Full Circle

ISSUE #41 - September 2010

INTERVIEW - Leann Ogasawara
Ubuntu 10.10's Kernel Release Manager
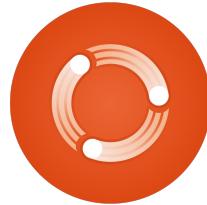
Full Circle

THE INDEPENDENT MAGAZINE FOR THE UBUNTU LINUX COMMUNITY

UBUNTU NEWS

Written by Amber Graner

September

30th - Maverick Meerkat -
Release Canadiate - https://wiki.ubuntu.com/ReleaseCandidate and Langauage Pack
Translation Deadline - https://wiki.ubuntu.com/LanguagePackTranslationDeadline

October

10th - Ubuntu 10.10 Maverick Meerkat - Final Release -
https://wiki.ubuntu.com/FinalRelease
Starting 10th - Ubuntu 10.10 - Release Parties - more to come
on this but here is the link from the LucidReleaseParties so
you can get an idea of what it's all about -
https://wiki.ubuntu.com/LucidReleaseParties
11th -15th - Ubuntu Open Week -
https://wiki.ubuntu.com/UbuntuOpenWeek
5th - 29th - Ubuntu Developer Summit is scheduled for the
last week of October 2010, even if you can't attend in person but want to see or hear
what is going to be occurring in the -N cycle there is always remote participation. -
http://uds.ubuntu.com/
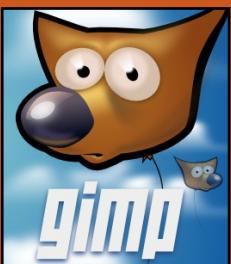
ubuntu

Full Circle Podcast
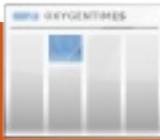
Released every two weeks, each
episode covers all the latest
Ubuntu news, opinions, reviews,
interviews and listener feedback.
The Side-Pod is a new addition,
it's an extra (irregular) short-form
podcast which is intended to be a
branch of the main podcast. It's
somewhere to put all the general
technology and non-Ubuntu stuff
that doesn't fit in the main
podcast.

Hosts:
Robin Catling
Ed Hewitt
Dave Wilkins

http://fullcirclemagazine.org

AUDIO MP3   AUDIO OGG

Linux's new Gnome desktop to take on KDE and Windows

KDE 4.0 is winning over users with the advances it has made for the Linux desktop. Unless Gnome undergoes a similar metamorphosis, it's living on borrowed time - it's clearly now been overtaken by both Windows 7 and KDE 4.0 in meeting the demands of a modern interface, both in flair and functionality.

What happens with Gnome has special importance for Ubuntu, too - as the 'premier' desktop Linux that most new users to Linux experience, it's important that it can meet their expectations in terms of a visually appealing and easy to use interface. And while KDE 4.0 is arguably prettier than Windows 7, it's not the default for Ubuntu.

Fortunately, Gnome is undergoing a change. The first major move in eight years of development, in fact. As I covered KDE extensively last issue, it's only fair we take a look at what the next major milestone of Gnome will bring and whether it can compete to
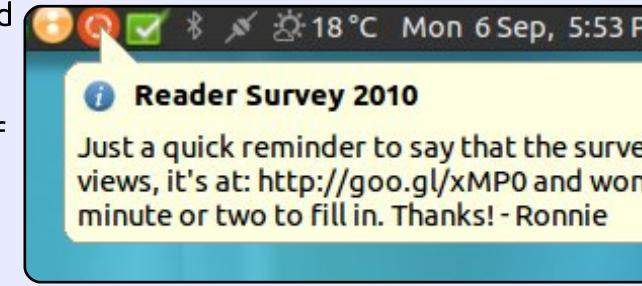
provide a next-generation experience. Afterall, assuming Canonical sticks with Gnome, this is what the future of Ubuntu will look like.

Source: apcmag.com

GCHQ spooks top UK Linux installations

The largest installation of Linux desktops in any British Government site is at GCHQ, the high-tech spy-station in Cheltenham, according to industry sources.

Whispers in the courtly corridors around Westminster, the seat of British government, have it that British intelligence uses Linux because it is secure, good at number crunching, and doesn't cost much to deploy.

Source: thinq.co.uk

Full Circle Notifier - Beta Release!

Our very own Robert Clipsham (mrmonday) has released the first beta of the **Full Circle Notifier**, a small application that sits in your system tray and will not only announce issue/podcast releases, but can be set to automatically download them for you too! Several people are creating various distro packages of FCN. For more info, see the FCN Google Group:
http://goo.gl/4Ob4

Full Circle Survey 2010

LAST FEW DAYS!

Here at Full Circle, we're always trying to improve things and welcome your input in every aspect of Full Circle magazine. Last year we did a survey which was very popular (and helpful) and we'd like to do it again this year as this will tell us if/what/how we have improved, or not!

Please take a few moments to fill out our survey:
http://goo.gl/xMP0

The future of Full Circle is in your hands!

The results of the survey will be published in a future issue of FCM. **The survey will end on Sept. 30th 2010, so you've only a few days left to participate!**

This month, I decided to cover both the necessary tools for CLI-based installers (fdisk, mkfs, and so forth), as well as useful tools for finding files on a hard drive - in case you decide to find configuration files on the newly installed system, or your old system that you'd like to carry over. About 2 years ago, I first installed Arch Linux, and in doing so I learned a lot about the command-line interface. Most of it I've found extremely useful. In order to make my Virtualization series a bit easier for my readers, I've been trying to expand on certain ideas within this series as well, in an attempt to bring it all together.

Fdisk:

I use fdisk primarily for listing my partitions on an installed system, and to do so, simply type:

```
sudo fdisk -l
```

It should result in output similar to that shown above right.

```
Disk /dev/sda: 320.1 GB, 320072933376 bytes
255 heads, 63 sectors/track, 38913 cylinders, total 625142448 sectors
Units = sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0x76692ca8

Device Boot      Start         End      Blocks   Id  System
/dev/sda1            2048    30716279    15357116   1c  Hidden W95 FAT32 (LBA)
/dev/sda2   *    30716280   186996599    78140160    7  HPFS/NTFS
/dev/sda3       186996600   625137344   219070372+   f  W95 Ext'd (LBA)
/dev/sda5       186996663   543109454   178056396    7  HPFS/NTFS
/dev/sda6       543109518   570452084    13671283+  83  Linux
/dev/sda7       570452148   625137344    27342598+  83  Linux
```

As you can see, the top half is dedicated to information regarding the hard drive itself, and the second half is dedicated to partitions and information about them.

If you wanted to edit the partition/hard disk, you could enter the following command:

```
sudo fdisk /dev/sda
```

Make sure to replace "/dev/sda" with whatever disk you actually want to edit. Upon doing so, you'll be greeted with a prompt that reads "Command (m for help):". If you enter "m", you get a list of possible commands.

```
Command action
 a   toggle a bootable flag
 b   edit bsd disklabel
 c   toggle the dos
compatibility flag
 d   delete a partition
 l   list known partition
types
 m   print this menu
 n   add a new partition
 o   create a new empty DOS
partition table
 p   print the partition
table
 q   quit without saving
changes
 s   create a new empty Sun
disklabel
 t   change a partition's
```
```
system id
 u   change display/entry
units
 v   verify the partition
table
 w   write table to disk and
exit
 x   extra functionality
(experts only)
```

As you can tell, the instructions are generally pretty straightforward. If you enter a command, you'll be prompted for more information as you progress. Please note that when creating a partition ("n" command), you'll be prompted about what cylinder to start from, where the default is generally what you want (as long

as you don't want to leave free space between partitions). Also, it will ask you where you want the partition to end. You can enter a cylinder, or "+1024M" for 1GB later, and so forth. It also accepts bytes and kilobytes as input, though megabytes should be what most people will need. Once you create your partitions, use "a" to make the primary partition bootable, and "t" to change the partition's format ("system id"). When choosing the partition type, it will ask for a hex code for the format, and not the name. A list of the codes can be pulled up with "L". An example is below:

```
Hex code (type L to list
codes): 82
```

As you can see, that is the prompt where you can enter "L", and 82 is the hex code for Linux swap. Fdisk is also capable of giving you information about possible issues with current setups, and these are generally clear and, at the very least, give you enough information to easily be able to google for a solution. Once you get comfortable with fdisk, you can also do everything you'll need to do via command-line arguments, instead of having to go through one command at a time.

Mkfs:

You may ask yourself why you'd need "make filesystem" (mkfs) when you can just use fdisk for it all. It's really quite simple – most people don't want to use fdisk for everything since it can be more complicated than necessary. If the partition is created, and you simply want to reformat it, mkfs is probably the tool better suited to the job. There are a few ways to use mkfs, listed below.

```
mkfs /dev/sdXY

mkfs.ext2 /dev/sdXY

mkfs -t ext2 /dev/sdXY
```

Each of these commands will format "sdXY" (replace X with the drive letter, and Y with the partition number) as ext2 (the default format for mkfs). The first command works only for ext2 partitions, since it defaults to ext2 if the type isn't specified.

This command also lets you specify blocksize, volume labels, percentage of blocks that are reserved for root, a UUID, and so forth. In order to get a complete list, you can check the manpages of mkfs and mkfs.<type> (replace "<type>" with the actual format). I won't go into further detail today, since I don't have my testing machine for formatting present. If anyone would like a more detailed explanation of mkfs, send me an email and I'll do so.

Find:

How many of you have ever been looking for a file, and find that Nautilus just doesn't cut it? I realize there are certain alternatives for desktop search, but I also know that "find" is an integrated utility in most distributions, making it ideal to learn.

```
find /home/ -name "*~"
```

This command will search through the /home/ folder (and any subdirectories, such as other users) for "tilde files" (backups of files from their previous edit). I find this useful for scripts where you want to automate cleaning up certain files. As you can probably figure out, "-name" tells find to only display files that contain what

> **[...] ever been looking for a file, and find that Nautilus just doesn't cut it?**

is enclosed in the quotes. In this case, I tell it to show me anything that ends in a tilde (the asterisk is a wildcard, which means anything). You can also specify any path you'd like instead of "/home/". Please note that, if you plan to search a folder that you have no read permissions for, or simply want to search your entire drive, you will need to run the find command as root with "sudo". Otherwise, you'll get permission denied errors. If you want to use it in a script, and don't want to access the folders you don't have permissions for, you'll have to grep -v it (inverse grep matching). I find this an excellent resource if you're willing to spend a while longer for the search (it can be extremely slow when searching large folders), but expect up-to-date and exact matches. Otherwise, for quick "where is this file" searches, I use "locate".

Locate:

This is a program that uses a database of files that's indexed, in order to quickly find a result. This database is updated regularly, but you should get into the habit of forcing an update before searching for a more recent file. You can do so with the following command:

```
sudo updatedb
```

This can take a few minutes to complete, but it shouldn't need to be done every time - only if you're looking for something you'd practically just downloaded/installed. Once the database is updated, you can run a search with the following command:

```
locate "*~"
```

As you may have noticed, since locate searches a database, you will receive search results in all folders of the hard drive, even ones you wouldn't have permission for using find, since updatedb is run as root. If you find you have too many results, you can use grep, head, or tail to reduce the search results. There are yet more commands you can use to find files, but I will only cover "where" and "whereis":

Where/Whereis:

These commands are intended to help you quickly find binaries of programs, and configuration folders. For example, if you install skype and run these commands, you see the following:

```
where skype
```

```
output: /usr/bin/skype
```

```
whereis skype
```

```
output: skype:
/usr/bin/skype.real
/usr/bin/skype
/usr/bin/skype.bak2
/usr/share/skype
```

As you can see, it returns results that are linked to a program's binary. If you try running where or whereis on a folder, you'll get 0 results. It's intended for a quick search for configuration files of a program, or the location of a binary. It also has the added bonus of making you sound like a caveman/hulk.

I hope that you've found these explanations clear and that you'll try some of these tips the next time you're looking for a file or wanting to reformat a drive. As always, if you have any questions, commands, or suggestions, you can reach me at lswest34@gmail.com. Also, make sure to put "C&C" or "FCM" in the subject line so I don't overlook it.

