

# INSTALL UBUNTU ON RB-100/RB-110

(METHOD 1: USING USB CD-ROM)

DMP Electronics Inc

Robotic Division

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# REQUIREMENTS

- + Ubuntu ISO file
  - Here, we use Ubuntu 9.04 for example
- + USB CD-ROM
- + RoBoard RB-100/RB-110
- + 8GB MicroSD card

# STEP1.

- + Download Ubuntu-9.04-DESKTOP-I386.ISO file  
download web: <http://releases.ubuntu.com/9.04/>

## Ubuntu 9.04 (Jaunty Jackalope)

This directory contains the most frequently downloaded Ubuntu images. Other images, including DVDs and source CDs, may be available on the [cdimage server](#).

### Select an image

Ubuntu is distributed on four types of images described below.

#### Desktop CD

The desktop CD allows you to try Ubuntu without changing your computer at all, and at your option to install it permanently later. This type of CD is what most 256MB of RAM to install from this CD.

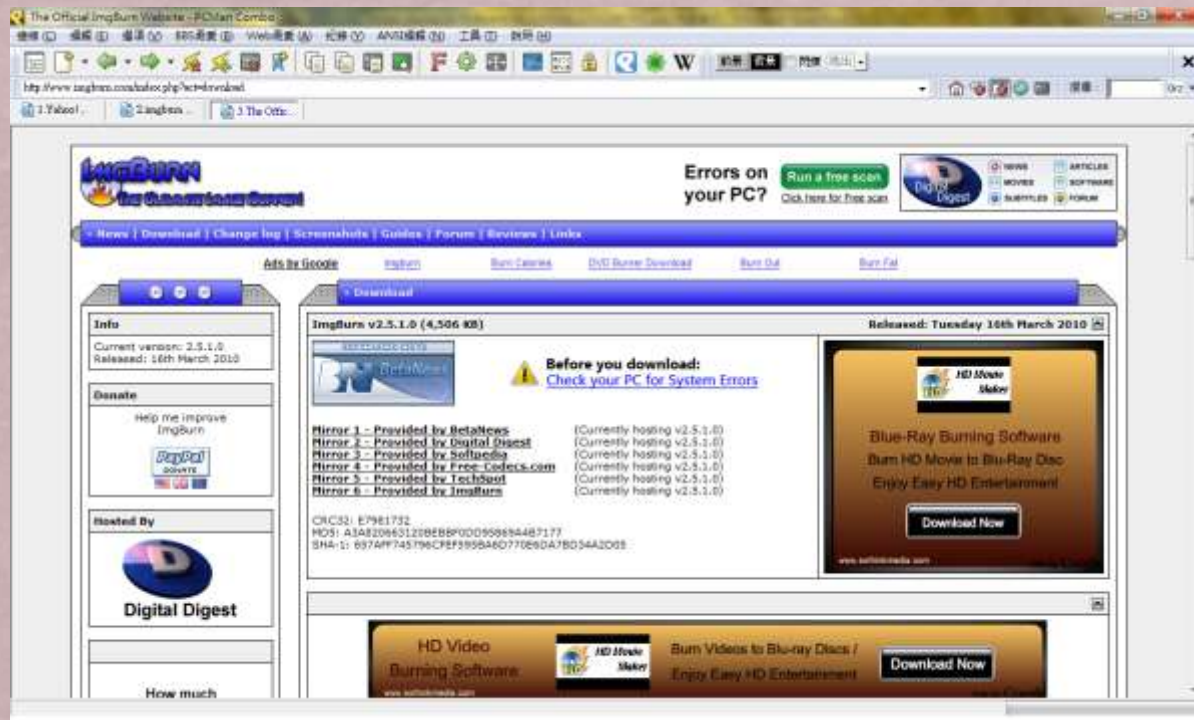
There are two images available, each for a different type of computer:

**PC (Intel x86) desktop CD**

For almost all PCs. This includes most machines with Intel/AMD/etc type processors and almost all computers that run Microsoft Windows, as well as i processors. Choose this if you are at all unsure.

# STEP2.

- + Make an installation CD with the Ubuntu ISO
    - In this example, we use ImgBurn to do this
- download web: <http://www.imgburn.com/index.php?act=download>





## STEP3.

- + Connect to the USB CD-ROM and plug the MicroSD card to your Roboard
- + Put the installation CD into USB CD-ROM



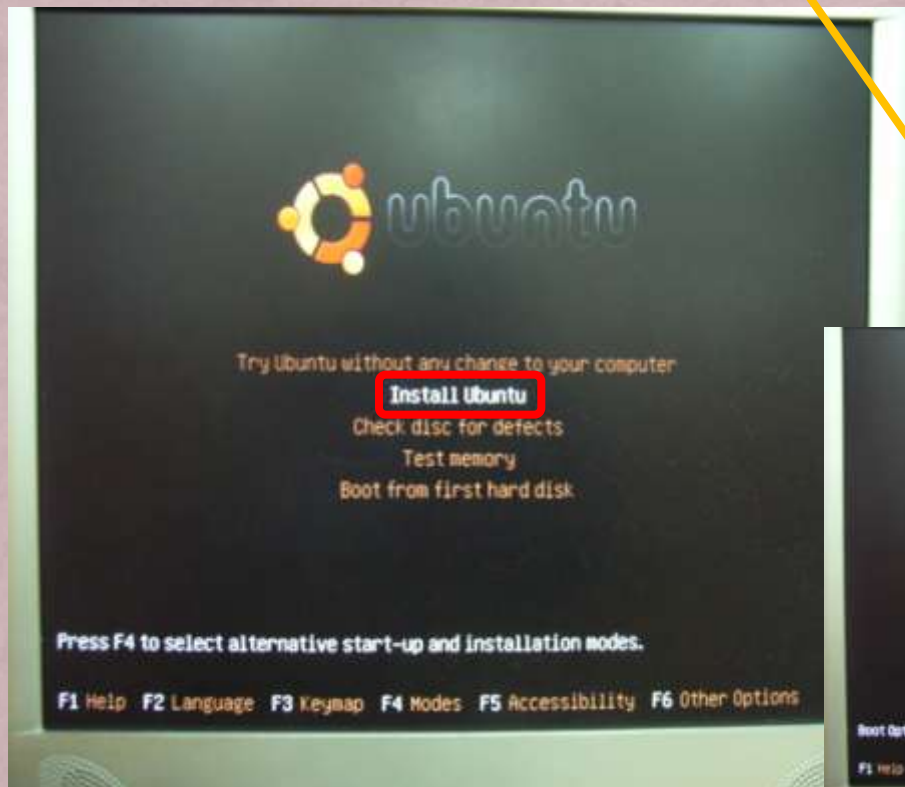
# STEP4.

