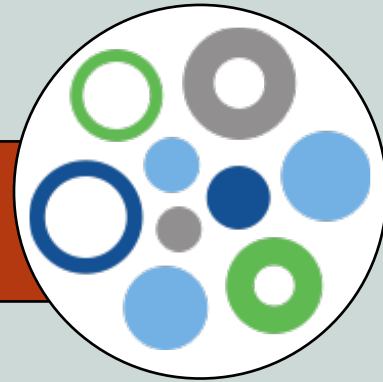# Full Circle

THE INDEPENDENT MAGAZINE FOR THE UBUNTU LINUX COMMUNITY

ISSUE #40 - August 2010

Statistics Open For All

SOFA - Statistics Open For All
the user-friendly, open-source statistics,
analysis & reporting package

REVIEW - SOFA Statistics

ubuntu

Full Circle

THE INDEPENDENT MAGAZINE FOR THE UBUNTU LINUX COMMUNITY

UBUNTU NEWS

Written by Amber Graner

August

THIS WEEKEND! **27th-29th** Ubuntu Global Jam - https://wiki.ubuntu.com/UbuntuGlobalJam

September

02nd - Maverick Meerkat - Beta
09th - Maverick Meerkat - Documentation String Freeze -
https://wiki.ubuntu.com/DocumentationStringFreeze
10th-13th - Ohio LinuxFest (http://ohiolinux.org/) and UbuCon http://ohiolinux.org/ubucon
16th Maverick Meekat -
   Final Freeze - https://wiki.ubuntu.com/FinalFreeze
   Kernel Freeze - and https://wiki.ubuntu.com/KernelFreeze
   Non Langauge Pack Translation Deadline -
https://wiki.ubuntu.com/NonLanguagePackTranslationDeadline
20-24th - Ubuntu App Dev Week -
https://wiki.ubuntu.com/UbuntuAppDeveloperWeek?action=show&redirect=UbuntuOpportunisticDeveloperWeek
30th - Maverick Meerkat -
Release Canadiate - https://wiki.ubuntu.com/ReleaseCandidate and Langauage Pack Translation
Deadline - https://wiki.ubuntu.com/LanguagePackTranslationDeadline

October

10th - Ubuntu 10.10.10 Maverick Meerkat - Final Release - https://wiki.ubuntu.com/FinalRelease
Starting 10th - Ubuntu 10.10.10 - 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 so you can
see what members of the team might be interested in helping with there is always remote
participation. - http://uds.ubuntu.com/

This magazine was created using :

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

Gmail Voice And Video Chat

Today we're launching voice and video chat -- right inside Gmail. [...] with high-quality audio and video -- all for free. All you have to do is download and install the voice and video plugin [...] in the spirit of open communications, we designed this feature using Internet standards such as XMPP, RTP, and H.264, which means that third-party applications and networks can choose to interoperate with Gmail voice and video chat.

We've just started to roll out Gmail voice and video chat for both PCs and Macs, so if you don't see it right away, don't worry -- it could take a day or so for this feature to be available in all Gmail and Google Apps accounts. If you want to download the plugin right away, visit http://gmail.com/videochat.

Source: gmailblog.blogspot.com

Steam For Linux Rumours Denied

A simple ten-word statement [...] by Valve marketeer Doug Lombardi [...] with some tech sites insisting that the VP's ambiguous address has driven the final nail into the Steam on Linux coffin forever.

What Lombardi actually said is, *"There's no Linux version that we're working on right now."*

Of course, even if Valve had a version of Steam for Linux deep in development the company wouldn't spoil the surprise by shouting about it in interviews.

Have we all forgotten the secrecy and intrigue which surrounded the release of the Mac version of the online gaming service?

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 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**
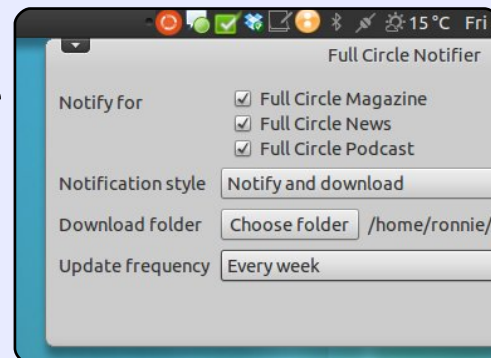
Full Circle Survey 2010

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.**

COMMAND & CONQUER

Written by Lucas Westermann

Oops!

Reader *Inkimar* made me aware that, when discussing wget's usefulness as a PDF-grabber, it was unclear if I was referring to both cURL and wget. CURL may be able to fulfil the same function, but it would output the binary PDF files to STDOUT, resulting in gibberish. I urge anyone who is confused about what program to use to follow this simple guideline: cURL for webpages/online files you want to parse, and wget to download any web-based files you want to store.