Further Reading:
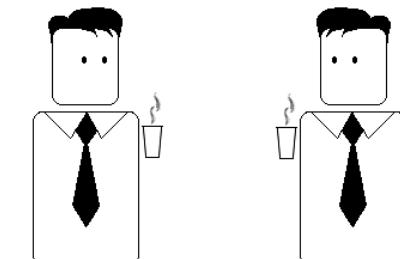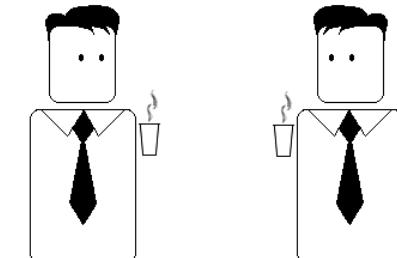
http://www.linfo.org/mkfs.html (useful mkfs resource)
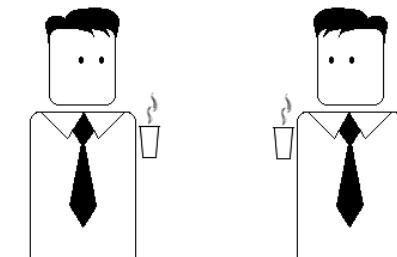
http://tldp.org/HOWTO/Partition/fdisk_partitioning.html (useful fdisk resource)

Manpages for all commands are also an excellent resource to start with.

Lucas has learned all he knows from repeatedly breaking his system, then having no other option but to discover how to fix it. You can email Lucas at: lswest34@gmail.com.

I think in the life of every employee there comes a point when they become maximalists.

They want maximum salary for minimum effort.

by Richard Redei

contents ^

This month we are going to explore **Pygame**, a set of modules designed for writing games. The website is http://www.pygame.org/. To quote from the Pygame read-me: "Pygame is a cross-platform library designed to make it easy to write multimedia software, such as games, in Python. Pygame requires the Python language and SDL multimedia library. It can also make use of several other popular libraries."

You can install Pygame through Synaptic as 'python-pygame'. Do this now so we can move forward.

First, we import Pygame (see above right). Next, we set the os.environ to make our window centered in our screen. Next, we initialize Pygame, then set the Pygame window to 800x600 pixels, and set the caption. Finally, we display the screen, and go into a loop waiting for a keystroke or mouse-button-down event. The screen is an object that will contain anything we decide to put

on it. It's called a surface. Think of it as a piece of paper that we will draw things onto.

Not very exciting, but it's a start. Let's make it a bit less boring. We can change the background color to something less dark. I found a program called "colorname" that you can install via the Ubuntu Software Center. This allows you to use the "color wheel" to pick a color you like, and it will give you the RGB or Red, Green, Blue values of that color. We must use RGB colors if we don't want to use the predefined colors that Pygame gives us. It's a neat utility that you should consider installing.

Right after the import statements, add...

```
Background = 208, 202, 104
```

This will set the variable Background to a tanish color. Next, after the pygame.display.set_caption line, add the following lines...

```
#This is the Import
import pygame
from pygame.locals import *
import os
# This will make our game window centered in the screen
os.environ['SDL_VIDEO_CENTERED'] = '1'
# Initialize pygame
pygame.init()
#setup the screen
screen = pygame.display.set_mode((800, 600))
# Set the caption (title bar of the window)
pygame.display.set_caption('Pygame Test #1')
# display the screen and wait for an event
doloop = 1
while doloop:
    if pygame.event.wait().type in (KEYDOWN, MOUSEBUTTONDOWN):
        break
```

```
screen.fill(Background)
pygame.display.update()
```

The screen.fill() method will set the color to whatever we pass it. The next line, pygame.display.update(), actually updates the changes to our screen.

Save this off as *pygame1.py*, and we'll move on.

Now we will display some text in our bland looking window. Again, let's start with our import statements and the background

variable assignment from our last program.

```
import pygame
from pygame.locals import *
import os
Background = 208, 202, 104
```

Now, add an additional variable assignment for the foreground color of our font.

```
FontForeground = 255,255,255
# White
```

Then, we will add in the majority of the code from our last

program (shown right).

If you run this now, nothing has changed visually since all we did is add the foreground definition. Now, after the screen.fill() line, and before the loop portion of our code, enter the following lines:

```
font =
pygame.font.Font(None,27)
text = font.render('Here is
some text', True,
FontForeground, Background)
textrect = text.get_rect()
screen.blit(text,textrect)
pygame.display.update()
```

Go ahead, save the program as pygame2.py, and run the program. On the top left of our window, you should see the text "Here is some text".

Let's break down the new commands. First, we call the Font method and pass it two arguments. The first is the name of the font we wish to use, and the second is the font size. Right now, we'll just use 'None', and let the system pick a generic font for us, and set the font size to 27 points.

Next we have the font.render() method. This has four arguments. In order, they are the text we wish

to display, whether we want to use anti-aliasing (True in this case), the foreground color of the font, and, finally, the background color of the font.

The next line (text.get_rect()) assigns a rectangle object that we will use to put the text on the screen. This is an important thing, since almost everything else we will deal with is rectangles. (You'll understand more in a bit.) Then we blit the rectangle onto the screen. And, finally, we update the screen to show our text. What is blit, and why the heck should I want to do something that sounds so weird? Well, the term goes WAY back to the 1970s, and came from Xerox PARC (which is where we owe so much of today's technology). The term was originally called BitBLT which stands for Bit (or Bitmap) Block Transfer. That changed to Blit (possibly because it's shorter). Basically we are plopping our image or text on to the screen.

What if we want the text to be centered in the screen instead of on the top line where it takes a bit of time to see? In between the text.get_rect() line and the screen.blit line, put the following

```
# This will make our game window centered in the screen
os.environ['SDL_VIDEO_CENTERED'] = '1'
# Initialize pygame
pygame.init()
# Setup the screen
screen = pygame.display.set_mode((800, 600))
# Set the caption (title bar of the window)
pygame.display.set_caption('Pygame Test #1')
screen.fill(Background)
pygame.display.update()

#  Our Loop
doloop = 1
while doloop:
    if pygame.event.wait().type in (KEYDOWN,
MOUSEBUTTONDOWN):
        break
```

two lines:

```
textRect.centerx =
screen.get_rect().centerx
textRect.centery =
screen.get_rect().centery
```

Here we are getting the center of the screen object (remember surface) in x and y pixel positions, and setting our textRect object x and y center points to those values.

Run the program. Now our text is centered within our surface. You can also modify the text by using (in our sample code) font.set_bold(True) and/or font.set_italic(True) right after the pygame.font.Font line.

Remember we discussed very briefly the 'None' option when we set the font to a generic font. Let's say you want to use a fancier font. As I stated before, the pygame.font.Font() method takes two arguments. The first is the path and file name of the font we want to use, and the second is the font size. The problem is multi-fold at this point. How do we know what the actual path and filename of the font we want to use is on any given system? Thankfully, Pygame has a function that takes care of that for us. It's called match_font. Here's a quick program that will print the path and filename of (in this case) the Courier New font.

```
import pygame
from pygame.locals import *
import os
print
pygame.font.match_font('Couri
er New')
```

On my system, the returned value is "/usr/share/fonts/truetype/msttcorefonts/cour.ttf". If, however, the font is not found, the return value is "None". Assuming that the font IS found, then we can assign the returned value to a variable, and we can then use the following assignment.

```
courier =
pygame.font.match_font('Couri
er New')
font =
pygame.font.Font(courier,27)
```

Change your last version of the program to include these two lines and try it again. The bottom line is, either use a font that you KNOW will be available on the end user's machine, or include it when you distribute your program and hard code the font path and name. There are other ways around this, but I'll leave that to you to figure out so we can move on.

While text is nice, graphics are better. I found a really nice tutorial for Pygame written by Peyton McCollugh, and thought I'd take and modify it. For this part, we need to start with a picture that will move around our surface. This picture is known as a sprite. Use GIMP or some other tool and create a stick figure. Nothing fancy, just a generic stick figure. I'll assume that you are using GIMP. Start a new image, set the size to 50 pixels in both height and width, and, under advance options, set the 'Fill With' option to Transparency. Use the pencil tool with a brush of Circle (03). Draw your little figure, and save it as stick.png into the same folder you have been using for the code this time. Here is what mine looks like. I'm sure you can do better.

I know...I'm not an artist. However, for our purposes, that will do. We saved it as a .png file, and set the background to be transparent, so that just the little black lines of our stick figure show up - and not a white or other color background will show.

Let's talk about what we want the program to do. We want to

```
import pygame
from pygame.locals import *
import os

Background = 0,255,127
os.environ['SDL_VIDEO_CENTERED'] = '1'
pygame.init()
screen = pygame.display.set_mode((800, 600))
pygame.display.set_caption('Pygame Example #4 – Sprite')
screen.fill(Background)
```

show a Pygame window that has our stick figure drawing in it. We want the figure to move when we press any of the arrow keys up, down, right and left, assuming we aren't at the edge of the screen and cannot move any further. We want the game to quit when we press the "q" key. Now, moving the sprite around might seem easy, and it is, but it is a bit harder than it initially sounds. We start by creating two rectangles. One for the sprite itself and one that is the same size but is blank. We blit the sprite onto the surface to start, then, when the user presses a key, we blit the blank rectangle over the original sprite, figure out the new position, and blit the sprite back onto the surface at its new position. Pretty much what we did with the alphabet game last time. That's about it for this program. It will give us an idea how to actually place a graphic on the screen and

move it around.

So, start a new program, and call it pygame4.py. Put in the includes we've been using during this tutorial. This time we'll use a minty green background so those values should be 0, 255, 127 (see above).

Next, we create a class that will handle our graphic or sprite (next page, shown bottom left). Put this right after the imports.

What is all this doing? Let's start with the __init__ routine. We initialize the sprite module of Pygame with the pygame.sprte.Sprite.__init__ line. We then set the surface, and call it screen. This will allow us to check to see if the sprite is going off the screen. We then create and set the position of the blank oldsprite variable, which will keep the old

position of our sprite. Now we load our stick figure sprite with the pygame.image.load routine, passing it the filename (and path, if it's not in the program's path). Then we get a reference (self.rect) to the sprite which sets up the width and height of the rectangle automatically, and set the x,y position of that rectangle to the position we pass into the routine.

The update routine basically makes a copy of the sprite, then checks to see if the sprite goes off the screen. If so, it's left where it was, otherwise its position is moved the amount we send into it.

Now, after the screen.fill statement, put the code shown on the following page (right-hand side).

Here we create an instance of our class, calling it character. Then we blit the sprite. We create the blank sprite rectangle, and fill it with the background color. We update the surface and start our loop.

As long as DoLoop is equal to 1, we loop through the code. We use pygame.event.get() to get a keyboard character. We then test it against the event type. If it's QUIT, we exit. If it's a pygame KEYDOWN event, we process it. We look at the key value returned, and compare it to constants defined by Pygame. We then call the update routine in our class. Notice here that we simply are passing a list containing the number of pixels on the X and Y axis to move the character. We bump it by 10 pixels (positive for right or down, negative for left or up. If the key value is equal to "q", we set DoLoop to 0, and so will break out of the loop. After all of that, we blit the blank character to the old position, blit the sprite to the new position, and finally update - but in this case, we update only the two rectangles containing the blank sprite and the active sprite. This saves a tremendous amount of time and processing.

As always, the full code is available at www.thedesignatedgeek.com or at http://fullcirclemagazine.pastebin.com/DvSpZbaj.

There's a ton more that Pygame can do. I suggest that you hop over to their website, and look at the reference page

```python
class Sprite(pygame.sprite.Sprite):
    def __init__(self, position):
        pygame.sprite.Sprite.__init__(self)
        # Save a copy of the screen's rectangle
        self.screen = pygame.display.get_surface().get_rect()
        # Create a variable to store the previous position of the sprite
        self.oldsprite = (0, 0, 0, 0)
        self.image = pygame.image.load('stick3.png')
        self.rect = self.image.get_rect()
        self.rect.x = position[0]
        self.rect.y = position[1]

    def update(self, amount):
        # Make a copy of the current rectangle for use in erasing
        self.oldsprite = self.rect
        # Move the rectangle by the specified amount
        self.rect = self.rect.move(amount)
        # Check to see if we are off the screen
        if self.rect.x < 0:
            self.rect.x = 0
        elif self.rect.x > (self.screen.width - self.rect.width):
            self.rect.x = self.screen.width - self.rect.width
        if self.rect.y < 0:
            self.rect.y = 0
        elif self.rect.y > (self.screen.height - self.rect.height):
            self.rect.y = self.screen.height - self.rect.height
```

PROGRAM IN PYTHON - PART 15

(http://www.pygame.org/docs/ref/index.html). In addition, you can take a look at some of the games that others have put up.