- + Power on RoBoard to start the Ubuntu installation
- + Choose the language for installation process



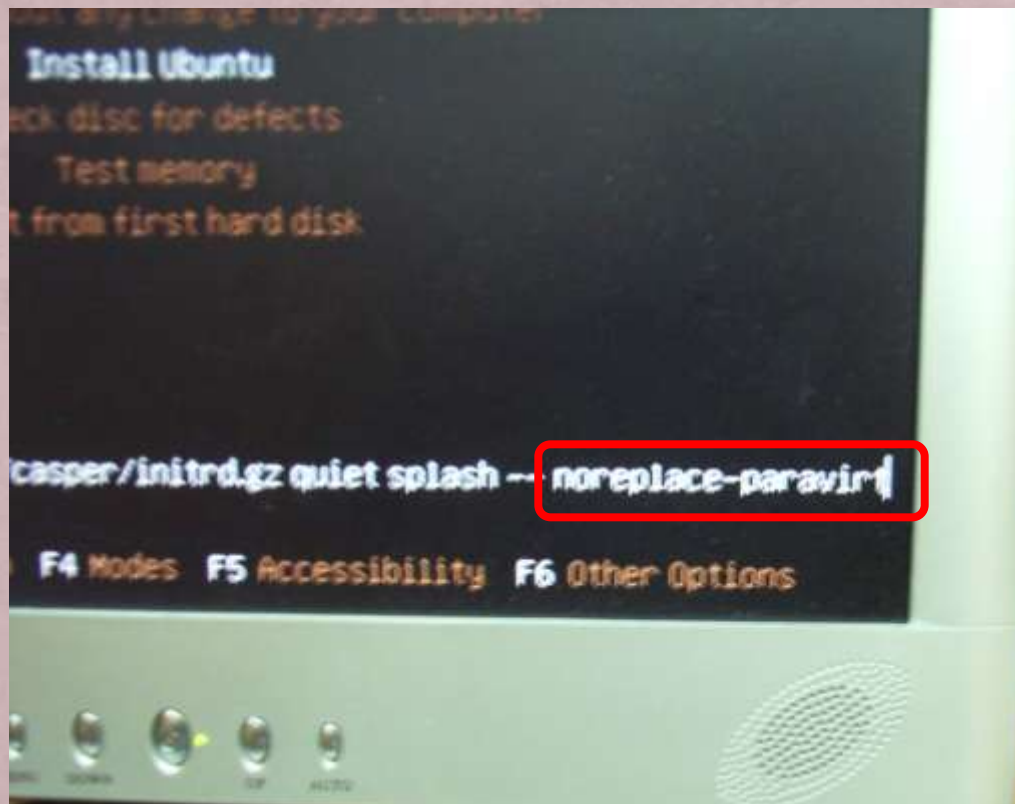
# STEP 5.

- + Choose “Install Ubuntu” & press “F6”
- + And then Press “Esc” to exit the submenu



## STEP 6.

- + Type **noreplace-paravirt**
- + Press Enter to continue





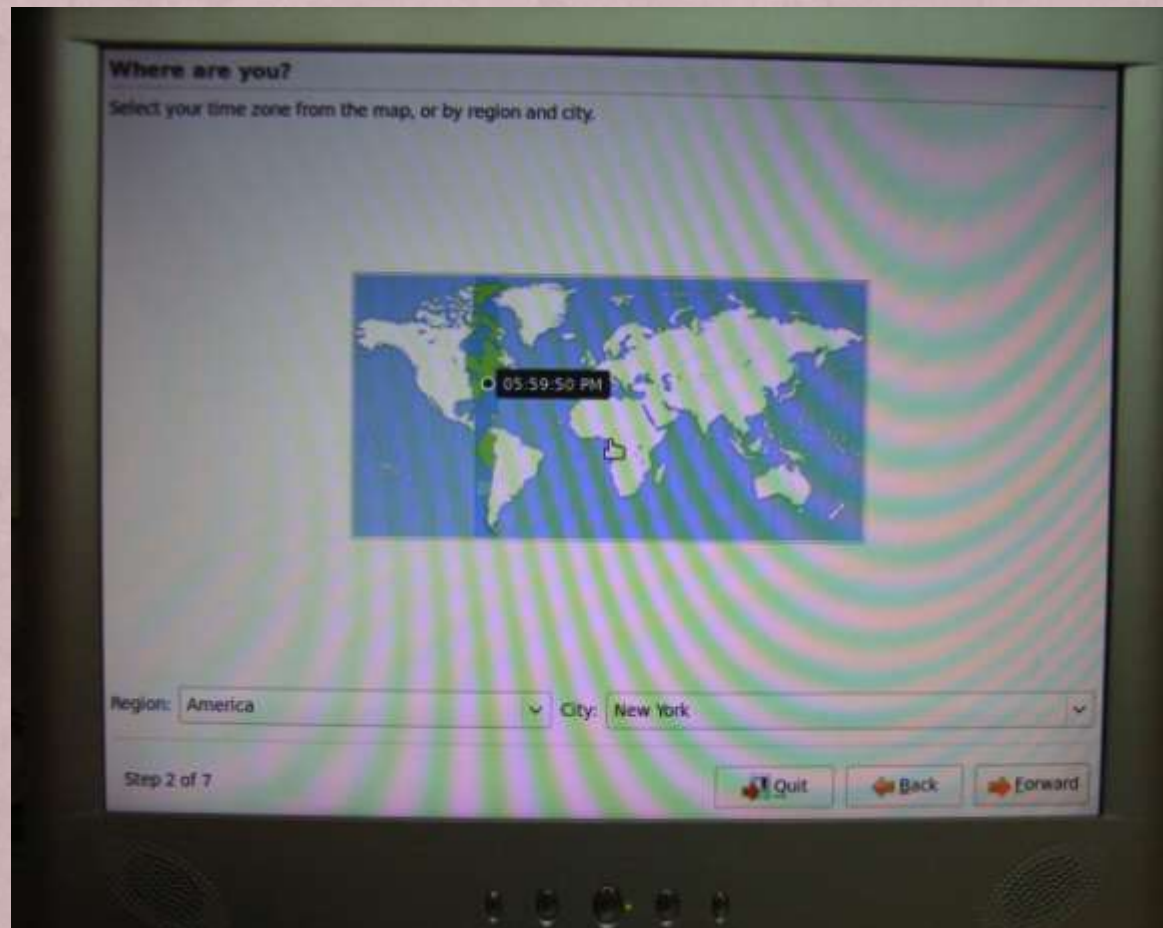
# STEP 7

- + Choose installation language



# STEP 8.

- + Choose Region and City



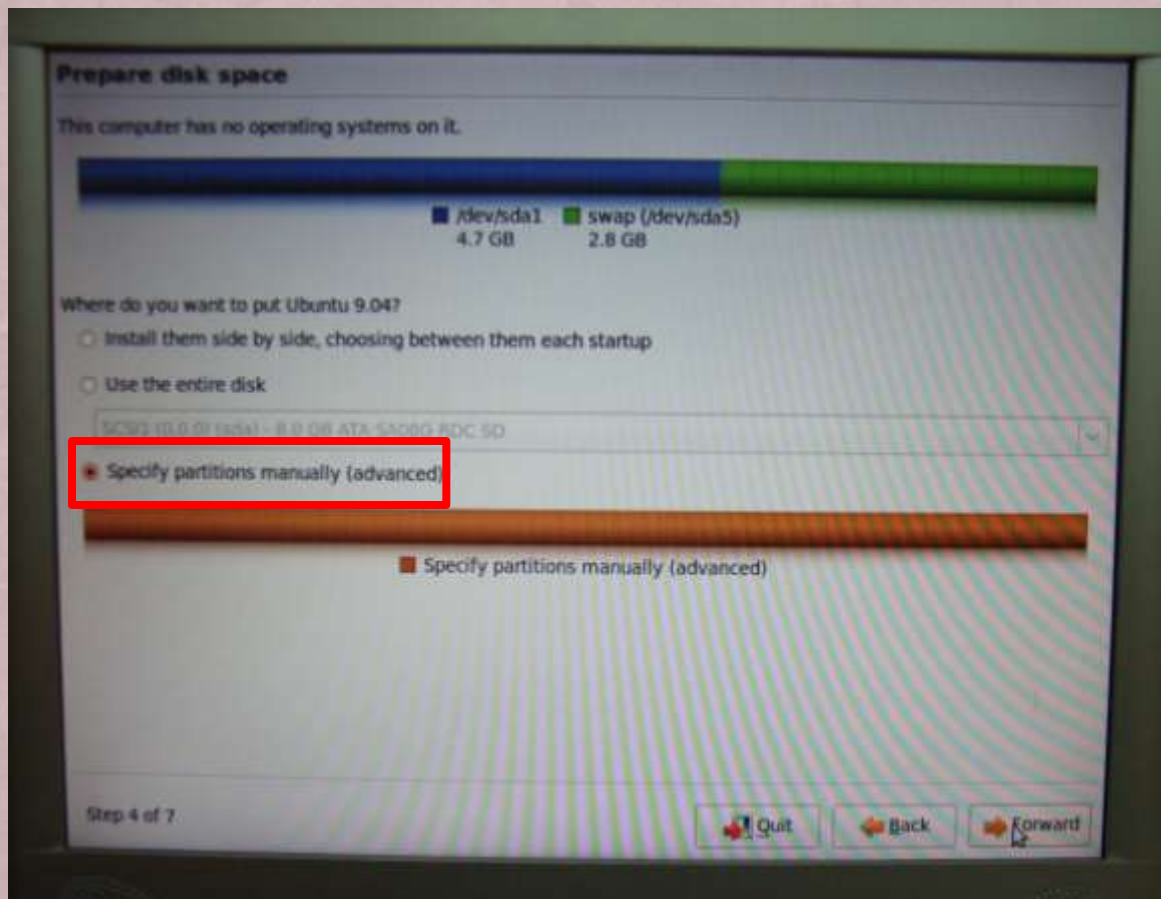
# STEP9.