This month, I'm going to leave out any extremely new concepts, and aim to consolidate some of the programs and ideas I explained in previous articles. Specifically, how most of my articles can help you when confronted with a tty screen, or when on someone else's Linux installation where the only programs you can rely on are command-line programs. My intention is two-fold. Firstly, I want my readers to feel comfortable with a command-line system, so that, if X dies, they can keep on working to fix it, instead of re-installing from scratch, or following instructions blindly. Secondly, I will be covering a few distributions (and Unix systems) that install nothing more than a command-line interface, leaving the rest up to the user. This way, I can focus on the installation process. This month, I will cover researching problems, and next month I will cover installation-focused programs (fdisk, mkfs, and so forth), in order to coincide with the first Unix virtual machine we'll be creating.

I assume many of you are familiar with the process of solving problems of a technological nature. Generally, it follows these steps: make a guess at what is wrong (or find error logs), Google the error message or problem, see if any results solve the problem for you, and, if you haven't solved the issue, then post on a forum. However, what would you do if you were stuck in a command-line screen without ready access to Firefox, Nautilus, or similar programs? I realize it's not uncommon for there to be multiple computers in a household these days, but I always find it inefficient to use a second computer to diagnose a first. As long as the computer is connected to the Internet, you can do your troubleshooting there. All you need is: ifconfig/iwconfig (and maybe wpa_supplicant), dhclient, cd/ls (or something like midnight commander), vim/nano, and elinks. Sure, midnight commander and elinks aren't generally installed from the get-go (nor is wpa_supplicant I believe), but these are valuable tools to have ready, just in case. Also, they don't take much space at all.

To ensure you're connected to the Internet, you can run a quick ping request:

```
ping -c 3 google.com
```

If you get replies, you're connected, if not, you'll probably need to do some work. I will assume that the network is not connected.

First, you'll need to know how you connect to the Internet. Is it via Ethernet cable, WEP-encrypted wireless, WPA-encrypted wireless, or a password-less wireless network?

If it's an Ethernet-based connection, all you'll need is ifconfig and dhclient. Use the following command to ensure that the Ethernet interface is "up" (enabled):

```
sudo ifconfig
```

If there is an "eth0" interface listed, you're all sorted and just need to run:

```
sudo dhclient eth0
```

The command will request an IP address from your router, after which the Internet should work without a problem. If your interface is not listed, it will be because it's "down" (disabled). To enable it, type:

```
sudo ifconfig eth0 up
```

And then run the same dhclient command as above. If you have multiple Ethernet cards, you can get a list of all possible interfaces with:

```
sudo ifconfig -a
```

This shouldn't be required for most PCs.

If you have a WEP-encrypted wireless (or a wireless without a password), you'll need iwconfig and dhclient. First, make sure you have the passkey/encryption key, and the ESSID ready. Then use the following command:

```
sudo iwconfig $interface
essid $ESSID key $KEY
```

Replacing "$interface" with the interface name (usually eth1 or wlan0, you can check by just running iwconfig without arguments, or ifconfig), $ESSID with the wireless network's name (can be found using "iwlist scan"), and $KEY with the passkey (ASCII password used to connect) or the encryption hex key (actual hex string). If the key is a passkey, you

will need to append "s:" to the key. For this example the interface is wlan0, the ESSID is home, and the key is passkey:

```
sudo iwconfig wlan0 essid
home key s:passkey
```

Once you enter the command, you can request an IP using this command:

```
sudo dhclient $interface
```

Make sure to replace "$interface" with the interface name. If it fails, you may need to add extra options to the iwconfig command (channel, etc.) which can be found clearly explained in the man page. Or else you may be trying to connect to a WPA secured network.

To do so, you require wpa_supplicant. First, you need to create the information for wpa_supplicant to process. To do so, you need to run this command:

```
wpa_passphrase $ESSID
$passphrase >
~/passphrase.txt
```

Replacing "$ESSID" with the actual ESSID, and "$passphrase" with the actual passphrase. The

file path after the ">" is entirely up to you. It will then create a file in your home folder called passphrase.txt that looks like this:

```
network={

ssid="test"

#psk="testing123"

psk=a9ff0c9d1f2367bccf9959e95
bc08695bf411f82b146c55b9486dd
b17495f39d

}
```

You can then connect to your network with the following command (best run in a second tty screen, since it does not daemonize, i.e. runs continuously):

```
sudo wpa_supplicant -
i$interface-c$file -D$driver
```

There are generally no spaces left between the arguments and the switches, but that's up to you. Be sure to replace "$interface" with your interface name (usually wlan0), "$file" with the path to the configuration file we created in the last step, and "$driver" with the driver for your device (usually wext will work, but other drivers are listed in the man page). Once the command starts running,

switch back to a non-occupied tty screen and run:

```
sudo dhclient $interface
```

Be sure to replace "$interface" with the actual interface name.