Next time, we will be digging deeper into Pygame by creating a game that comes from my past...my very DISTANT past.

```python
character = Sprite((screen.get_rect().x, screen.get_rect().y))
screen.blit(character.image, character.rect)

# Create a Surface the size of our character
blank = pygame.Surface((character.rect.width, character.rect.height))
blank.fill(Background)

pygame.display.update()
DoLoop = 1
while DoLoop:
    for event in pygame.event.get():
        if event.type == pygame.QUIT:
            sys.exit()
        # Check for movement
        elif event.type == pygame.KEYDOWN:
            if event.key == pygame.K_LEFT:
                character.update([-10, 0])
            elif event.key == pygame.K_UP:
                character.update([0, -10])
            elif event.key == pygame.K_RIGHT:
                character.update([10, 0])
            elif event.key == pygame.K_DOWN:
                character.update([0, 10])
            elif event.key == pygame.K_q:
                DoLoop = 0

    # Erase the old position by putting our blank Surface on it
    screen.blit(blank, character.oldsprite)
    # Draw the new position
    screen.blit(character.image, character.rect)
    # Update ONLY the modified areas of the screen
    pygame.display.update([character.oldsprite, character.rect])
```

Greg Walters is owner of RainyDay Solutions, LLC, a consulting company in Aurora, Colorado, and has been programming since 1972. He enjoys cooking, hiking, music, and spending time with his family.

This month, I thought we would take a step further into the realm of Unix systems, and install our first CLI installer-based Unix system. We'll be installing FreeBSD 8.1, which you can download at http://www.freebsd.org/where.html. Clicking on the "[iso]" link will take you to an FTP server, where you are presented with a few options for images. You can either download the DVD or the "-disc1.iso" files. The livefs image is intended for recovery and repair, not installation. For more information about the different options, have a look here: http://www.freebsd.org/releases/8.1R/announce.html.

I gave the machine 512MB of RAM and 6GB of storage, but you're free to change that (as long as you stay above the minimum requirements).

Step 1:

Upon starting the machine and selecting the correct ISO, you'll be greeted by the FreeBSD bootloader. You can let the timer run out, or just hit 1 to boot the CD.

Step 2:

Once the CD has loaded, you'll be asked for a region (fig. 1) and a keymap (fig. 2).

Step 3:
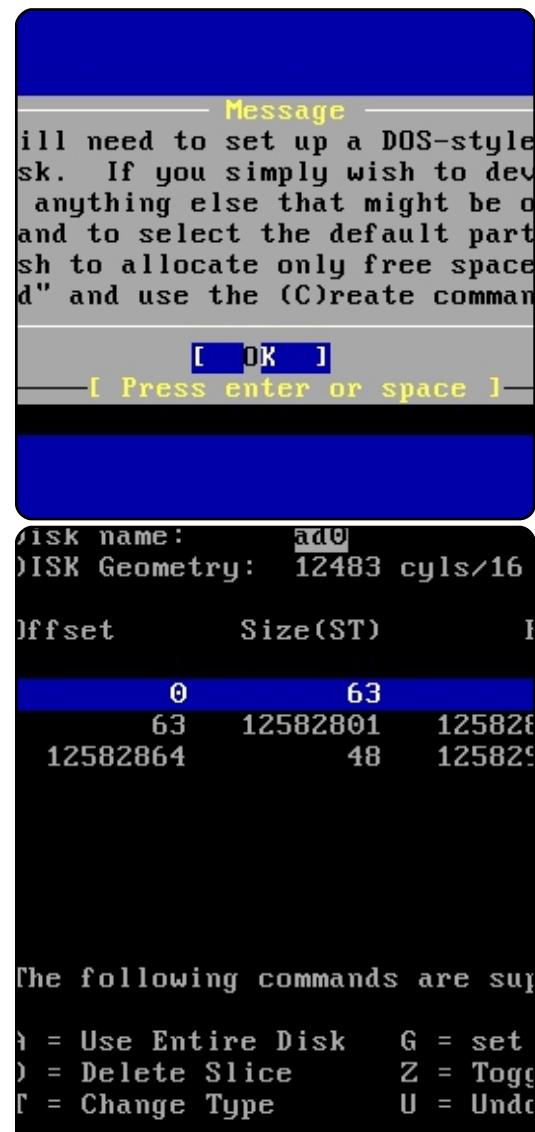
You're now at the main menu (fig. 3). If it's your first time installing FreeBSD, I recommend going for the Standard option, but you're free to choose the others (it is, after all, a virtual host that you can re-install numerous times).
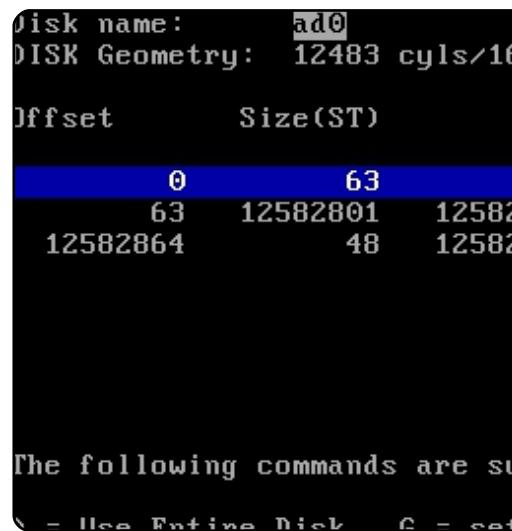
Step 4:

Once you choose the Standard install, you'll be greeted by a message explaining fdisk to you (fig. 4). Since this is a virtual machine, and there's nothing else on there, using the "(A)ll" command is fine. If you want to install it on an actual machine, I suggest you go through the motions in order to get accustomed to it. The fdisk menu looks like fig. 5, and is pretty self-explanatory - once you understand the basics of fdisk.
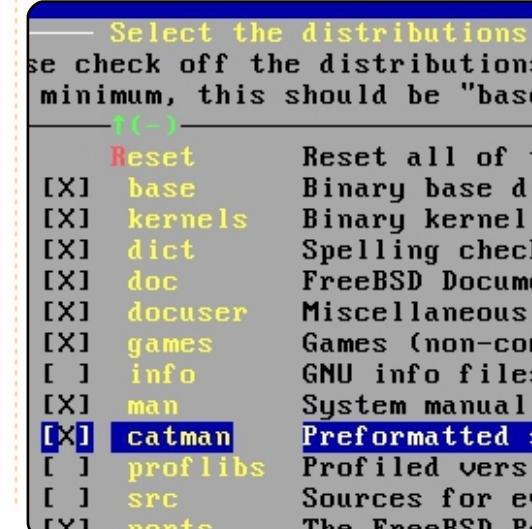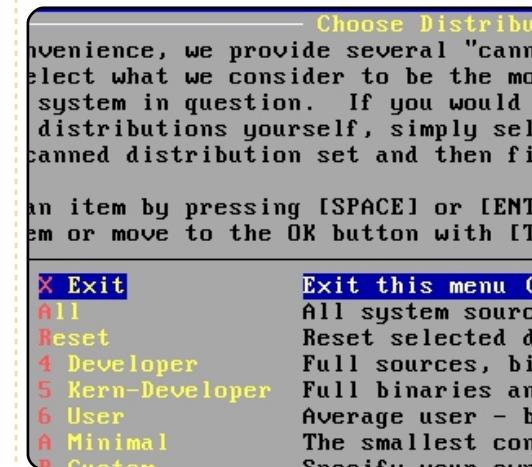
Once you've completed that task, you need to decide what bootmanager you want to install. If FreeBSD is on its own, Standard is suitable, and if you have multiple installs on a disk, you'll need to choose "BootMgr" or "None" (if you already installed a boot manager of some sort). See fig. 6.

Thereafter you just need to create a set of BSD partitions within the fdisk partition you created. Basically, you're splitting up the partition into regions for the BSD system, and Auto is suitable for pretty much every case I can think of, unless you feel you need an extra segment/don't need a segment. Again, trying it out in a virtual machine is better than messing around on a live system.

Step 5:

Now you can choose what packages to install (fig. 7). I generally choose Custom, and select Base, kernels, dict, doc, docuser, games, man, catman, and ports (see fig. 8).
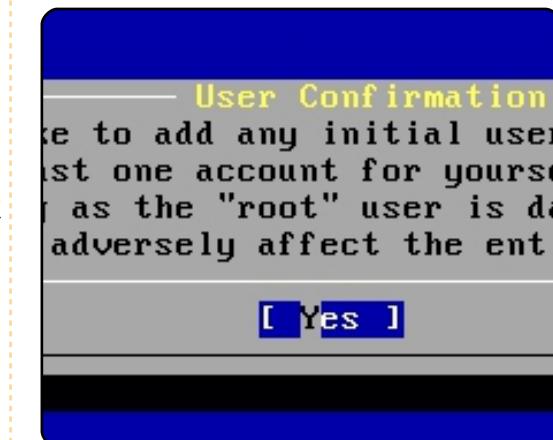
Once you choose the packages to install, you need to select where to install it from (fig. 9). The CD is fine if you are using the disc1 or dvd1 ISOs, and you'll need to use the FTP option for the bootonly image. Also, if you want to have the most up-to-date packages, you can use the FTP option as well. If you choose the FTP option, you'll need to enable networking and select an FTP site (instructions for which can be found in the handbook I link to below). For the next few options, you can choose "No" unless you know for a fact you'll be using the virtual machine as a server, then you'll need to pick the services you want. At the screen where you're asked if you want to add a user, you should select "yes" (fig. 10). First you need to create a group for your user (you can also get away with just using "user" as a group, but I prefer to have the primary group be the user's name). When you're done, it should look something like fig. 11. Once the group is created, you can create a user (fig. 12) using your username, the group you just created in the "group" box; choose a password, give it your name, and add "users" to the member groups. You may also want to add your user to the group

"wheel" if you want to install sudo.

```
          User and Group Manager
              Add a new user
  Login ID:      UID:     Group:
  [lswest    ]  [1001]  [lswest  ]
  Password:          Confirm Password:
  [*********  ]     [*********  ]
  Full name:                  Membe
  [Lucas Westermann█         ]  [    ]
  Home directory:     Login shell:
  [/home/lswest  ]  [/bin/sh      ]
          [ OK ]          [ CANCEL ]
```

Once you've completed this step, you can choose if you want to install any extra packages, and you will also be asked for a password for your root account.

Step 6:

Check the handbook for instructions on installing packages, and get busy messing around!

I hope you've found this article useful, and that you've gotten interested in FreeBSD. If you're anything like me, you'll be intrigued and curious as to what you can figure out. If you have any questions, problems, or suggestions, you can email me at lswest34@gmail.com. Please put "virtualization" or "FCM" in the subject line, so that I don't overlook the email.

Extra links:

PC-BSD (A FreeBSD-based distribution with a graphical installer and pre-configured desktop environment).
http://www.pcbsd.org/

FreeBSD Handbook:
http://www.freebsd.org/doc/en_US.ISO8859-1/books/handbook/index.html

Lucas has learned all he knows from repeatedly breaking his system, then having no other option but to discover how to fix it. You can email Lucas at: lswest34@gmail.com.

Efficiency has become crucial in our industry.
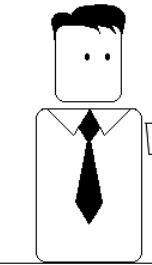
You should always be efficient.

Try to work as little for as much as you can.
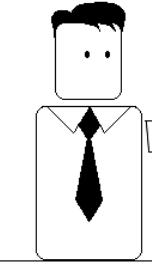
Ever since I was a child I've wanted to rule the world.
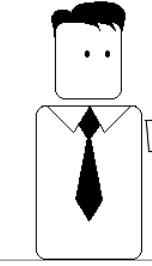
Is that immature?

I don't think so.

But it means we'll have to share

by Richard Redei

My home office in 2001 had what I now think of as a primitive hardware setup for a small business: A Dell Inspiron 2600 (really old now) with Windows XP Home, an even older Dell Latitude running a painfully troublesome Windows ME that went on the road with me - along with an assortment of 32MB memory keys and CD-Rs for backups.

I used Microsoft Office (I think I used Office 2000 with the ME, and Office XP with the XP machine) for everything - Excel for my bookkeeping, along with Word and Notepad for my notes and documents. For photos I used an old Adobe Photoshop Elements version whenever I could manage to get the photos from my camera

> " I used Microsoft Office for everything...

to the Dell Inspiron 2600. The anti-virus products I used consisted of cheap commercial ones - until I couldn't stand them anymore and moved to use various free ones instead.

Being a one-man company in the computer repair business, and mainly fixing Windows computers and their networks, I just had to do things cheaply, and hated upgrades. Between the record-keeping and keeping the computers current with Windows updates and anti-virus definitions, my time back at the office was considerable. Things weren't efficient, and I occasionally lost files that should have been backed up. No scripts or reminders to help me, just paper notes to remind me of required tasks. I didn't have the patience to write DOS .bat scripts.

