes for information on problems that may affect you.
ગુજરાતી	
עברית	Release Notes
Step 1 of 7	[Signature] [Sign

#### Step 1

Release notes should only be offered if there is internet access.

Without, the existence of release notes could still be pointed out, but don't bother the user with this conditional statement.

★ ==		Install		2		install		×
عربي	More		Welcome	عربي	Español			
Беларуская	Languages		Ready to install? Once you answer a few	Беларуская	Eesti			
Български			basic questions, the contents of the live	Български	Euskaraz			
বাংলা			CD can be installed to your computer so you can run the system at full speed and	वारला				
Bosanski			without the CD.	Bosanski	Suomi			
Català			Answering the questions should only take	Català	Français			
Čeština			a few minutes.		Galego			
Dansk				Čeština	ગુજરાતી			
Deutsch			Please choose the language used for the installation process. This language will be	Dansk	עברית			
Ελληνικά			the default language for the final system.	Deutsch	More			
English				Ελληνικά	Languages			
No localization				English				
				No localization				
Esperanto				Esperanto				
Español				Welcome				
Eesti				Ready to install? Once	e vou answer a few	Answering the question	ons should only take	
Euskaraz				basic questions, the	contents of the live	a few minutes.	ins should only take	
Suomi				CD can be installed to you can run the syste		Please choose the lar	augusta used for the	
Français				without the CD.	em at full speed and	installation process. T		
Galego						the default language		<u>Release Notes</u>
ગુજરાતી								
עברית			<u>Release Notes</u>					
Step 1 of 7			€orward €	Step 1 of 7				ncel

### Perhaps all languages could fit in without scrollbar?

#### Cancel



The *Quit* button should read *Abort* to match the question.

A few words about the consequences or lack thereof would be nice: No changes will be applied. You can start the installation process again.

Cancel isn't a clear alternative. Better would be Continue Installation.

#### Step 2: Where are you?

		Install	
Where are you	u?		
Select a city in your	country and time zone. If	the indicated current time is incorrect even adjust it after rebooting into the installed	
• •••			
Selected city:	New York	Selected region: United States	
Time zone:	EST (GMT-5:00)	Current time: 07:53:56 AM	
Step 2 of 7		Cancel 🚑 Back	<u>Eorward</u>

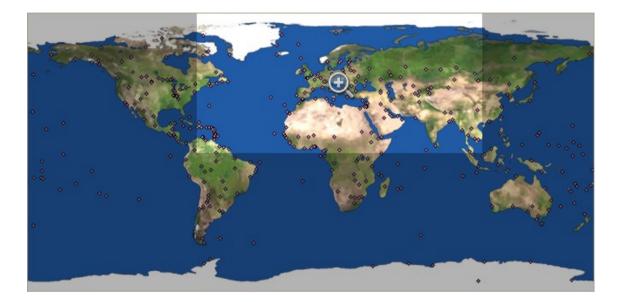
A fitting city isn't necessarily in the user's country. The second sentence seems to be overly complicated. I suggest:

Select a city in your time zone. The exact time can be adjusted later on.

The map should fit without scrollbars and fill the horizontal space from border to border.

*Time Zone* and *Selected Region* could be menu-boxes like *City*.

#### Installer



The user shouldn't feel a need to aim precisely.

The cities should have tooltips.

There's no way to zoom out. A zoom-out button could be placed in the corner left empty by the scrollbars.

City selection is back in New York if you return to this page.

## Installer



The actual time zones/regions would be larger targets.

Original Source (Wikipedia)

#### Step 3: Keyboard layout

<u></u> II	stall	
Keyboard layout		
Which layout is most similar to your keyboard?		
Denmark Esperanto Estonia Faroe Islands Finland France Georgia Germany Ghana Greece Hungary Iceland India Iran Iraq		Germany Germany - Dead acute Germany - Dead grave acute Germany - Dvorak Germany - Eliminate dead keys Germany - Macintosh Germany - Macintosh, eliminate dead keys Germany - Neostyle Germany - Noostyle Germany - Romanian keyboard with German letters, Germany - Romanian keyboard with German letters, Germany - Sun dead keys
Step 3 of 7		Cancel

Keyboard layout defaults to English, ignoring both the boot screen keymap and live system preference.

Asking the user to press certain keys like the text mode installer might be easier.

#### Step 4: Prepare disk space

🚊 Install	_   ×					
Prepare disk space						
How do you want to partition the disk?						
— Guided - resize SCSI1 (0,0,0), partition #6 (sda) and	Guided - resize SCSI1 (0,0,0), partition #6 (sda) and use freed space					
New partition size:	60% (7.0 GB)					
○ Guided - use entire disk						
⊙ IDE1 master (hda) - 160.0 GB SAMSUNG SP1614N	И					
🔿 SCSI1 (0,0,0) (sda) - 200.0 GB ATA WDC WD2000JE	D-00K					
Manual						
Step 4 of 7	Cancel					

I couldn't try the guided options. The first option doesn't make much sense for my system. The second disk isn't SCSI, but SATA!