+ Choose keyboard layout



# STEP 10.

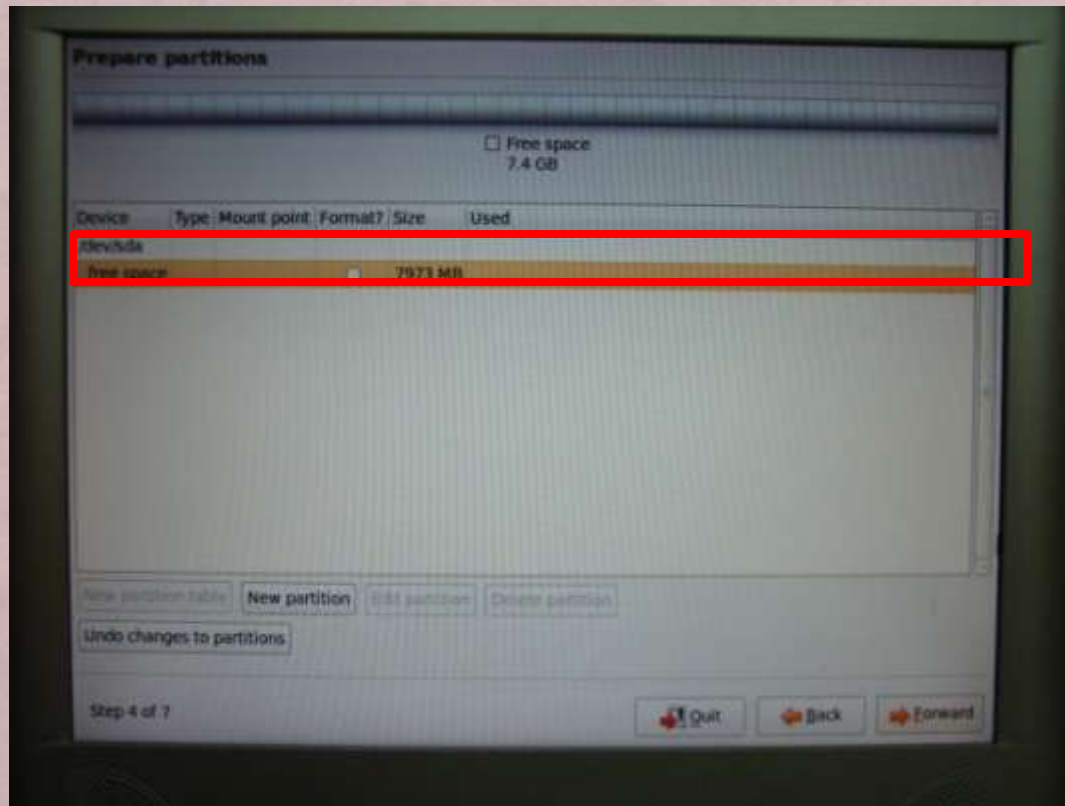
+ Choose “specify partitions manually (advanced)”





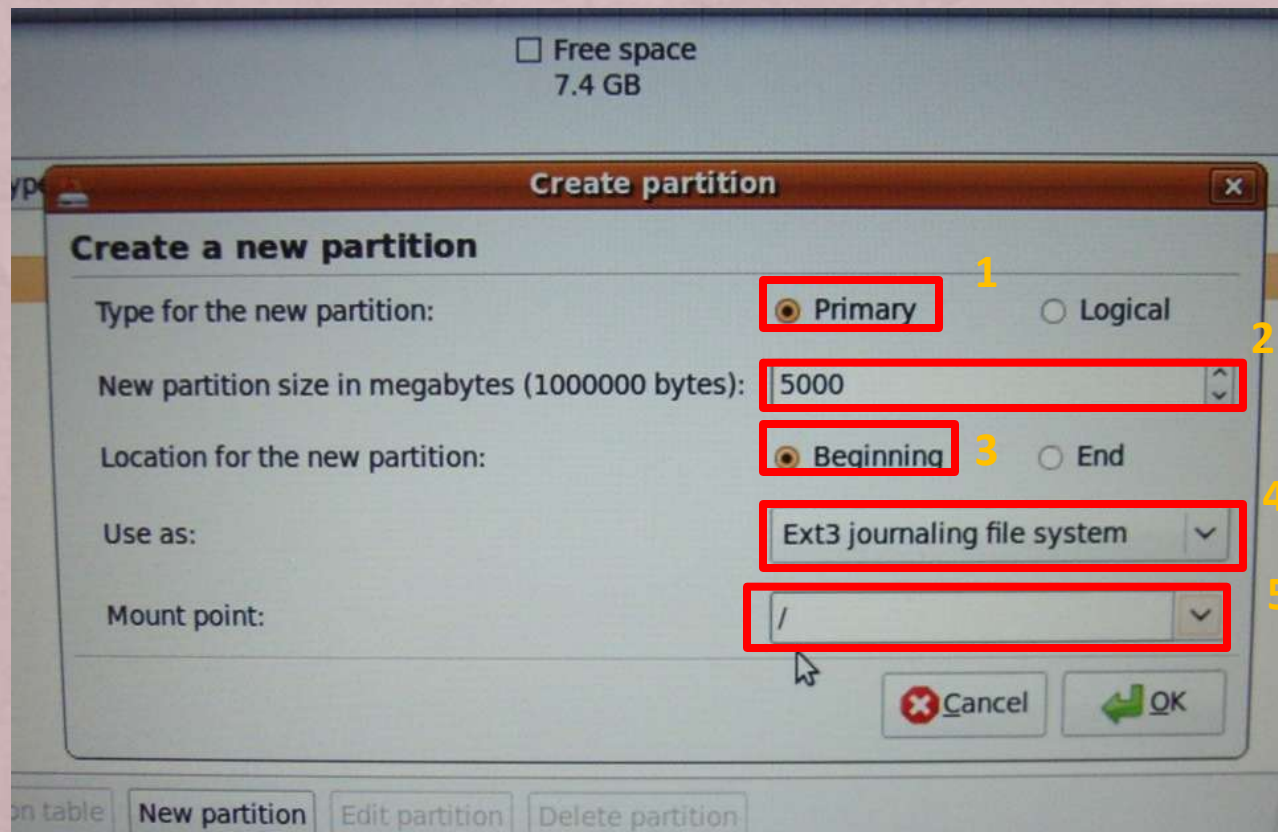
# STEP10. [OPTION]

- + Repartition the MicroSD card
  - 1. Delete the original partitions if they exist
  - 2. Create new partitions