As of the Fall of 2006, I started experimenting with Ubuntu's Edgy Eft (6.10), then moved through Feisty Fawn and Gutsy Gibbon to Hardy Heron (8.04). I migrated fully from Windows XP to Hardy Heron as my main base for the business - using a notebook and server at that time. A Dell Mini-9 replaced the now recycled Windows ME computer. On the

Dell Mini-9 I experimented with Ubuntu's Intrepid Ibex and Karmic Koala for a time.

Today, I now use a Dell Inspiron E1505 with Ubuntu 10.04 (Lucid Lynx) Desktop for my business notebook, a white box using Ubuntu 10.04 Server as a network file server, and a Dell Mini-9 netbook with Ubuntu 10.04

```
madmod@madmod-laptop: ~
File  Edit  View  Terminal  Help
madmod@madmod-laptop:~$ ./dir

         MADMOD COMPUTING - Directory of Scripts

    Activity                                    Activity
    ----------------------------------------------------------------
 1  Backup Utility.....................13  Password Directory
 2  Update MadMod10.ods................14  Python Program Directory
 3  Update MadModPages.ods.............15  Bash Finder Utility
 4  Customer Folder Config File........16  Status of Printers
 5  Customer Configuration File........17  LaserJet Print Queue
 6  Customer Contact & Route...........18  Clear LaserJet Print Jobs
 7  Existing Customer Files & Folders...19  Network Status
 8  New Customer Folder................20  Run the iRiver Unit
 9  New Customer Configuration Notes....21  Run the Logs Menu
10  Update MadMod Calendar.............22  VNCviewer Menu
11  Update MadMod Invoice #............23  Dir. of Miscellaneous Routines
12  Update First Church 'wkglance'.....24  Next Invoice Number

 0  Exit

Enter your number choice (1 - 24 or 0): █
```

KEEP A BUSINESS AFLOAT WITH UBUNTU

Netbook Remix for my customer visits. With me also are Ubuntu Live CDs and memory keys to diagnose and fix Windows computers - particularly when curing malware infections. The Dell Mini-9 is particularly good at accessing other people's printers and for tracing their networks.

So far, I've written numerous scripts using gedit. An important one is a Bash multiple-choice directory script that starts my daily computer sessions with OpenOffice.org or GIMP. I use them to bring up customer invoices and configurations, check the network, make backups, update webpage calendars, edit pictures, and initiate ftp transfers to my websites. Most of the time-wasting tasks that went with the Windows computers are gone. Updates for the computers using Ubuntu have become truly background tasks.

A large Calc spreadsheet, with numerous tabs, is used for my bookkeeping. Since all three Ubuntu computers are networked, a backup script makes good use of rsync to synchronize my files between them at the end of the work day. The Dell Mini-9 is ready with the necessary files when I leave the house.

Cron jobs send reminders to a text page on my desktop to let me know of the many activities my business has to keep track of such as taxes, credit card payments, invoices, inventory, or pages to update. A typical crontab listing for day 26 of the month is:

```
30 8 26 * * /bin/date >>
Desktop/reminders ;
/bin/echo "Credit Card
Payments Due" >>
Desktop/reminders
```

Three 2GB memory keys rotated every 15 days are used for critical off-site backups with one of them always in my safe deposit box. I also use a handy notebook USB 60GB external hard disk drive for immediate backups from the business notebook - making doubly sure that files

> " **Cron jobs send reminders to a text page on my desktop...**
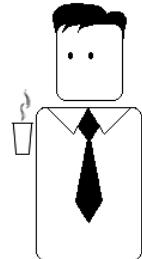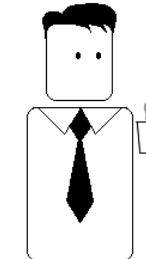
don't go missing.

My current camera is a digital Nikon Coolpix with a 4GB SD card that fits a slot in both of the Dell computers, so I can work with camera pictures from either computer while on the road.
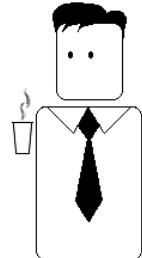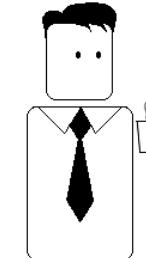
Routine office costs now mostly involve printer paper, ink cartridges, a rare notebook battery replacement, and an occasional purchase of CD-Rs or memory keys for customer backups and running Ubuntu Live CDs. Software purchases are relics of the past - replaced with an occasional donation to a software project.

As you've probably guessed, I'm a really happy 71-year-old in my current Ubuntu-based work environment!
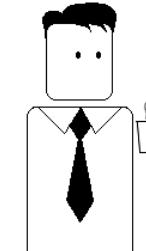
Looks like I'm gonna have to work overtime.

Why, what did they tell you?

That I should be more flexible.

by Richard Redei

Guidelines

The single rule for an article is that **it must somehow be linked to Ubuntu or one of the many derivatives of Ubuntu** (Kubuntu, Xubuntu, Lubuntu etc).

Write your article in whichever software you choose. I would recommend OpenOffice, but **PLEASE SPELL AND GRAMMAR CHECK IT!**

Writing

In your article, please indicate where you would like a particular image to be placed. Please do <u>not</u> embed images into your Open Office document.

Images

Images should be JPG with low compression.

Regarding image sizes: if in doubt, send a full size screengrab and we will crop the image.

If you are writing a review, please follow the guidelines shown here.

For a more detailed list of the style rules and common pitfalls please refer to:
https://wiki.ubuntu.com/UbuntuMagazine/Style - in short: US spelling, no l33t speak and no smilies.

When you are ready to submit your article please email it to:
articles@fullcirclemagazine.org

If you can't write articles, but hang out in Ubuntu Forums, send us interesting forum threads that we could print.

Non-English Writers

If your native language is not English, don't worry. Write your article, and one of the proofreaders will read it for you and correct any grammatical or spelling errors. Not only are you helping the magazine and the community, but we'll help you with your English!

REVIEWS

Games/Applications
When reviewing games/applications please state clearly:

• title of the game
• who makes the game
• is it free, or a paid download?
• where to get it from (give download/homepage URL)
• is it Linux native, or did you use Wine?
• your marks out of five
• a summary with positive and negative points

Hardware
When reviewing hardware please state clearly:

• make and model of the hardware
• what category would you put this hardware into?
• any glitches that you may have had while using the hardware?
• easy to get the hardware working in Linux?
• did you have to use Windows drivers?
• marks out of five
• a summary with positive and negative points

You <u>don't</u> need to be an expert to write an article - write about the games, applications and hardware that you use every day.

MY STORY

Written by Bernd Wetzel

My wife is a professional photographer working mainly at schools. She visits schools to take pictures of classes and of each girl and boy in a class. But, since she hates computers, she was doing her whole job without the help of one.

As times changed, it became harder to do professional analog photography, so she finally decided to switch to digital photography, in April of this year. You're right if you think this will not be possible without a computer.

But how can a newbie without computer know-how quickly manage the following tasks?

• Handle hundreds of photos a day

• Transfer photos from the camera (usually CF cards "filled" during the morning at schools) to the PC

• Sort out the pictures to be produced

• Arrange and group all the pictures belonging to one class

• Retouch pictures as necessary

• Transfer picture data (special format, created by Windows software developed by photographic laboratory) to a transport medium (normally USB sticks, because that is faster and easier than creating CD or DVD burning), that will be sent to a photographic laboratory

• Create and print orders for the laboratory

• Prepare and clean CF cards for upcoming classes

• Keep the photo archive up to date (especially for future orders)

• Make backups of photo and order data

• Have email conversations with customers, schools and photographic laboratories

The answer is: **Ubuntu**

To be more precise, Ubuntu, GIMP, Evolution, a few self-made apps/wizards, and VirtualBox.

I know that many photographers use a Mac or a Windows PC in conjunction with Adobe's Photoshop, but, since I have worked for years in my spare time with Ubuntu, I decided to see whether it and its applications could fulfill my wife's photographic requirements.

After we found the appropriate hardware, I installed Ubuntu 8.10 without any problems on her new machine, and began to develop a few GTK2 applications to allow my wife to focus on her main tasks.

Below is a graphic collage of the newly created wizards that my wife now uses in her daily digital work.

More than half-a-year later, my wife is still happy with our decision to start her digital life with Ubuntu.

And I love my wife being happy!

MY STORY

Written by Jesse Avilés

I changed to Ubuntu full time about two-and-a-half years ago. I had Ubuntu on an 8-year-old computer that went dead two weeks ago, and on a Dell system with Ubuntu pre-installed that I bought a year ago for my daughter. Since that time I had Ubuntu installed on my mother's computer, my father-in-law's, and on three hand-me-downs that were given to a church and three co-workers. All of them use Ubuntu to this day, and my coworkers will upgrade to 10.04. Most of them changed because of viruses "disabling" their computers - even when they paid for virus protection. They didn't like that they paid for "protection software" that let them down. Some of them were given advice to upgrade their hardware and OS (to a newer Windows), but didn't like the price tag for "upgrading".

After seeing that I was able to save the data of other person's computers with an Ubuntu Live CD, and that Ubuntu wasn't so different from Windows, and that it could open their MS Office documents, they decided (with a little prodding on my part) to try Ubuntu. So, they went home with their "new" computers able to do what they were used to doing after installing the restricted repositories. I also suggested that, if they decided to keep Ubuntu, they should think about buying Fluendo's codecs (I did). One of them changed back to Windows after not being able to open a Publisher file (I had installed Scribus and given her a crash course on its use). However, her computer is now back in my hands to install Ubuntu after Vista decided not to boot. Although I do install restricted repositories, I do it to give these folks a chance to learn the system and love it. The computers that were for the church got the Fluendo codecs (I bought a copy for them) because of their pseudo business-like activities. This gets me to my current challenge.

The church wants to open a computer room to lure the kids from the streets and also offer internet and computer access to some of their constituents. They asked me to help them with this task when the computer room is complete. Now, I'm just a computer hobbyist - a microbiologist working to protect the environment. I have learned about Ubuntu and Linux by going to the forums and places like your magazine. I'm not really sure how to set up a business environment. What do I mean by a business environment? Here is a list:
• Server that will function as a file server, Internet point-of-entry, print server, database server and a mail server (with a GUI, please).
• Network printers and scanners. The network printers will be something like Xerox Documents Centers (more likely HP since that's the one brand that I have had the most success with, although the printers I have used are the "small" ones. Right now I have a HP Photosmart Premium).
• Faxing
• Desktops with password protection to access the server
• Remote access to emails (web mail)
• Automated (if possible) backup

I have read the articles on setting up a LAMP server, and I have several books on Ubuntu that deal with the topic, but I haven't been able to understand how to put the whole system together. I think that Ubuntu is a good alternative for small businesses. It has office software (Open Office), a fairly capable e-mail client (Evolution), a dependable Web browser (Firefox), a sophisticated image editor (GIMP), a PDF reader, 2D CAD software (QGIS), and a huge free software library, and it works on leaner hardware and prints to PDF natively from any program. I haven't been able to find satisfactory business accounting. I know it should be out there - it's just that I have not found one that strikes my fancy. I have used GnuCash in the past and found it useful for my personal finances.

[**Editors note**: If anyone can help with information regarding Jesse's ideal business environment please email your article to articles@fullcirclemagazine.org]

> **Nero AG has filed an anti-trust lawsuit against the MPEG-LA. The German technology company claims the licensing body has abused its monopoly power, and that it has not honoured agreements made with the US Department of Justice.**

Is this just another license fee dispute, or a brave stand against monopolistic abuse under the Sherman Act?

Nero's antitrust argument concerns a deal with the US Department of Justice which set conditions to the licensing of audio-visual codecs to avoid any antitrust investigations:

1) MPEG-LA would engage with independent experts to ensure only essential patents would be placed in the MPEG-2 pool of 53 essential patents. The 'expert',

however:
• helped form the MPEG-LA,
• helped in drafting the first MPEG-LA licensing agreements,
• answers questions from licensees on behalf of the MPEG-LA, and has attended business settlement meetings on behalf of the MPEG-LA,
• has testified before US congress on behalf of the MPEG-LA.
• is listed on the MPEG-LA website as "MPEG-LA's US patent counsel"

2) Independent experts would *"weed out non-essential patents"* from the pool:
• Nero also claims that the MPEG-LA has unlawfully extended its patent pools by adding non-essential patents to the MPEG-2 patent pool.

• the non-independent expert added around 800 more patents to the pool, extending the duration of the patent pool, on expiry of the original 53.
• its MPEG-4 Visual and AVC pools now contain more than 1000 and 1300 patents.