#### Bug #136268

Another option should be replacing existing installations, especially older Ubuntu releases.

Many not technically inclined users will hardly understand partitions, but I currently don't see a way to hide them.

#### Step 4<sup>1</sup>/<sub>2</sub>: Manual

4				Install		×
Prepare	partiti	ons				
Device	Туре	Mount point	Format?	Size	Used	4
/de∨/hda	21					
/dev/hda1	ext3	/media/hda1		15011 MB	5000 MB	
/dev/hda2	reiserfs	/media/hda2		145028 MB	unknown	
/dev/sda						
/dev/sdal				10010 MB	unknown	
/dev/sda5				10010 MB	unknown	
/dev/sda6	ext3	1		15011 MB	2400 MB	
/dev/sda7	swap			1011 MB	0 MB	
/dev/sda8	reiserfs	/media/sda8		164003 MB	unknown	
						-
Edit partitio	n Dele	te partition	Undo cha	nges to parti	tions	
		(				
		a partition for				
		it "/") with a m ition of at leas				
		er partitions if				
						ר
Step 4 of 7					Cancel Cack Eorward	

The explanatory text should perhaps be on the top.

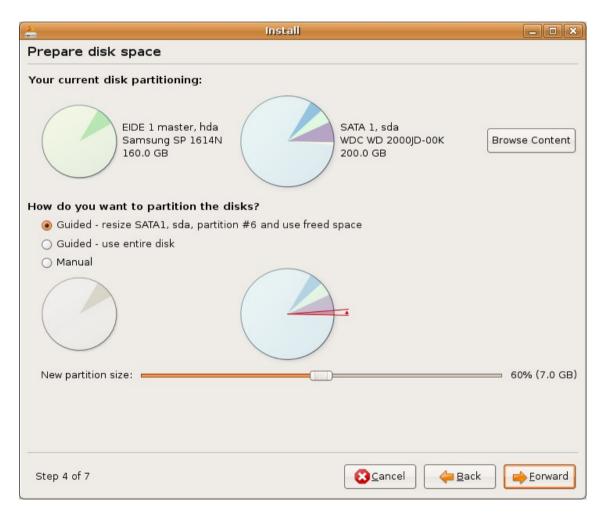
It should be possible to format partitions of unrecognised types.

The many /dev are redundant.

There would be no need for an editing dialog with widgets in the table.

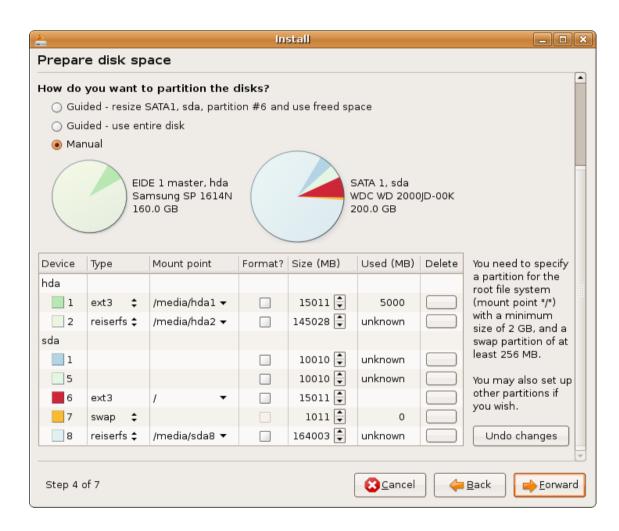
Navigating back from step 5 leads to the initial step 4. This breaks the step/page concept.

#### Step 4 more visual



*Browse Content* would open a browser window, allowing to take a look at the content of each partition.

It might be better to not have a slider for resizing, just going with the default.



On choosing Manual, the window contents should be updated, followed by a smooth scroll animation.

Other possibilities:

Up/down buttons instead of the scrollbar.

No table on the page, edit dialogs instead.

#### Step 6: Who are you?

🚣 Install	-	
Who are you?		
What is your name?		
Thorsten Wilms		
What name do you want to use to log in?		
thorwil		
If more than one person will use this computer, you can set up multiple accounts after installation	1.	
Choose a password to keep your account safe.		
Enter the same password twice, so that it can be checked for typing errors.		
What is the name of this computer?		
charly		
This name will be used if you make the computer visible to others on a network.		
Step 6 of 7	<u> </u>	rward

Friendly text, but the layout looks a bit chaotic.