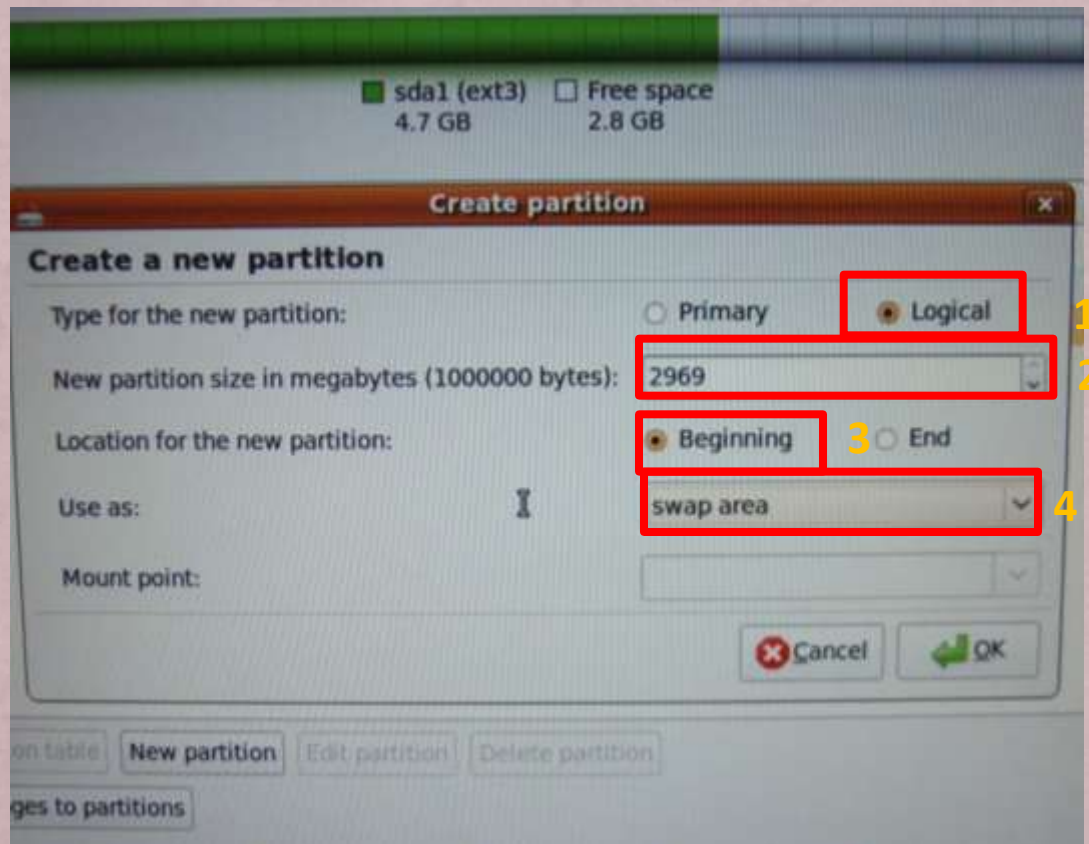
# STEP10. [OPTION]

- + Repartition the MicroSD card (cont.)
  - 3. Set the Primary partition



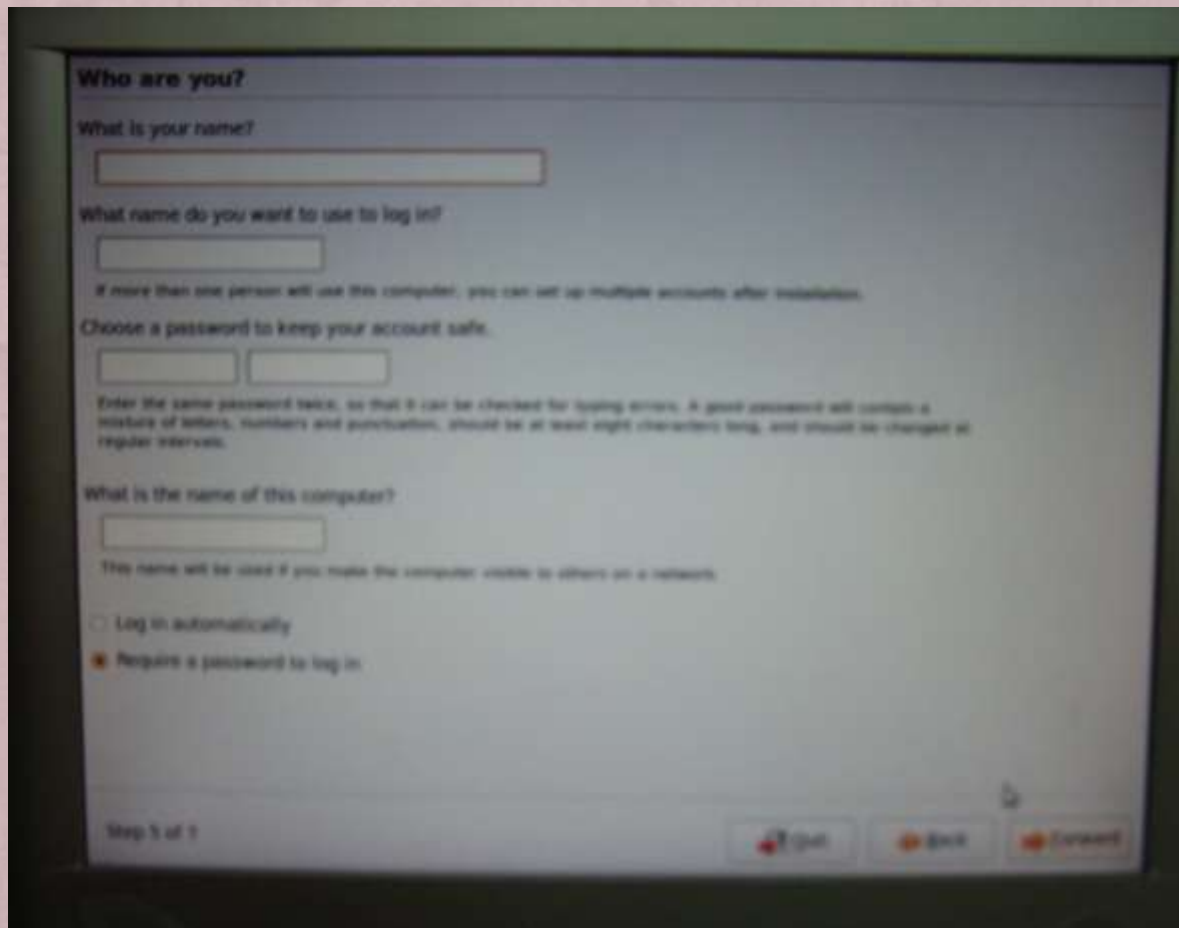
# STEP10. [OPTION]