3) Licensing terms would be "fair, reasonable, and nondiscriminatory." Nero claims that the MPEG-LA:
• has "formulated and imposed licensing terms that are unfair, unreasonable, and discriminatory", by charging different royalty rates from licensees for the same MPEG-2 license and by not making any downward adjustment in line with the "rapid and dramatic" decrease in costs of implementing the

MPEG-2 standard.
• collects royalties for the same device multiple times (internal hardware, software, monitor, etc.) and has failed to "communicate its policies equally to all licensees". For example, Trial Software (which Nero promotes heavily in its business) was outside licensing until MPEG-LA u-turned and demanded royalties in 2004 in defiance of existing licenses.

In consequence, Nero argues, MPEG-LA has 100% market share, since every device or piece of media-related software needs a license. The value of MPEG-2 products alone, according to the MPEG-LA itself, exceeded half a trillion dollars in 2006.

MY OPINION

"In sum, MPEG-LA's predatory and abusive conduct has caused antitrust injury to innovation, competition, and consumers in the relevant technology markets."

MPEG-LA's legal counsel dismissed this as a common license fee dispute with one licensee.

Significance
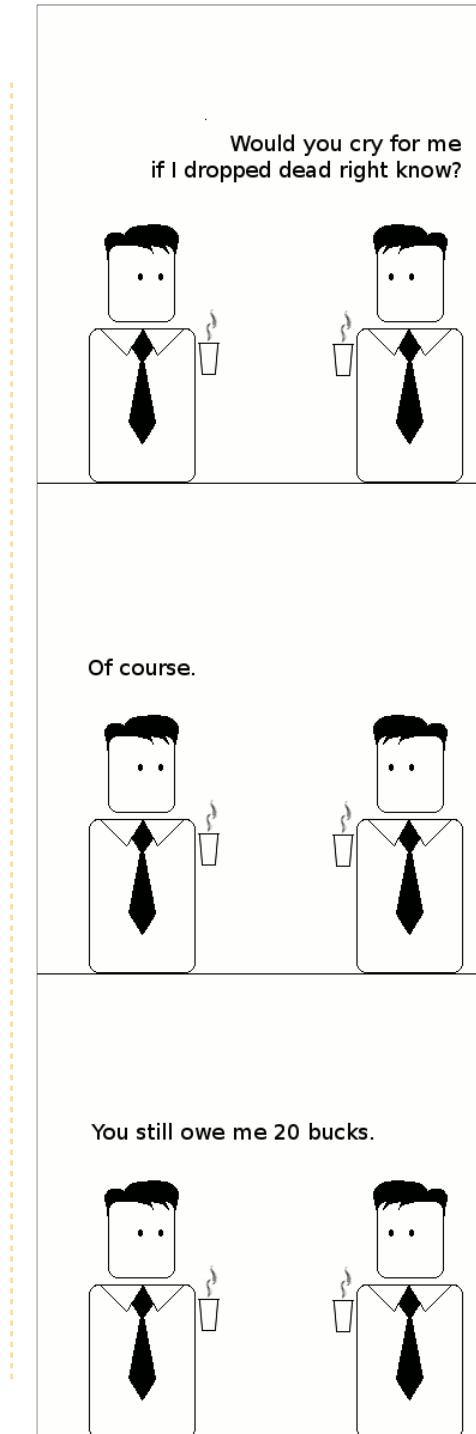
Underlying this case is the question of control of video on the Web. MPEG-LA is being portrayed as the 'mafia enforcer' for the pro-Apple/H.264 lobby, which Nero is trying to prove stifles innovation and effectively extorts undue revenue through a monopoly position.

The Sherman Anti-Trust Act dates back to the 19th century, and has a chequered history in court, largely because the alleged monopolists are always massive corporate entities - with expensive legal departments and deep pockets. The burden of proof has often overturned on legal technicalities. America's love of free-market capitalism has always weighed heavily on the justice's reluctance to be seen to crush entrepreneurial success, all the way to the Supreme Court.

Good try, Nero, but I'm not anticipating a swift, or profitable, outcome.

News source: OSNews.com
http://www.osnews.com/story/23346/Nero_Files_Antitrust_Case_Against_MPEG-LA

Would you cry for me if I dropped dead right know?

Of course.

You still owe me 20 bucks.

by Richard Redei

Full Circle Survey 2010

LAST FEW DAYS!

Here at Full Circle, we're always trying to improve things and welcome your input in every aspect of Full Circle magazine. Last year we did a survey which was very popular (and helpful) and we'd like to do it again this year as this will tell us if/what/how we have improved, or not!

Please take a few moments to fill out our survey:
http://goo.gl/xMP0

The future of Full Circle is in your hands!

The results of the survey will be published in a future issue of FCM. **The survey will end on Sept. 30th 2010.**

contents ^

Since I started my gap year, I've been playing more and more guitar, reaching the point where I play an average of 2 hours a day. I often play music off tabs, songbooks I own, or off YouTube videos, but as I began playing more and started writing the tabs out in gedit, vim, on paper, etc. it was a slow and tedious process. That's when I decided to give TuxGuitar a shot in order to write actual sheet music that had tabs, notes, beats per minute, lyrics, etc. It's an extremely powerful program (similar to Guitar Tab Pro 5, or Powertab Editor, for anyone who may have used either). It's also compatible with Guitar Tab Pro files (possibly Powertab Editor files as well, but I haven't got any to check with).

What I like about the program is that the interface is fairly straightforward (as long as you're familiar with musical notation), and the tool-tips do a good job of explaining what some more obscure options are. It also makes editing, shifting, re-writing and

transposing songs extremely easy with a few clicks of the mouse. It also supports multiple parts (i.e. an electric guitar part, a drum part, and so forth), which can be switched between using the list of instruments/parts on the bottom of the screen. The chord input is especially nice, since you can add tabs by name, or by finger positions, and inputting the chord causes it to appear above the measure (as is standard), but also adds the chord shape into the tab below the notes. This feature is especially nice if you're trying to use chord shapes as the base for melodies and need to force yourself to think "this is a Cadd9 chord but only play these strings". For example, if you add the chord above the measure, you're thinking "Cadd9 chord", and then you delete the chord shape in the tablature (or just a few strings), and space them out as is required for the melody. In doing so, you're making the process second nature, and this should improve your playing. Also, TuxGuitar is available for Windows, which is nice if you're in a band with non-Linux users, or

if you dual-boot and want to be able to edit tabs in either OS.

There are, of course, a few aspects of the program that don't work quite right, or cause more issues than they're really worth. One of these is the audio output for the instrumental tracks. I haven't tried TuxGuitar on Ubuntu with Pulseaudio, but I do know that in Arch with either ALSA or Pulseaudio, it won't play any sound if any program was using your

speakers when you started the application. This means you need to pause/stop your music, video, whatever, and restart the application. I also don't find the sound of the instrument to be anything like the actual instrument, but that's true for any tablature program I know of. Another problem I've noticed is that if you print the sheet music, it is often extremely faint and hard to read (either notes or tabs), but there are settings you can change

to try to get a better printed copy. This is especially bad when printing to PDF. What I found helps is changing the default font and size, but that only goes so far before the Tablature is stretched vertically to the point where it runs over to a new page.

Overall, I find TuxGuitar to be an excellent program for musicians to create sheet music, or to write their own songs. It's also extremely useful for learning and practising songs you like or for making certain actions second nature. I hope that others find this program as useful as I did, especially those new to an instrument who would like notes to go with their tabs, or who would like to better understand tablature and musical notation.

Score: 4.5/5

Pros:
• Similar UI to proprietary software
• Compatible with Pro Guitar 5 files
• Multiple tracks
• Chord input

Cons:
• Audio output troublesome, audio tracks not really worth the effort
• Printed copies can be difficult to read at default settings

Behind MOTU is a site featuring interviews with those known as 'Masters of the Universe' (MOTU). They are the volunteer army of package maintainers who look after the Universe and Multiverse software repositories.

Age: 26
Location: Paris, France
IRC Nick: gilir

How long have you used Linux, and what was your first distro?
My first distro was a Mandriva in 2004, but I really began to use Linux with Ubuntu 5.04.

How long have you been using Ubuntu?
Since Hoary (5.04). It was the first distro I used full time. I've used Ubuntu since then, with some period under Debian Sid.

When did you get involved with the MOTU team and how?
I began during the Edgy cycle by reporting some bugs and doing some testing. I began with no particular knowledge, no coding skills, and terrible English (still a problem, but it's better.

What helped you learn packaging and how Ubuntu teams work?
Mostly the documentation, Debian reference and Debian Policy, and the How-To's for all tools (cdbs, quilt, dh7, python-support …). I learned also with all my sponsors, in both Debian and Ubuntu.

What's your favorite part of working with the MOTU?
No particular favorite part. When I work too much on a part, I switch to another so I always have something fun to do.

Any advice for people wanting to help out MOTU?
Don't start with a new package. You will learn faster and more by working on existing packages. And there is so much to do with existing packages. It's also a good way to find sponsors for future new packages you want to include.

Are you involved with any local Linux/Ubuntu groups?
A bit with the French LoCo Team, installing Ubuntu for new users during Ubuntu parties in Paris. It's nice to talk to users sometimes, to listen to their problems and wishes.

What are you going to focus on in Karmic and Karmic+1?
For Karmic, I kept an eye on some packages I try to maintain (awn, ogmrip, conduit …). For Lynx, I'll have more time for sync packages from Debian, for introducing new stuff, and for working on Lubuntu more than I did for Karmic.

What do you do in your other spare time?
Not much time after real work and Ubuntu work, but when I find some time, I watch movies and travel.

Ubuntu is brought to users in their own language by a large community of volunteer translators, who tirelessly work on localizing every part of the operating system on every release. In this series of interviews we'll get to know who they are, about their language, and how they work.

Could you tell us a bit about you, and the language you help translate Ubuntu into?

Hi! I'm Ricardo Pérez, I'm 35 years, old and I'm a computer science teacher in a High School in the South of Spain, in the Andalusia region. For some years, I'm the Ubuntu Spanish Translators Team administrator, and one of its translators. Spanish is one of the most spoken language around the world as well as in the Internet - only English goes before. There are also a huge amount of Spanish-speaking Ubuntu users out there.

How and when did you become an Ubuntu translator?

I started translating Ubuntu into Spanish virtually at the same time as Rosetta was born. I'm talking about the end of 2005. I always liked to translate technical texts into Spanish, and my work as a teacher pushed me to do so. For example, some years ago, I translated into Spanish a book about computer programming fundamentals called "How to think like a computer scientist", and I adapted it from Python to Eiffel at the same time (if you're curious, this is the link: http://sourceforge.net/projects/httlcseifspa/).
I always loved Rosetta and its ease of use, so translating Ubuntu using Launchpad is like an enjoyable game for me.

What other projects do you help with inside the community?

I spend practically 99% of my Ubuntu time in translating and reporting bugs.

Do you belong to an Ubuntu LoCo team? If so, which one?

Well, I'm a member of the Ubuntu Spain Team, but I'm not involved in any of its activities.

How can people who want to help with translating Ubuntu and all the various pieces and parts into your language get started?

The best they can do is to take a look at many already translated applications, and then go to the Ubuntu Spanish Translators wiki on https://wiki.ubuntu.com/UbuntuSpanishTranslators, and read all the guides and recommendations. There are some things about translating into Spanish which could sound weird the first time you hear them.

What's the desktop experience for Ubuntu users in your language? Is Ubuntu in your language popular among native speakers?

If I'm not wrong (and I don't think so), Ubuntu is the most popular Linux distribution among Spanish speakers. Ubuntu is also the Linux distribution choosen as the base for *Guadalinex*, the derivative distro of Andalusia.

Where does your team need help?

Translating, translating and translating. We need more contributors, and we need quality.

Do you know of any projects or organizations where Ubuntu is

used in your language?

Apart from the Government of Andalusia (and its own Linux distribution called *Guadalinex*), Ubuntu is used in University as well as High Schools.

What do you feel is the most rewarding part of translating Ubuntu?

It's a pleasure to know that your work is being used in many places around the world. I like to see my translated strings printed in Spanish books and articles about Ubuntu.

Is there anything else about your team or translation efforts that I haven't asked you about that you would like to talk about?