Once you're connected, give the ping request another shot. If it works, you're all set. You can then cd to /var/log/ or wherever you need to go, and check the logs using cat. Once you've decided on a search term for the Google search, open up elinks with the following command:

```
elinks
```

By default, elinks will ask you straight away for a URL, which will generally be google.com. Once it loads, use the arrow keys to highlight the search box (displayed with underscores), if it isn't already selected. Then, hit enter to allow input, and type your search term, hit enter again to begin the search. Use the arrow keys to select links, and enter to follow them. If you stumble across a file you need to download, simply highlight the link to the file, hit Esc, head to Links, and choose "download link" (or hit "d"). You can check on downloads

by either hitting Esc, going to Tools, and then choosing downloads, or hitting "D" (shift+d). Once you're done searching, you can close elinks with "q" or Esc (to bring up the menu), then choose File and Exit.

Hopefully this quick guide (and it really was quick - there are many more things I could have covered here) will help anyone who is following my virtualization series, and anyone who runs into a tty screen. Next month, I'll be covering the things required for installing an OS via the command-line, and managing partitions from the command-line. If anyone has questions, or requests for a more in-depth explanation of anything covered in this article, they can reach me at: lswest34@gmail.com. Please be sure to place the word "C&C" or "FCM" in the subject line, so I don't overlook it.

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.

U^3 (U-Cubed) - 28th August 2010

On 28th August, MadLab is hosting U^3 (U-Cubed) - an Ubuntu and Upstream UnWorkshop day in collaboration with HacMan, ManLUG and Manchester Free Software. The day is inspired by the Ubuntu Global Jam event which is being held on the same weekend.

It's an opportunity to help show users how to get involved in wider distribution work - both in the projects they're using already (maybe Ubuntu, maybe just some specific Free & Open Source applications) but also in the upstream projects, such as Debian, Gnome and others, and is inspired by the Ubuntu Global Jam events being held on the same day.

We're hoping to find support on the day from people experienced in Ubuntu, but also people that are involved in more than just Ubuntu, so we're reaching out to anyone in the North West UK region to see if people are prepared to help out - even if Ubuntu isn't the Linux distribution you normally would use, so, if you're interested and available between 11am and 9pm and can get to Manchester, or even if you can just be around for part of the day, please get in touch with me, or better yet, go to http://u-cubed.eventbrite.com to reserve a ticket.

Because we've got limited space, we can only allocate 60 tickets, and to make it fair for everyone, we're giving people access to these tickets at 1PM on Thursday 12th August (giving people a chance to find out about the event), but if you're able to come along to help out with technical information or guidance, please let me know and I'll make sure that you're invited when the flood gates open!

I really hope you'll be able to make it on the day, and help to make the day great!

Les Pounder
One of the U^3 Organisers

Last time we talked about the Curses library. This time we are going to delve further into the curses library, and concentrate on the color commands. Just in case you missed the last article, let's have a quick review. First, you have to import the curses library. Next you have to call curses.initscr to get things started. To put text on the screen you call the addstr function, and then call refresh to show your changes to the screen. Finally, you have to call curses.endwin() to restore the terminal window to its normal state.

Now, we are going to create a quick and easy program that uses color. It's pretty much the same as what we did before, but we have a few new commands this time. First we use curses.start_color() to tell the system that we want to use color in our program. Next, we assign a color pair of foreground and background. We can assign many pairs, and use them whenever we want. We do that by using the curses.init_pair function. The syntax is:

```
curses.init_pair([pairnumber]
,[foreground
color],[background color])
```

The colors are set up by using "curses.COLOR_" and the color you want. For example, curses.COLOR_BLUE or curses.COLOR_GREEN. The options here are black, red, green, yellow, blue, magenta, cyan and white. Just add "curses.COLOR_", and the color you want, in upper case. Once we have set up our color pair, we can use it as a final parameter in our screen.addstr function like this:

```
myscreen.addstr([row],[column
],[text],curses.color_pair(X)
)
```

Here X is the color set we wish to use.

Save the following code (above right) as colortest1.py, then run it. Don't try to run a curses program in an IDE like SPE or Dr. Python. Run it from a terminal.