- + Repartition the MicroSD card (cont.)
  - 4. Set the Logical partition



# STEP 11.

- + Set username and password



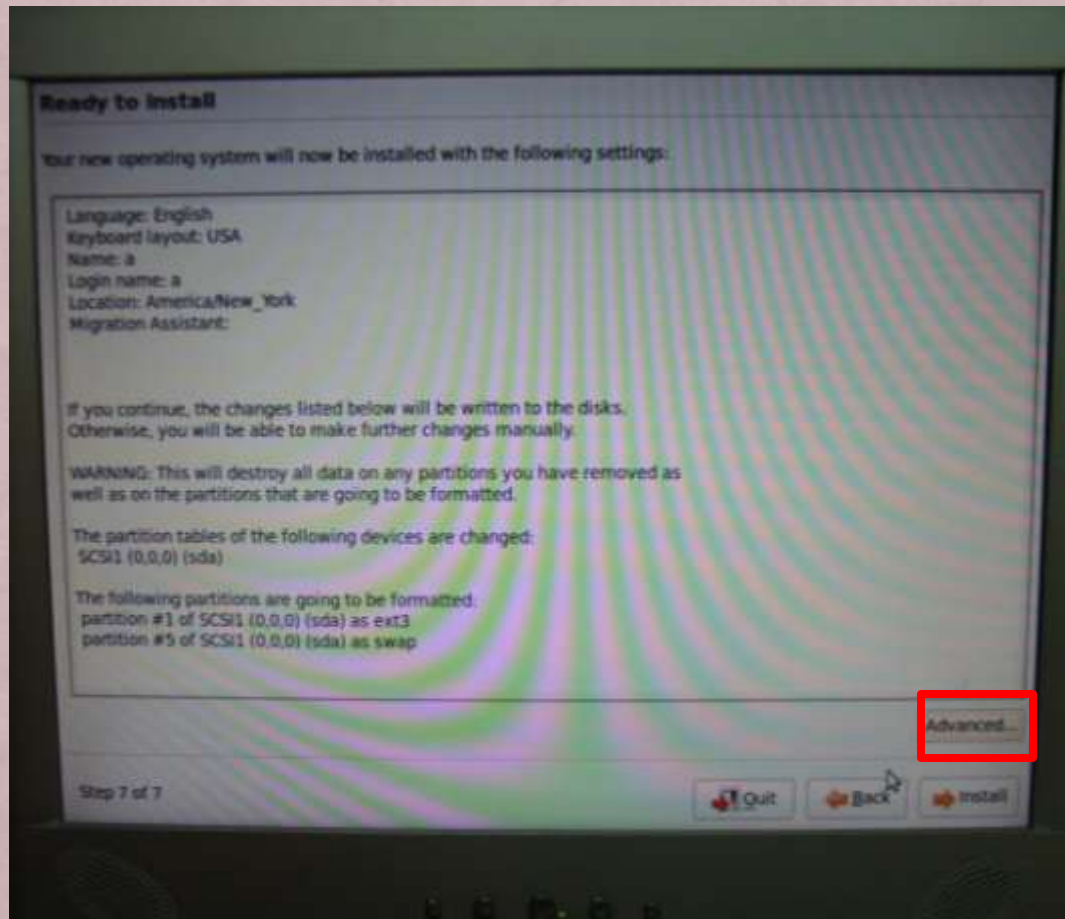
The screenshot shows the 'Who are you?' window in the Windows XP installation process. It contains the following elements:

- Title:** Who are you?
- Field 1:** 'What is your name?' with a text input box.
- Field 2:** 'What name do you want to use to log in?' with a text input box.
- Text:** 'If more than one person will use this computer, you can set up multiple accounts after installation.'
- Text:** 'Choose a password to keep your account safe.'
- Field 3:** A password input box with a confirmation box next to it.
- Text:** 'Enter the same password twice, so that it can be checked for typing errors. A good password will contain a mixture of letters, numbers and punctuation, should be at least eight characters long, and should be changed at regular intervals.'
- Field 4:** 'What is the name of this computer?' with a text input box.
- Text:** 'This name will be used if you make the computer visible to others on a network.'
- Options:** Two radio buttons: 'Log in automatically' (unselected) and 'Require a password to log in' (selected).
- Footer:** 'Step 5 of 5' and three buttons: 'Quit', 'Back', and 'Next'.



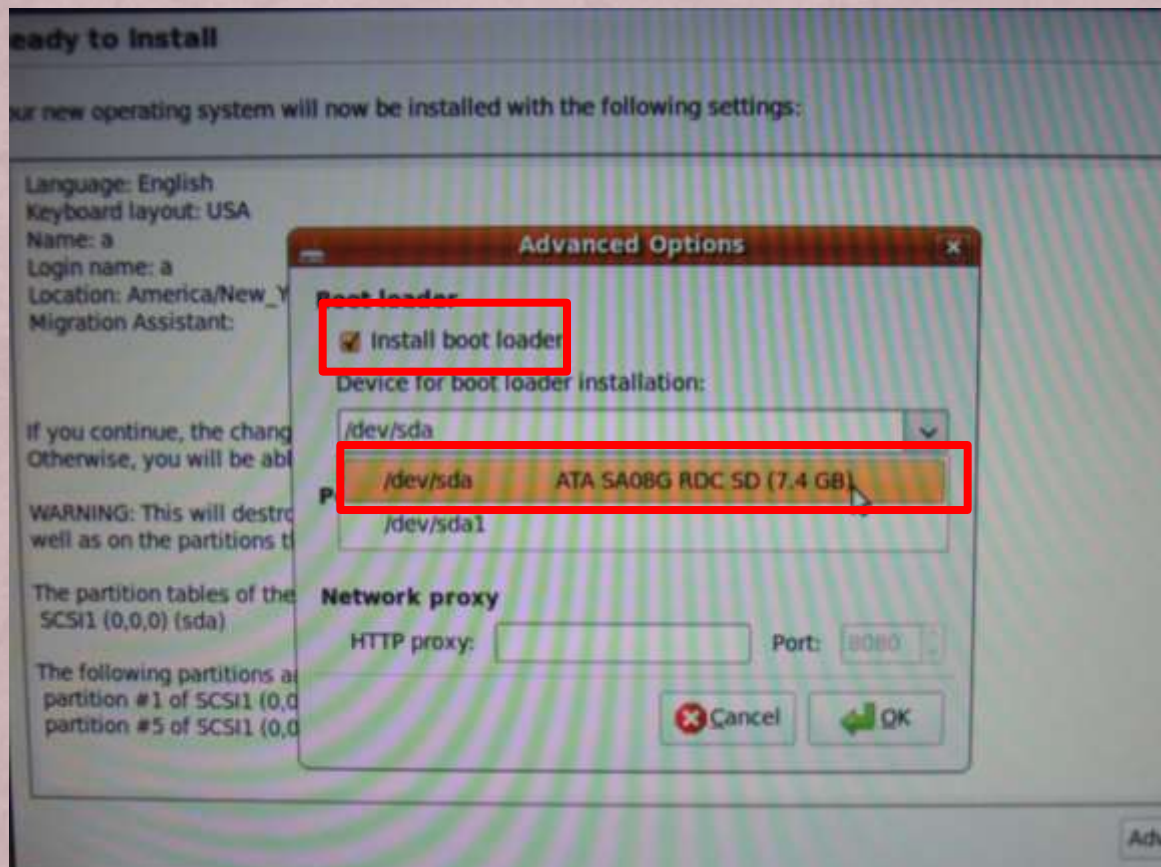
# STEP 12.

+ Click “Advanced...”



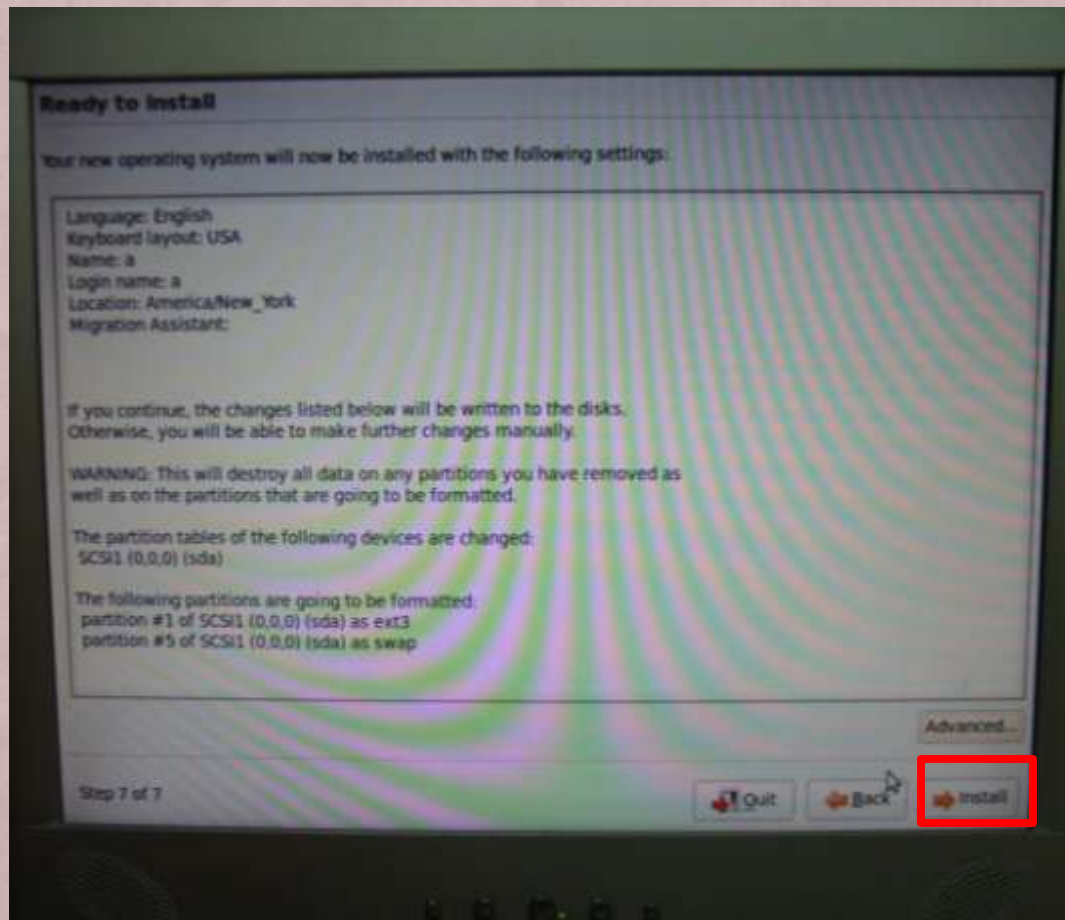
# STEP 13.