I don't think so. It was a great interview. Thanks very much!
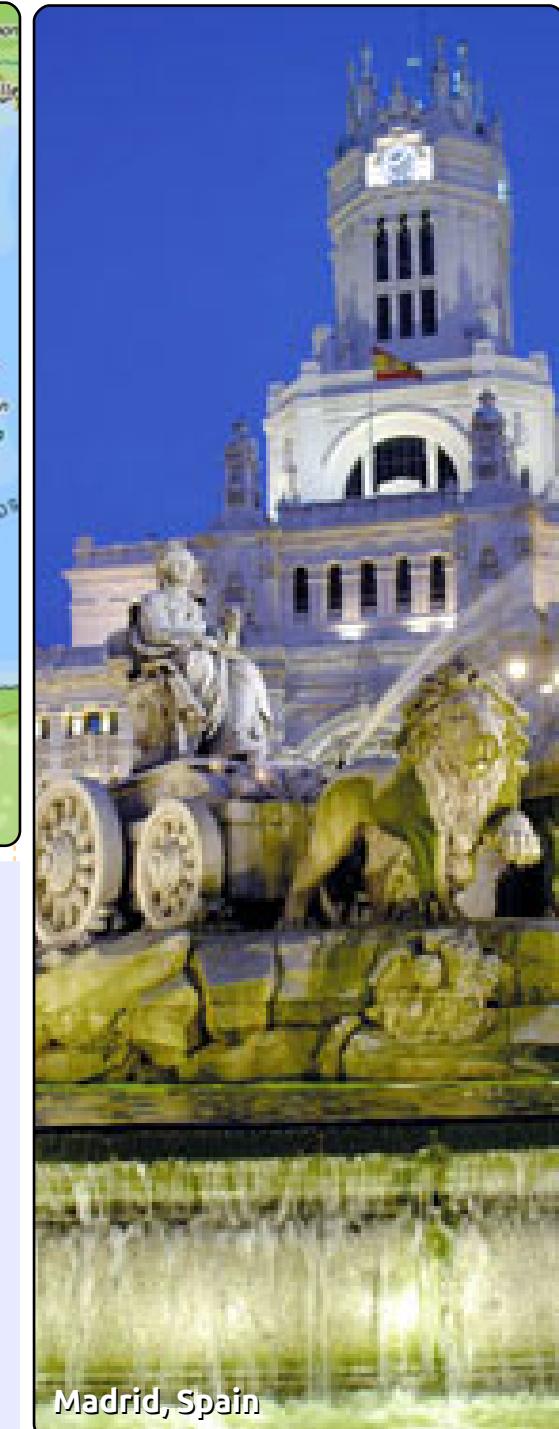
Become an Ubuntu Translator

Do you speak languages? Join our translation community, and make Ubuntu accessible to everyone in their own language. You can:

Get in touch with a translation team (https://translations.launchpad.net/+groups/ubuntu-translators) or create your own https://wiki.ubuntu.com/Translations/KnowledgeBase/StartingTeam

Help translating this language - https://translations.launchpad.net/ubuntu

Madrid, Spain

A LoCo Team is a Local Community of Ubuntu users. A LoCo can involve things such as local promotion, support in the local language, general support to local users and much more. Most importantly however, it lets people find other Ubuntu users near them and experience the Ubuntu Community firsthand.

In the latest LoCo Team interview in this US Teams Interview Series – LoCos, Leaders, and Lessons Learned - Amber Graner talks to Greg Grossmeier of the Ubuntu Michigan LoCo Team. Greg talks about the history of the team, resources, events, a new podcast put together by Ubuntu Michigan team members and more!

US-Teams: Could you tell us a little about you and what your role in the LoCo Team is?

Greg Grossmeier: Well yes! My name is Greg Grossmeier, and during the day I work as the Copyright Specialist at the University of Michigan Library where I'm involved in such great projects as Open.Michigan and the Scholarly Publishing Office. I'm also a Fellow at Creative Commons (where I interned when in grad school). But most importantly (for this conversation), I am the (by name only) leader of the Michigan LoCo Team. I can't really say I'm the leader of the team without qualifying it because, without the tremendous help of many people in the LoCo, there would be nothing to lead.

US: When was the Ubuntu Michigan LoCo team started? How long after it was started did it take to get approved?
GG: The Launchpad team for the Michigan LoCo was created in June of 2007. That was the summer before I went to grad school, and I thought "Hey, I know what would be a great compliment to starting a graduate school program - starting an Ubuntu LoCo team!" To my surprise, and everyone else's, it actually worked!

However, this team didn't start from scratch in June of 2007. I unknowingly started a team that had already tried to start before. The awesome Jorge Castro (and others) had started a LoCo for the area a while before, but it was laying dormant when I came into the picture. In fact, I "started" the LoCo before I had even moved to Michigan. While still in Minneapolis, MN, I created the IRC channel, wiki page, mailing list, and Launchpad team; setting up the technical infrastructure from afar.

But with Jorge (and others') help, we got more interest in the team, met a few times, and the Michigan LoCo was back in business.

US: What tools do you use for your team? Mailing Lists, Forums, IRC, websites, Micro-blogging sites, etc.
GG: We use mostly the IRC channel (#ubuntu-us-mi), and the mailing list (ubuntu-us-mi@lists.ubuntu.com). There was some initial interest with the Forum but that has slowly died down - except for people asking about the IRC channel. We also have an identi.ca group that, sadly, doesn't get used for much except spam accounts joining it.

US: On the road to LoCo approval, what were some of the challenges the team faced, and how did the team overcome them?
GG: Mostly, the challenges we faced were focusing our energies on specific attainable goals like bug/packaging jams. There was also the issue that South East Michigan area, where many of the team members live, has no lack of techie groups to join, and there are many LUGs and other User Groups to consider. So, one of the things we needed to do right away was convince people that A) we weren't trying to steal members from other groups, and B) our group added something special and different to what was already available.

US: What are the biggest challenges your team faces now,

and what strategies does the team use to overcome them?

GG: The biggest current challenge is probably the momentum problem. We have been fairly lax lately with our event planning. We have participated in the major events like the Ubuntu Global Jam, and, of course, the release parties, but getting together more often is definitely one of our major goals. One strategy that worked recently was for one of our members to get married (congratulations Jorge and Jill!); that brought much of the LoCo team out and having fun - along with (gasp!) dancing.

US: What types of activities does the LoCo Team participate in? Are there any events the LoCo team sponsors?

GG: Along with release parties and the Global Jam, the team also makes sure to have a presence at local events like Penguicon, the Ohio Linux Fest, and PyOhio.

US: What are some of the projects your LoCo team has worked on? What are some of the upcoming projects the Ubuntu community can expect to see from the LoCo team throughout the next cycle?

GG: While the words "Ubuntu" and "Michigan" are not in the title, the new Lococast.net podcast from Michigan LoCo members Rick and Craig is a great project that is taking off from conversations in the Michigan LoCo IRC channel (and other places). We are excited to see where this will go!

US: What are some of the ways in which the LoCo actively recruits new members? What resources have you created or do you use (ie posters, fliers, business cards, banners, etc.).

GG: We actually do much with word of mouth: attending other local groups in the area (the members of the LoCo are almost always members of other groups as well), talking with new people at local events, and even promoting our LoCo via the great new Lococast.net.

US: What do you think is the best aspect of being part of a LoCo team?

GG: Simply, the chance to meet and hang out with great people in the area. I wouldn't have any other way of reliably meeting such good people (Penguicon is VERY hit or miss).

US: What has been the most rewarding and exciting moment for the LoCo Team to date, and why?

GG: I can't speak for the entire team, but when myself and others took our application to the Community Council to be an official LoCo team, that was a great achievement.

US: What suggestions would you offer for newly formed LoCo teams or those teams working toward approval right now?

GG: Get out there! Talk with people! Keep your mailing list and IRC channels active. No one likes to hang out with quiet people. Most importantly: have a good time. Because being boring is almost worse than being quiet.

US: What tips, tricks, tools, references, etc., would you suggest for the leadership of a LoCo team?

GG: Along with getting out there and talking with people, just be sure to listen to your team. Don't think that you know the right way of doing something. Your goal should be to attract smart and engaged people, so treat them like they are.

US: When you think of the Ubuntu Community, and the spirit of Ubuntu, how does the LoCo embody and share that spirit?

GG: We are always the first to help each other no matter what, and with anything. Also, I think one of the most telling examples of how our LoCo team, while relatively small, epitomizes the concept of Ubuntu, is Jorge and Jill's wedding. It really was very special to see the turnout of the LoCo team there - celebrating that wonderful occasion.

To get a peek at some of the fun the team has, check out photos from some of their past events:

Gutsy Release Party:
http://www.flickr.com/photos/7508761@N03/1636244836/in/set-72157602529198873/
Jaunty Release Party:
http://www.flickr.com/photos/grggrssmr/3476604620/in/set-72157617391698128/
Lucid Release Party:
http://picasaweb.google.com/brousch/WestMIUbuntuLucidReleaseParty#5466095970570143586

LETTERS

Every month we like to publish some of the emails we receive. If you would like to submit a letter for publication, compliment or complaint, please email it to: letters@fullcirclemagazine.org. PLEASE NOTE: some letters may be edited for space.

Less CLI, More GUI

've been a Linux user for just over one year. In this short time, from following blogs and listening to an array of podcasts, this is what I've learned about the community that carries the OS forward: nearly all of them want Linux to replace Windows as the leading OS, and nearly all of them consider the command line a part of everyday life that new users should learn to live with whether they like it or not. To me these two beliefs have always seemed absolutely incongruent. When I think of the potential converts in my social circle - mother and father who use Windows, wife and friends who use OSX - I know that all of them would be instantly turned off at the idea of having to use the command line for anything. Not because they are "afraid" or aren't savvy enough, but because it's simply an objectionable pain when you have spent years happily and comfortably computing with a GUI. As for speed, Amber (Graner, in Full Circle Podcast #10) said it best: speed is in the eye of the beholder, only as valuable as each individual user deems it to be.

Regardless, I've come to expect these competing beliefs whenever I present my ears to a Linux related podcast. So, today, while listening to my very first Full Circle Podcast, I about fell out of my chair when I heard Rob make the comment that ideally a new user should never have to touch a CLI. For someone who has been in the IT industry for as long as he has, to hold that view was incredibly refreshing. Bravo to you, sir. You have made an avid Full Circle listener out of me.

James

PS3 > Ubuntu Streaming

n response to Anthony Parr's request for "Streaming to PS3?": If you want to simply stream the video/audio files, use PS3 Mediaserver: http://code.google.com/p/ps3mediaserver/. It is written in Java and works fine. If you want to create a real media server, then use MediaTomb (http://mediatomb.cc/) but you will want to pre-transcode the videos so mediatomb simply presents the streams. To do that, use HandBrake or a recent Avidemux. Create an mp4 file making sure you use "Normal Profile" or "High Profile" for the video. You may need to change the size of the video to ensure that the X and Y are divisible by 4 (preferably by 16) else you may see a 'rolling' video, similar to the old TVs with the vsync off.

I've found that a small virtual machine running Ubuntu Server with 256 MBytes of RAM is more than sufficient to stream my multimedia collection to three different televisions (one PS3 and two WD TV HD Live boxes) at full 1080p with about 40% CPU utilization. This is, of course, with pre-transcoded video.

Jason Froebe

n reply to a request for an Ubuntu/PS3 Media Server article: I've been successful in setting up a PC Media Server with the following guide: https://help.ubuntu.com/community/Ps3MediaServer. The wealth of the Ubuntu community documentation is astonishing—even for proprietary technologies—and I would like to thank everyone who has contributed to it. I hope to eventually contribute to it through translations to Lojban—an engineered language that I'd encourage people to examine.

Cameron Bullivant

Podcast #11?

'm so looking forward to my favorite podcast. I keep checking and it's not there. Any word on when the next one will be available?

NUboon2Age
(via Ubuntu Forums)

Robin says: *There is a Full Circle*

Side-pod in production which may escape in the next few days. We did say it would be occasional and irregular.

Ed says: *I am going to upset Robin now and give you a release date of Episode 11 to be mid-September 2010!*

Download All Issues

I 've seen a lot of people asking for a download including all issues so they don't have to download each once individually. Therefore I wrote a simple .sh script to help people out.

It basically creates a folder in your home folder called FullCircleMagazine and it will download all the issues starting with 37 and finishing with 0. It also renames a few of the issues so that they are all nicely organised.

Obviously you can add your own lines to incorporate issues released after this post.

Download the attachment, make sure it's checked to be run as an executable and then run it in terminal:

http://ubuntuforums.org/showthread.php?t=1513621

Jake007g
(via Ubuntu Forums)

Thank You

J ust dropping you all a huge thank you for the great work you are doing. I've been a big fan from the beginning and I didn't realise that it's been three years already. It's my 4th as a GNU-Linux Ubuntu user and you have clearly helped me along the way.

I used to translate to help out, and I must admit it was fulfilling and a learning process for me in the marvelous world of Ubuntu.

You've been a great help in finding this exciting path for a non-programmer. I've even had the opportunity to see Ubuntu machines running in my working environment and it's a blessing.

Anyway, thank you again and keep up the great work!

David

Full Circle Side-Pod #3
Where's the Neurotic Numbat?