The GDM screen simply asks for a Username, so the label What name do you want to use to log in? is less conductive to creating the connection than using the same simple label Username.

The *Forward* button should be disabled on unequal passwords. A hint should appear as soon as the letters don't match or after typing stopped with unequal result.

#### Step 6: Alternative Layout

<b>*</b>	Install 🛛 🗖 🗙
Who are you	1?
Name:	Thorsten Wilms
Username:	thorwil
	Use this name to log into your account.
	You can set up multiple accounts after installation.
Password:	woodolok woodolok
	Enter the same password twice to rule out a typing error.
Computer name:	charly
compater name.	This name will be used if you make the computer visible to others on a network.
	This name will be used if you thake the compater visible to others on a network.
Step 6 of 7	Cancel ↓ Eorward

Short labels should allow experienced users to quickly go through this, while the additional text still provides help for the less experienced.

#### Step 7: Ready to install

🛓 Install		
Ready to install		
Your new operating system will now be installed with the following setting	gs:	
Language: English Keyboard layout: Germany - Dead grave acute Name: Thorsten Wilms Login name: thorwil Location: Europe/Berlin Migration Assistant:		
If you continue, the changes listed below will be written to the disks. Otherwise, you will be able to make further changes manually. WARNING: This will destroy all data on any partitions you have remove well as on the partitions that are going to be formatted. The following partitions are going to be formatted: partition #6 of SCSI1 (0,0,0) (sda) as ext3 partition #7 of SCSI1 (0,0,0) (sda) as swap	ed as	
		Advanced
Step 7 of 7	<u>Cancel</u>	Back

Strange frame around the text.

The 1<sup>st</sup> block could be easier to read with tabs / as table.

There's no way to go back to the relevant pages directly, if the user has to change something.

What is hiding behind the *Advanced* button? No user knows until looking.

#### Step 7: Advanced

<u>4</u>	Install	_ <b>– ×</b>	
Ready to install			
Your new operating system will now be installed with the following settings:			
Language: English Keyboard layout: Germany Name: Thorsten Wilms Login name: thorwil	- Dead grave acute		
Location: Europe/Berlin Migration Assistant:	Boot loader		
If you continue, the change Otherwise, you will be able	Device for boot loader installation: (hd0)		
WARNING: This will destroy well as on the partitions th	Popularity contest		
The following partitions are partition #6 of SCSI1 (0,0 partition #7 of SCSI1 (0,0	Cancel CK		
		Advanced	
Step 7 of 7	Cancel 🚑 Back	Install	

The boot loader options might be better off as part of the partitioning step. A menu should be used to list targets instead of having an error-prone entry.

If you want to encourage users to take part in the package usage survey, the option shouldn't be hidden behind a scary *Advanced*.

#### **Step 7 Alternative**

<u>*</u>	Install		
Ready to install			
Your new Ubuntu will be installed with the following settings:			
<ul> <li>2 Location: E</li> <li>3 Keyboard layout: G</li> <li>5 Migration Assistant: -</li> <li>Name: T</li> <li>6 Login name: t</li> <li>If you continue, the changes</li> <li>Otherwise, you will be able to</li> <li>A This will destroy all date</li> </ul>	Thorsten Wilms horwil s listed below will be written to the disks o make further changes manually. ta on any partitions you have removed		
as well as on the partitions that are going to be formatted:			
4 partition #6 of SATA1, sda as ext3 partition #7 of SATA1, sda as swap			
The boot loader will be installed to device (hd0)			
✓ Participate in the package	e usage survey		
Step 7 of 7		Cancel Back install	

The step numbers are meant as links, but there would have to be a way to navigate back to the end with the same ease.

Partitioning as step 6 would make this much nicer.

#### Installer unmounting problem

On the first attempt, the installer failed:

The installer needs to commit changes to partition tables but can not do so because partitions on the following mount points could not be unmounted: /media/disk

Please close any application using these mount points.

Would you like the installer to try to unmount these partitions again?

[Go Back] [Continue]

According to mount, no partition was mounted.

The buttons are no clear answers to the question. They could be labelled *Abort* and *Try again*.

#### Grub

Bug #29329 Bug #45989 Bug #46520 Bug #153019 Bug #80661 Grub had drive numbering backwards until I placed EIDE before SATA in my BIOS. I don't remember having such an issue with Gentoo's Grub.

Even this issue aside, installing systems side by side should be easier.

This is rather out of scope for Canonical, but with an open BIOS and perhaps Dell, maybe it could be made to happen: A BIOS that checks all partitions for runnable systems to list them on startup, removing the need for boot loaders and installing to MBA.