- + Click “install boot loader” and choose the MicroSD card



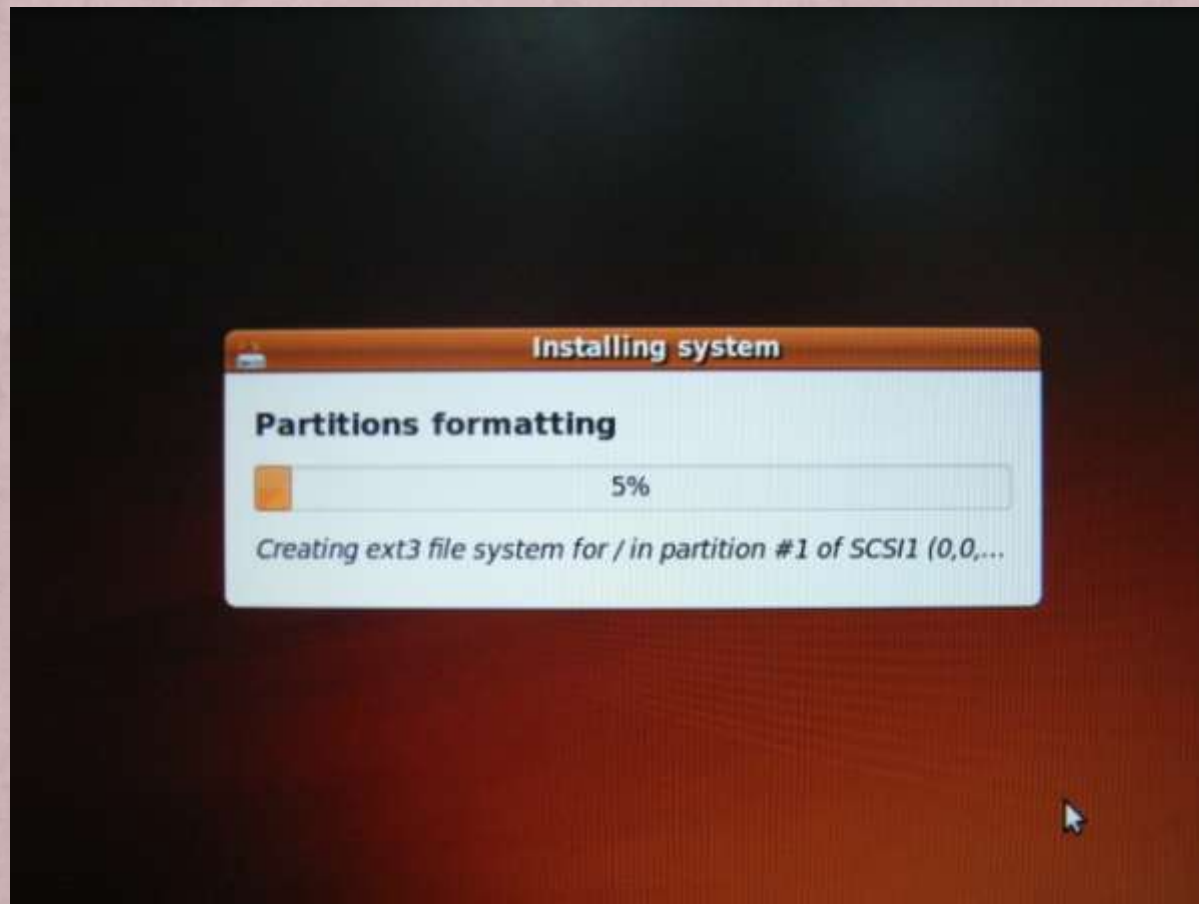
# STEP 14.

+ Click “Install”



# STEP15.

- + Partitions formatting





# STEP16.

+ Installing system



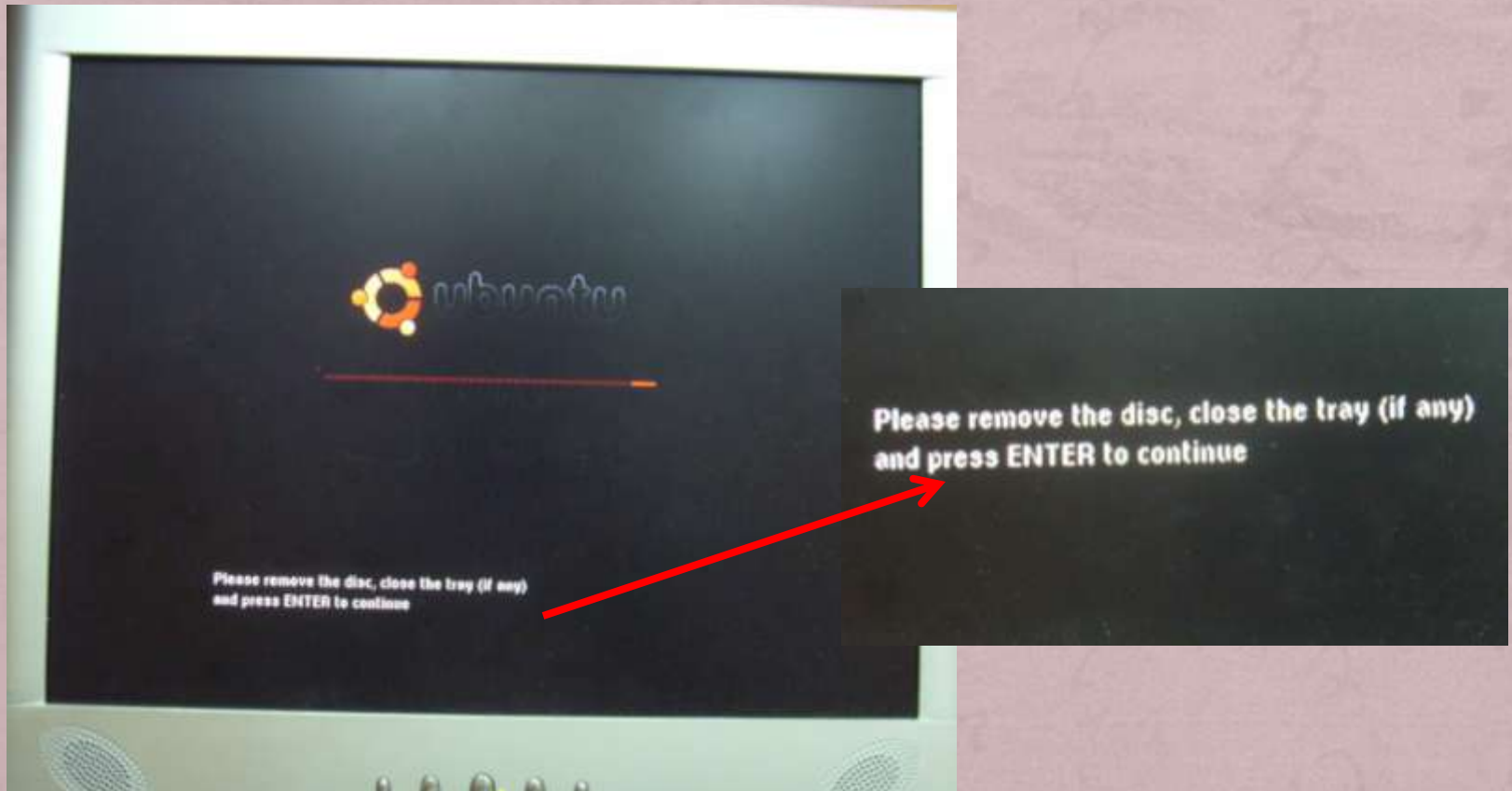
# STEP17.