In this episode: *with great power, comes a big utility bill.*

It's been a while. We're maybe half way through our summer recess from the Full Circle Podcast, so this is either goodbye to season one or hello and welcome to season two.

• News: Products die, divorce by Facebook, yet more lawsuits.
• Interview: Matt Grove from Miserware describes Granola's energy-saving ability
• Expert Spot: Editing the Full Circle Podcast pt. 3: The Edit Environment

http://fullcirclemagazine.org

Modern Times

Ring . . . Ring . . .

Hey! We agreed on no phone calls during our meetings!

Nov-05
costantinos.bourboulas@oracle.com

Old Shatterhand froze: ... Was it notoriously jealous Winnetou, who found out he is spending his pastime playing with a young Sioux?

My name is Leann Ogasawara, and I've been working for Canonical for the past 3 years. I've been involved with QA and triaging, stable maintenance and am now this cycle's Ubuntu 10.10 kernel release manager.

Penelope Stowe: How did you end up working with Canonical and Ubuntu?

LO: Prior to ever working for Canonical and on Ubuntu, I was an Ubuntu user and fan - like many people are. At that time, I was involved with Kernel QA and Testing. Coincidentally, some former colleagues of mine had mentioned a job opening at Canonical for a Kernel QA Engineer. It sounded like an amazing job opportunity, so I submitted my resumé, crossed my fingers, and began diving into triaging Ubuntu kernel bugs. A few weeks later I received an email to set up my first interview and now here I am.

PS: How has being the kernel release manager for Ubuntu 10.10 differed from the other work you have done on the kernel team?

LO: Every role has different, yet crucial, responsibilities. Being the kernel release manager, I'm the gatekeeper for what goes into our current kernel. It involves a lot more patch review and testing. Also, not only do I have to be responsible for completing my own tasks for the release cycle, I have to ensure the entire team is on track with their work items as well. It requires a lot more organization than any of the other roles I've been in.

I definitely feel that rotating different members of the team through this position only makes us stronger. We have this "bus theory" we often talk about within the team. Should any one of us get hit by a bus tomorrow, we want to have full confidence that another person on the team can step right in and take over a person's tasks and responsibilities.

PS: What are some of the things you've done with Canonical/Ubuntu that you are most proud of, or that you enjoyed the most?

LO: Regardless of what role I've been in, the one aspect of each role that I've enjoyed the most is that moment when I've been able to fix someone's bug. Whether it's simply applying an upstream patch, or writing some quirk for a device, it's just very gratifying when someone sincerely thanks you for solving an issue they've been facing.

PS: What are you most excited to see happen?

LO: I'm obviously the most excited to see our Ubuntu 10.10 Maverick Meerkat release! I'm completely biased since the Maverick kernel has been near and dear to my heart. It's just been this huge milestone I've been staring at during the entire release cycle, and I hope to be extremely proud, and relieved, when it goes out the door.

PS: What other open-source work outside of Canonical/Ubuntu have you done?

LO: To be honest, there's so much to do within Canonical/Ubuntu already that I haven't found huge amounts of time to focus on other open-source projects.

PS: What do you do with your free time? Are there any hobbies you'd like to tell us about?

LO: I'm a fairly active individual, and love to spend time outdoors, so you'll often find me running, skiing, golfing, etc. Anything involving some sort of athletic activity and light competition is right up my alley.

PS: Is there anything I haven't asked that you'd like to mention?

LO: I just want to thank Full Circle magazine for the opportunity to be interviewed. I was extremely flattered when asked to be a part of this issue, so thank you.

UBUNTU GAMES

Written by Edward Hewitt

This month, I will be continuing the review of the selection of games featured in the Humble Indie Bundle. This month it is **Gish**.

Gish is a 2D platform game, which features a ball of tar, named Gish. Gish is very versatile, being able to become sticky, slick or heavy, and to jump. These abilities allow Gish to climb walls, stick to ceilings, stand firm, slide quickly, and squeeze through narrow gaps.

The story of Gish is simple: Gish's friend Brea is captured and taken underground to the sewers of Dross. Gish does have a nice ending, with two possible outcomes. Each mission is varied, with different locations and puzzles to solve, and their difficulty increases quickly. I thought the difficulty was too high from the start. There is no tutorial teaching you the techniques of Gish, so the game is hard. It is made even harder by having a limited life system. The main story mode has a number of lives. Once the lives run out, the game's over, and you will have to start the story mode again. You will lose lives by restarting a level and even quitting the level. The other single player mode, Collection Games, is far more interesting. It is a selection of many different levels for you to complete as quickly as possible. These are easier than the story missions and far more enjoyable. They encourage you to play through them over and over again by tying your score into a highscore system. Once you have exhausted the story mode and collection games, you can download custom levels to extend the life of the game!

One of the standout and surprising features of Gish is the versus mode. Before trying Gish, I was expecting it to be a single-player-only game, but it has a rather good local multi-player feature. There are several modes to try out with a friend, using the same computer; these include, sumo, football, greed, pit fight, and drag race. All are enjoyable, with varying degrees of success.

Gish has a nice artistic look, but nothing outstanding. Soundtrack is great, but repetitive at times. Overall, Gish has a nice look and feel.

Overall, Gish is good game platformer. The story mode is hard, and there is not a whole lot of story to delve into. The collection games are by far the best way to play the game, in my opinion: quick and easy enough to complete, with the added extra of beating your score. The versus mode is a nice added extra, allowing you and a friend to enjoy Gish. It is a worthwhile purchase, but do not expect it to be a walk in the park.

Score: 7/10

Good:
• Enjoyable collection games mode
• Surprisingly good multi-player mode

Bad:
• Story mode too hard

Ed Hewitt, aka chewit (when playing games), is a keen PC gamer and sometimes enjoys console gaming. He is also on the development team for the Gfire project (Xfire Plugin for Pidgin)

Q&A
Written by Gord Campbell

If you have Ubuntu-related questions, email them to: questions@fullcirclemagazine.org, and Gord will answer them in a future issue. Please include as much information as you can about your problem.

Q Is there a way to record streaming audio?

A There are several ways, perhaps the easiest is to use Outrec. For instructions, Google outrec Ubuntu and look at the first result.

_____

Q The wireless doesn't work in my HP G62 laptop.

A Connect the laptop by Ethernet cable to your router, run Administration/Hardware Drivers. Select the Broadcom STA wireless driver, and click "Activate."

_____

Q I purchased a USB sound card. When I plugged it in, it did not work. What do I have to do?

A Go to System > Preferences > Sound/Output and choose to send output to the USB device.

_____

Q I have a Dell Inspiron 9400 with an ATI Radeon Mobility X1400 graphics card. I have an external monitor connected using a VGA cable. When I try to use the external monitor as an extension of my main screen, the image goes all wavy and jumps around.

A Install xorg.driver.fglrx using Synaptic, then restart. The ATI Catalyst Control Centre should work now.

_____

Q Do you think Samba will be a little bit better for new users in 10.10?

A (Thanks to _Dmizer_ in the Ubuntuforums) I don't really think Samba is bad now. Most of the problems with Samba are not software related. Many problems are related to unnecessary firewalls, permissions, and/or shallow understanding of basic networking.

_____

Q Once installed, sopcast launches successfully but only about 10% of the channels in the channel list actually work. Among the Chinese channels (the ones I'm most interested in) only CCTV3 is working; for every other Chinese channel I always get a "connecting" message.

A I found a way to fix my problem, I replaced the channel server. I used http://www.sopcast.cn/gchlxml instead of http://www.sopcast.com/gchlxml and now everything works!

Q After an update, my "Nvidia Xserver" does not recognize my monitor all of a sudden, displaying "unknown" instead of the monitor name, and giving me 1024x768 resolution instead of the 1600x1200 that it used to. If I switch to the "guest" user, the Nvidia Xserver recognizes the monitor like it used to, and displays the proper resolution. What is going on?

A Open a terminal and run:

```
sudo nvidia-xconfig

gksudo nvidia-settings
```

_____

Q I have a 2GB /boot partition shared with Sabayon and Fedora, a 77GB Sabayon partition, a 200GB Fedora partition, and a 200GB Ubuntu partition. Ubuntu detects Fedora perfectly, however, there is no Sabayon. Today Ubuntu upgraded my

Q & A

kernel and my triple-boot is, once again, broken. Is there some way I can fix my triple-boot so that, when Ubuntu upgrades the Grub menu, it includes Sabayon?

A Copy a Sabayon entry into /etc/grub.d/40_custom. For more information, see "The Grub2 Guide" in the Ubuntu Forums.

_____

Tips and Techniques

Nasty Partitions

I recently bought an HP G62 laptop, and it runs Ubuntu beautifully. However, if you want to dual-boot with Windows, there's a huge headache to work around first.

HP, in its infinite wisdom, sells the computer with four partitions on the hard drive, and they are all primary partitions. If a hard drive has four primary partitions, that's it, you can't make any more. You're out of pie.

The future of this machine includes running software which only works in Windows, so I couldn't just blow away all the partitions.

The four partitions are:
Boot
the normal C: drive
Restore
HP_Tools

The Restore partition (13 GB) contains the Windows 7 installation files, for the day when only a re-install will solve the problem of the day. The HP-Tools are utility programs which might never be needed, but they hardly take any space. Fortunately, HP provides a utility to make a set of four DVDs which can be used to reinstall Windows, at which point I didn't really need the Restore partition any more. (If I mislay the DVDs, I'll regret deleting the Restore partition, but that's life.)

In Windows, I ran Windows Explorer, and selected the E: drive, HP_tools. I highlighted all the files and right-clicked to select "copy". Then I went to the C: drive and selected "new," "folder." I named it "h-p" and copied in the files from E:.

Back to the C: drive, I right-clicked

and selected Properties. One of the "Properties" is Tools, and one of the Tools is defragmentation. I ran that, and it only took a few minutes on a brand-new hard drive.

In Windows Control Panel, search for "disk," and one of the items is "Create and format hard disk partitions." I clicked on it, highlighted the C: drive and selected "Action," "All Tasks," "Shrink Volume." That opened up more than 100 GB of free space, which was completely unusable because I could not create a partition to put it in -- yet.

However, I was now ready to install Ubuntu.

When I got to the step called, "prepare disk space," I selected "specify partitions manually." That put me into "partition editor," where I rearranged the drive to my liking. I deleted the Recovery partition, then the HP_tools partition, and clicked "apply". That left me with a C: drive of 153 GB followed by empty space. I turned the empty space into an "extended" partition, which can hold many "logical" partitions.

I made five logical partitions: first

a tiny NTFS one called Restore, which would never hold any files, but would act as a place-holder for Windows' disk-naming. Next, another tiny NTFS one (100 MB) called HP_TOOLS. Then my root (/) partition for Ubuntu, which I gave 13 GB and formatted as EXT3. A Linux swap partition of 3.5 GB was next. Finally, my /home partition, with all remaining disk space, formatted as EXT3. When I clicked "apply" the computer was busy for a couple of minutes.

That was a lot of work, more in the planning than the actual execution. If HP had formatted the drive more cleverly, it wouldn't have been needed.

I was quite surprised by how quickly the rest of the installation went, less than 20 minutes. (The computer wasn't connected to the Internet during installation, so there were no extraneous downloads.) After the installation was all done, I copied the files from h-p back to the E: drive, the HP_tools partition.

Later, I would have one audio issue to track down, but that's a story for another day.

I've been in the Ubuntu world from version 5.04. Now I am using 10.04 and feel OK with it, though my sound and display is not really good!

I love the simple desktop with light colour. I've added the AWN dockbar to my Ubuntu 10.04. It's a match with my clear screen. I am running my U 10.04 on a Toshiba Satellite, Celeron 1.7GHz, 1.5GB RAM, 80GB SATA HDD! I hope people like the simple desktops like mine!

Long Nguyen

This is my Ubuntu 9.10 Karmic Koala running on my Dell laptop 1435 Studio. It is dual booted with Windows Vista, but I love to work on Ubuntu - there are so many things which you can do in Ubuntu. The theme is New Wave, and the icons are Black and White 2 Gloss. The processor is a core2duo, and my hard disk is 320GB, with 3GB of RAM. The wallpaper is Gnome Transparent.

I have also included the screenlets: a clock at the bottom, with the trash icon and system monitor. I have also edited the terminal - making it more transparent and light.

Praveen Kumar Singh

Hi, I'm a Junior Ubuntero from Indonesia, using Lucid Lynx on a Dell Inspiron 1440. I want to show my desktop to all Full Circle readers.