- + Click “Restart Now”



# STEP18.

- + Press ENTER to continue
- + Remove the USB CD-ROM & reboot



# STEP19.







- You will boot into Ubuntu 9.0.4 GUI
- Download & Install the RoBoard Linux kernel package
  - Note that currently the Ubuntu can't connect to internet, and so you must download RoBoard Linux kernel package with other PC.





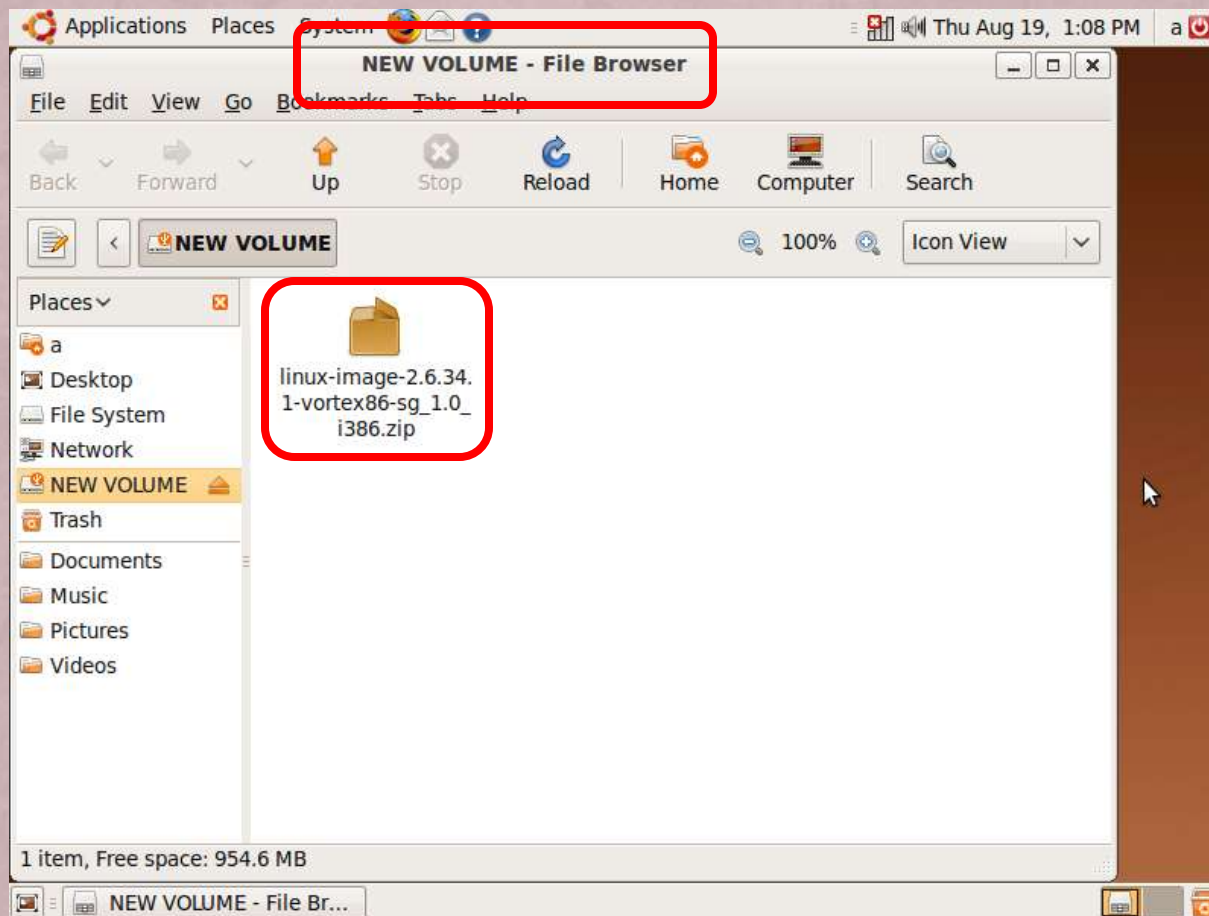
# STEP20.

- + Download RoBoard Linux kernel package into a USB stick  
download web [http://www.roboard.com/download\\_ml.htm](http://www.roboard.com/download_ml.htm)

Windows CE 6.0 SDK	
RB-110 WinCE FTDI (FT2232H) COM Driver	
Linux	
RB-100/RB-110 Linux Kernel package 2.6.34.1 Aug 18, 2010	
RB-100/RB-110 Linux Kernel source 2.6.34.1 Aug 18, 2010	
RB-110 Linux FTDI (FT2232H) COM Driver	
BIOS	
RB-100	
RB-100 normal BIOS (ver. A5) ( <a href="mailto:tech@roboard.com">contact tech@roboard.com</a> ) July 20, 2010	
RB-100 special BIOS (ver. A5I_APM) for WinXP/Linux shutdown indicator ( <a href="#">coming soon...</a> )	

# STEP 21.

- + Plug the USB stick into your RoBoard



# STEP22.

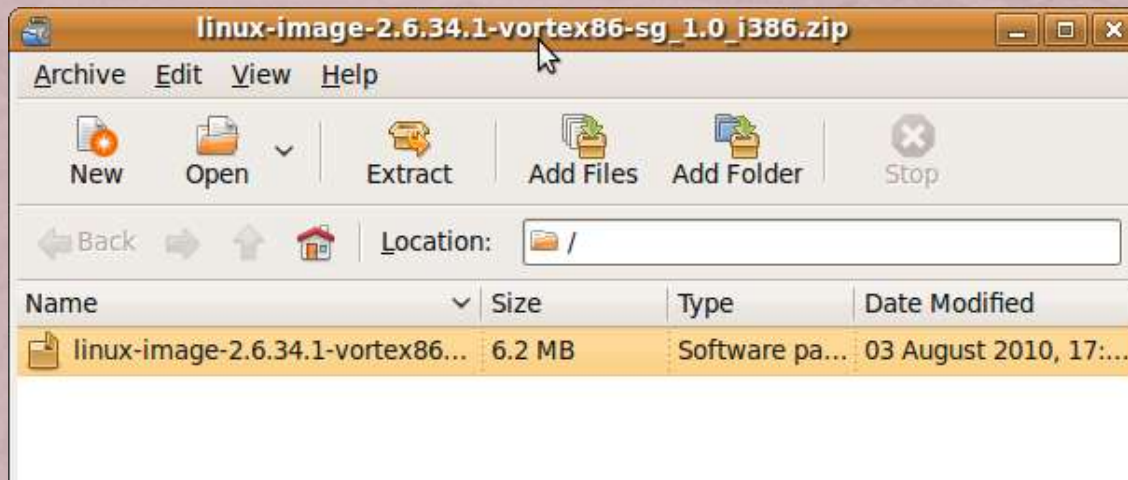
- + Extract the downloaded kernel package