This is the configuration of my desktop:
Use a blank wallpaper (pure black)
Conky on the right side
For the Main Menu, I use the Ubuntu System Panel
On the Top Panel is Gnome Applet Global Menu
At the bottom of the screen is Gnome-Do

The software and hardware specifications are:
Pentium Dual-Core CPU - T4300 - @2.10GHz
1.9GB of RAM
VGA - Intel Corporation Mobile 4 Series Chipset Integrated Graphics Controller (rev 07)
Kernel version: 2.6.32-23-generic

Fakhrul Rijal

I have used Ubuntu 10.04 instead of Windows 7 for only one week, but I find it easy to use and elegant; I love Ubuntu very much.

The system is running with Docky as well as the Elementary theme and wallpapers which can be found in the Ubuntu software center. Unfortunately, until now, I have not found a convenient input method like the Google PinYin Input Method (which one can use only in the Windows environment).

The computer is a Lenovo Y460 laptop, with Intel Core i3 M330 CPU(2.13GHz), 2GB RAM, ATI Mobility Radeon HD 5650 and Intel GMA HD, 320GB HDD, and 14" screen. All the hardware worked very well except that the graphics cannot switch to Intel GMA HD.
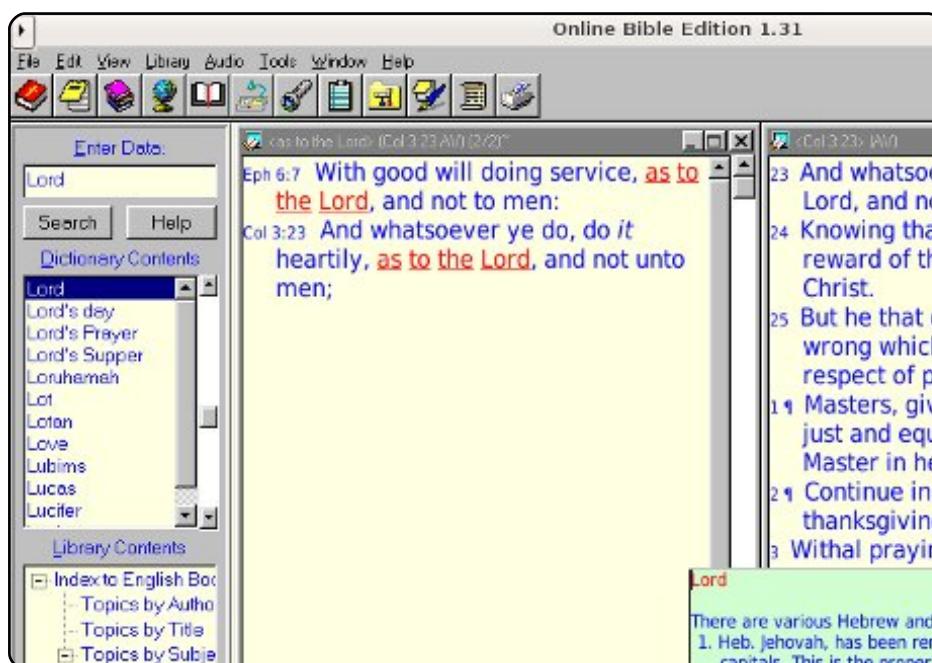
wangshuo2008

Wine

Homepage: http://www.winehq.org/

Wine (which used to stand for the recursive acronym Wine Is Not an Emulator) is a compatibility layer that allows Windows programs to run semi-natively on a Linux box without requiring a copy of Windows. In theory, that means you can make any Windows application or game fit right into Linux, allowing it to interact with the filesystem, other programs, and, quite simply, letting users run it. In practice, there's often a bit of patching involved, and even that may not always result in seamless behavior. Still, for some programs at least, Wine is the only addition necessary.

To install Wine, use the wine package in the universe repository.

CrossOver

Homepage: http://www.codeweavers.com/
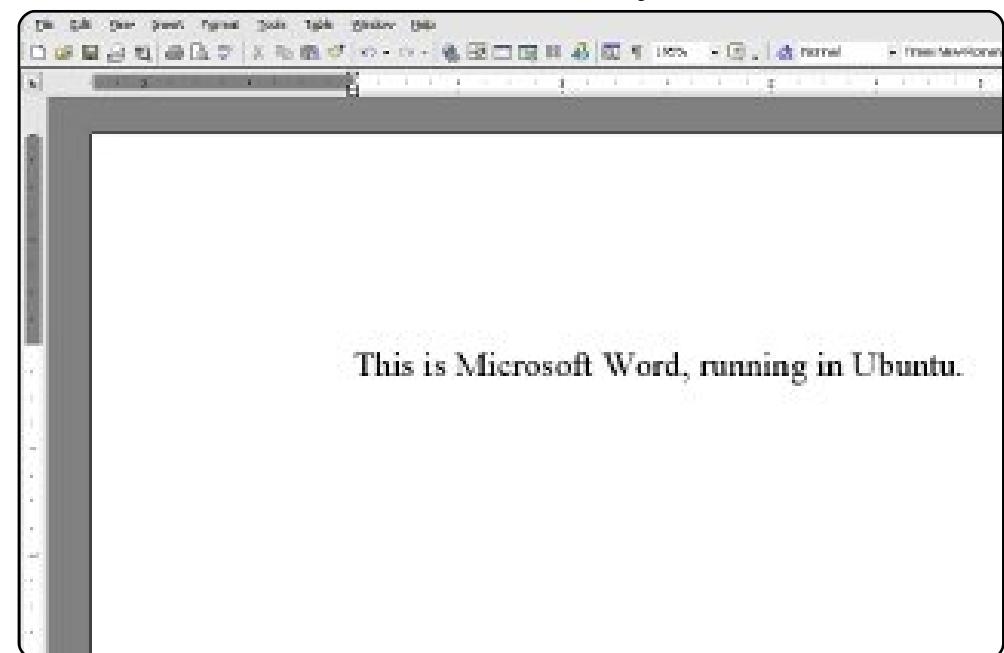
If you're frustrated with the lack of compatibility that Wine provides, but don't want to run a full separate instance of Windows, give CrossOver a try. It's a payware program created by CodeWeavers, one of the main commercial sponsors of Wine. Since it's payware, and uses some proprietary code, it can run a lot more Windows programs successfully. It also supports "bottles", which means each application gets its own registry and system settings. That way, if one of your programs completely bricks, you can remove it without compromising the rest of your (functional) applications.

Crossover comes in several versions, all of which can be purchased from their website. It includes a .deb for easy Ubuntu installation.

VMWare Server

Homepage: http://www.vmware.com/products/server/

While both Wine and Crossover are great tools, they don't always work. If the application you want to run is critical, you'll have to go to the next level: virtualization. One of the best free (as in beer) solutions for this is VMWare Server. While mainly geared towards web servers, VMWare Server will allow you to install and use regular Windows applications. It runs a full operating system within your regular operating system, so you can run both Ubuntu and Windows simultaneously.

VMWare Server can be installed from the VMWare website, after
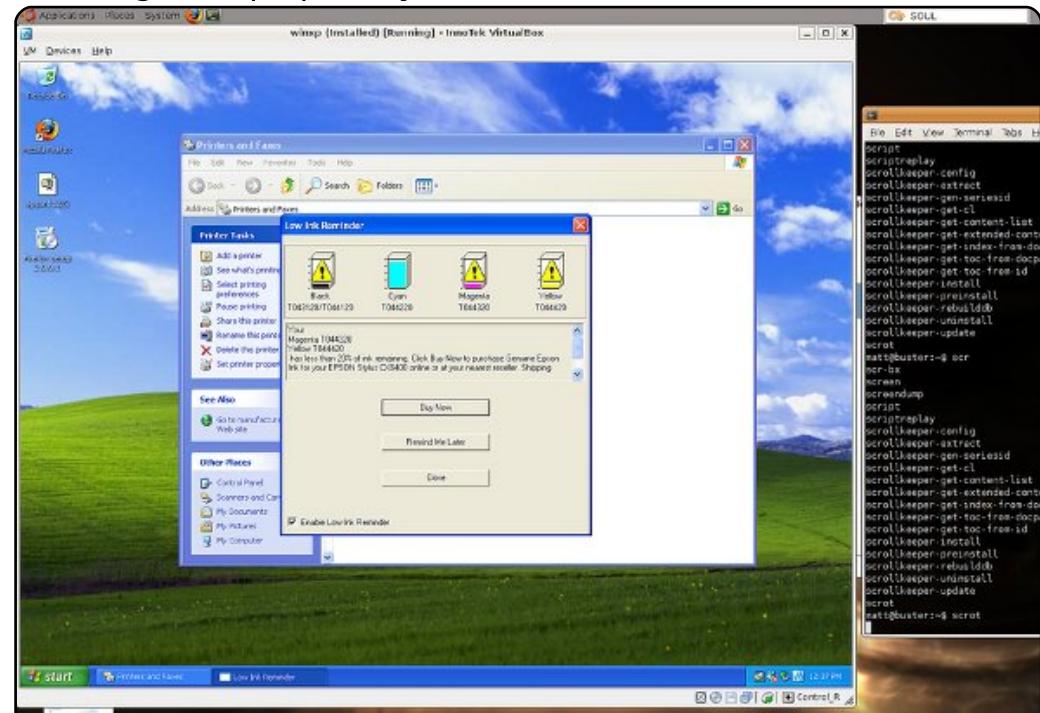
free registration.

VirtualBox

Homepage: http://www.virtualbox.org/

The main problem with VMWare is that, well, it's only free as in beer. It's not open source, and a lot of Linux users dislike it on principle. If that's your case, try VirtualBox. Currently owned by Oracle, the main download is purely proprietary, but there's also a fully functional open-source edition. It supports all the main features of the enterprise edition, with the exception of RDP (and it offers VNC instead) and USB support. Still, it's the best open-source virtualization tool out there.

You can get the proprietary version of VirtualBox from the official
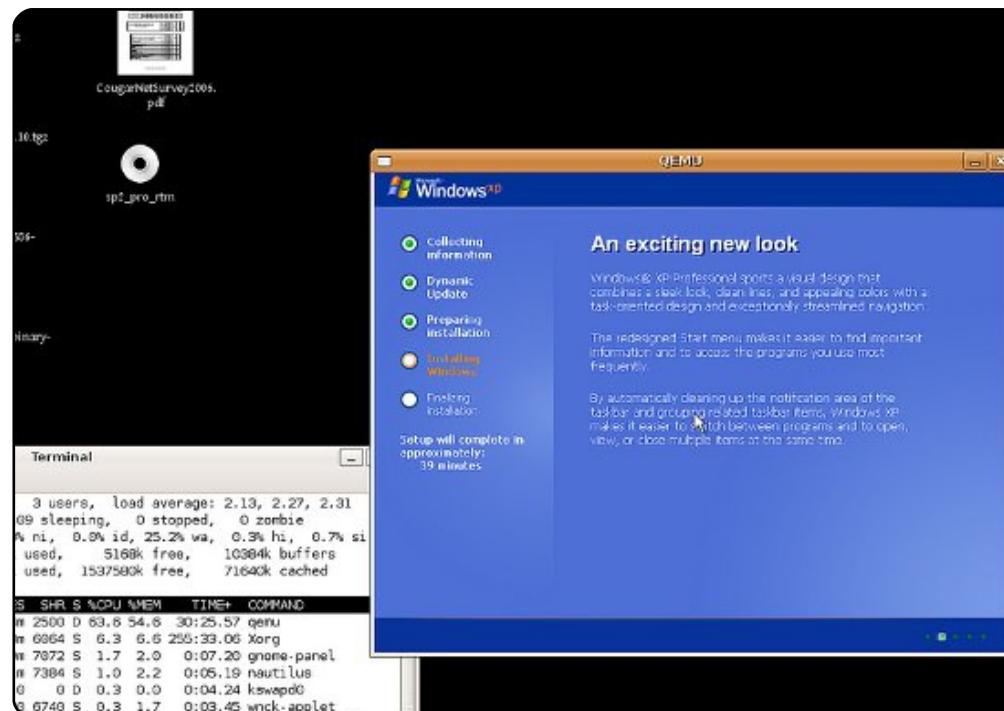
website, or the open-source edition using the virtualbox-ose package

QEMU

Homepage: http://www.qemu.org/

For some, especially those on architectures that can't run Windows, virtualization isn't enough. You have to go one step further: emulation. And, on Ubuntu, the best option is most likely QEMU. It includes several operating modes, and supports features such as physical hardware (like USB sticks and network cards), suspend/restore, and file-sharing via a local network connection. You can even set up Remote Desktop to create a "SeamlessVirtualization", allowing your windows to act like individual Ubuntu applications.

To install QEMU, use the qemu package in the universe repositories.

To view instructions for installing Windows XP, check out the

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Because the show is produced by the Ubuntu UK community, the podcast is covered by the Ubuntu Code of Conduct and is therefore suitable for all ages.

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