- In this example, the package is

**linux-image-2.6.34.1-vortex86-sg\_1.0\_i386.zip**

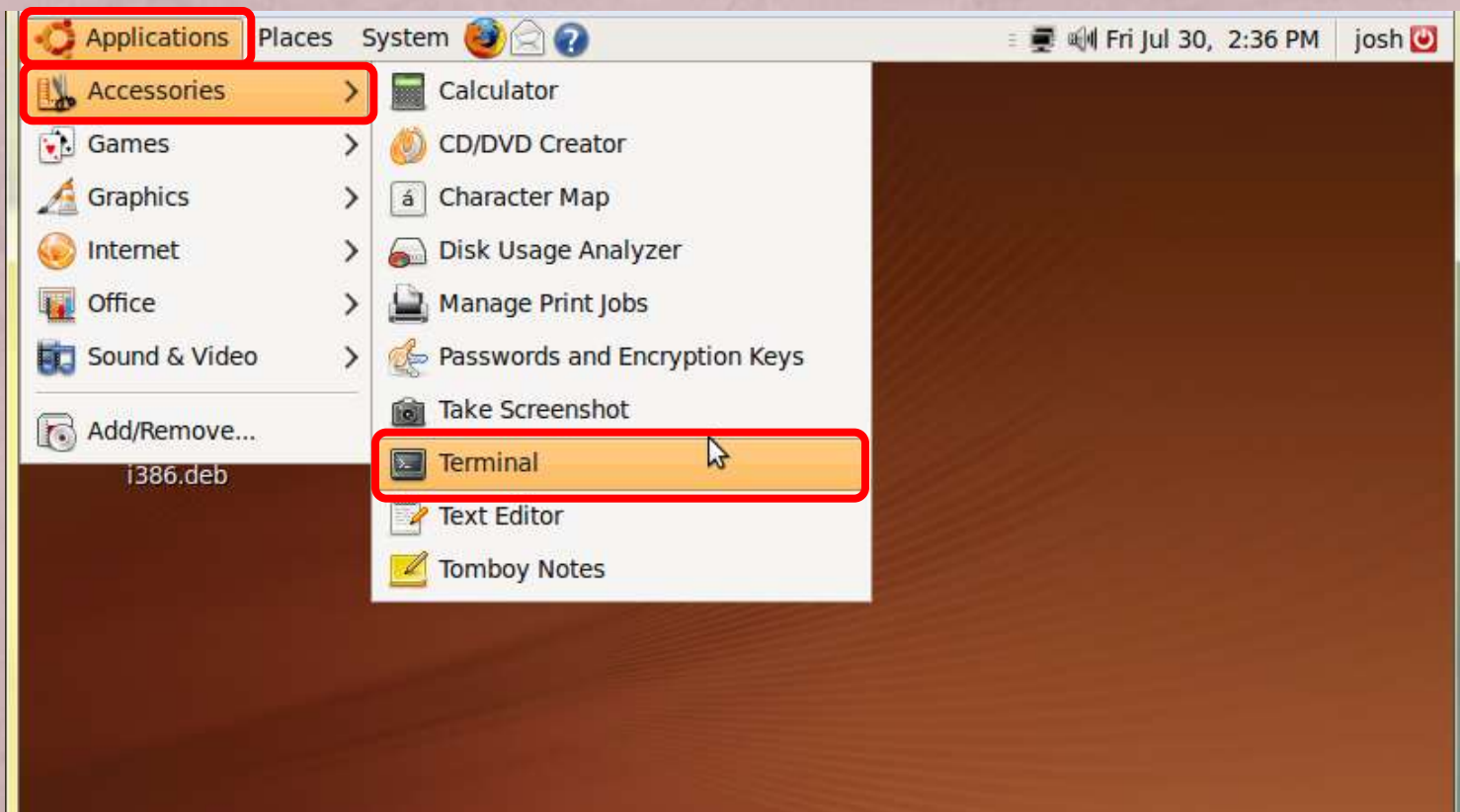
Extracting it, we get

**linux-image-2.6.34.1-vortex86-sg\_1.0\_i386.deb**



# STEP23.

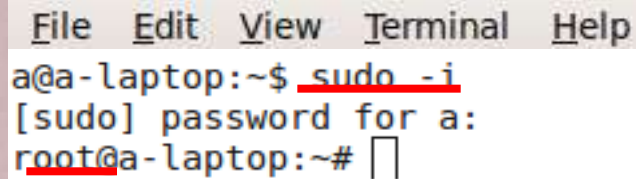
- + Open a Terminal window





# STEP24.

+ Type **sudo -i**

A terminal window with a menu bar containing 'File', 'Edit', 'View', 'Terminal', and 'Help'. The terminal text shows a user 'a' at a machine 'a-laptop' in the home directory. They enter the command 'sudo -i', which is underlined in red. The prompt changes to '[sudo] password for a:', and after an invisible password entry, it changes to 'root@a-laptop:~#', where 'root' is underlined in red. A cursor is visible at the end of the root prompt.

```
File Edit View Terminal Help
a@a-laptop:~$ sudo -i
[sudo] password for a:
root@a-laptop:~# █
```

# STEP25.

- + Type `dpkg -i <RoBoard Linux kernal package path>`
  - In this example, the path is  
`/home/a/Desktop/linux-image-2.6.34.1-vortex86-sg_1.0_i386.deb`

```
File Edit View Terminal Help
a@a-laptop:~$ sudo -i
[sudo] password for a:
root@a-laptop:~# dpkg -i /home/a/Desktop/linux-image-2.6.34.1-vortex86-sg_1.0_i386.deb
Selecting previously deselected package linux-image-2.6.34.1-vortex86-sg.
(Reading database ... 102544 files and directories currently installed.)
Unpacking linux-image-2.6.34.1-vortex86-sg (from .../Desktop/2.6.34.1-vortex86-sg_1.0_i386.deb) ...
```



## STEP25.

+ Type `update-initramfs -k 2.6.34.1-vortex86-sg -c`

```
Found kernel: /boot/vmlinuz-2.6.28-11-generic  
Found kernel: /boot/memtest86+.bin  
Replacing config file /var/run/grub/menu.lst with new version  
Updating /boot/grub/menu.lst ... done
```

```
root@a-laptop:~# update-initramfs -k 2.6.34.1-vortex86-sg -c
```

# STEP27.

+ Type **update-grub**

```
root@a-laptop:~# update-initramfs -k 2.6.34.1-vortex86-sg -c
update-initramfs: Generating /boot/initrd.img-2.6.34.1-vortex86-sg

root@a-laptop:~#
root@a-laptop:~# update-grub
Searching for GRUB installation directory ... found: /boot/grub
Searching for default file ... found: /boot/grub/default
Testing for an existing GRUB menu.lst file ... found: /boot/grub/menu.lst
Searching for splash image ... none found, skipping ...
Found kernel: /boot/vmlinuz-2.6.34.1-vortex86-sg
Found kernel: /boot/vmlinuz-2.6.28-11-generic
Found kernel: /boot/memtest86+.bin
Replacing config file /var/run/grub/menu.lst with new version
Updating /boot/grub/menu.lst ... done
```



## STEP28.

- + Type `reboot`
- + Now It is complete to install Ubuntu on RoBoard RB-100/RB-110.

```
Found kernel: /boot/vmlinuz-2.6.28-11-generic
Found kernel: /boot/memtest86+.bin
Replacing config file /var/run/grub/menu.lst with new version
Updating /boot/grub/menu.lst ... done
root@a-laptop:~# reboot
```

# THANK YOU

[tech@roboard.com](mailto:tech@roboard.com)  
<http://www.roboard.com>