What you should see is a grey

```
import curses
try:
    myscreen = curses.initscr()
    curses.start_color()
    curses.init_pair(1, curses.COLOR_BLACK,
curses.COLOR_GREEN)
    curses.init_pair(2, curses.COLOR_BLUE,
curses.COLOR_WHITE)
    curses.init_pair(3,
curses.COLOR_MAGENTA,curses.COLOR_BLACK)
    myscreen.clear()
    myscreen.addstr(3,1,"  This is a test
 ",curses.color_pair(1))
    myscreen.addstr(4,1,"  This is a test
 ",curses.color_pair(2))
    myscreen.addstr(5,1,"  This is a test
 ",curses.color_pair(3))
    myscreen.refresh()
    myscreen.getch()
finally:
    curses.endwin()
```

background, with three lines of text saying " This is a test " in different colors. The first should be black-on-green, the second blue-on-white, and the third magenta on the grey background.

Remember the Try/Finally set. This makes sure that if anything happens, our program will automatically restore our terminal to its normal state. There is another way. There is a curses

command called wrapper. Wrapper does all the work for you. It does the curses.initscr(), the curses.start_color(), and the curses.endwin(), so that you don't have to. The one thing you have to remember is that you call curses.wrapper with your main routine. It passes back your screen pointer. On the following page (top right) is the same program as before, but this time using the

curses.wrapper function.

That's a whole lot easier, and we don't have to worry about calling curses.endwin() if something bad happens. All the work is done for us.

Now that we have a bunch of basics, let's put some of the things we've learned over the past year to work, and start making a game. Before we start however, let's lay out what we are going to do. Our game will pick a random uppercase letter, and move it from the right side of the screen to the left side. At a random position, it will drop down to the bottom of the screen. We'll have a "gun" that can be moved using the right and left arrow keys to be positioned below the falling letter. Then, by pressing the space bar, we will shoot it. If we shoot the letter before it gets to our gun, we get a point. If not, our gun explodes. If we loose three guns, the game is over. While on the surface this seems like a simple game, there's a lot of code to it.

Let's get started. We need to do our setup, and create a few routines before we go very far. Create a new project and call it game1.py. Start with the code shown below right:

This code won't do much right now, but it's our starting point. Notice that we have four init_pair statements setting the colors that we will use for our random color sets, and one for the explosions (number 5). Now we need to set up some variables and constants that will be used during our game. We will put them in the __init__ routine of class Game1. Replace the pass statement in __init__ with the code on the following page.

You should be able to figure out what is happening in these definitions. If you are unsure at this precise moment, it should become clearer as we fill in the code.

We are getting closer to having something that will run. We still need to make a few more routines before it will do much. Let's work on the routine that will move a letter from right to left on the screen:

http://fullcirclemagazine.pastebin.com/z5CgMAgm

This is our longest routine in the program, and there are some

```python
import curses
def main(stdscreen):
    curses.init_pair(1, curses.COLOR_BLACK,
curses.COLOR_GREEN)
    curses.init_pair(2, curses.COLOR_BLUE,
curses.COLOR_WHITE)
    curses.init_pair(3,
curses.COLOR_MAGENTA,curses.COLOR_BLACK)
    stdscreen.clear()
    stdscreen.addstr(3,1,"  This is a test
",curses.color_pair(1))
    stdscreen.addstr(4,1,"  This is a test
",curses.color_pair(2))
    stdscreen.addstr(5,1,"  This is a test
",curses.color_pair(3))
    stdscreen.refresh()
    stdscreen.getch()
curses.wrapper(main)
```

```python
import curses
import random

class Game1():
    def __init__(self):
        pass
    def main(self,stdscr):
        curses.init_pair(1, curses.COLOR_BLACK,
curses.COLOR_GREEN)
        curses.init_pair(2, curses.COLOR_BLUE,
curses.COLOR_BLACK)
        curses.init_pair(3, curses.COLOR_YELLOW,
curses.COLOR_BLUE)
        curses.init_pair(4, curses.COLOR_GREEN,
curses.COLOR_BLUE)
        curses.init_pair(5, curses.COLOR_BLACK,
curses.COLOR_RED)

    def StartUp(self):
        curses.wrapper(self.main)
g = Game1()
g.StartUp()
```

new functions in this routine. The scrn.delch function deletes the character at the given row | column. The curses.napms() tells python to sleep (nap) for X number of milliseconds (ms).

So the logic in this routine is as follows (in pseudocode) on the next page (top right).

You should be able to follow the code by now. We need two new routines to keep everything correct. The first is Explode, which we will stub with the pass directive. The second is ResetForNew. This is where we will reset the current row for the letter to the default letterline, reset the current column, set the DroppingLetter flag to 0, pick a random letter, and pick a random drop point. Following page, middle right, are those two routines.

Now we need four more routines to keep up with things (next page, bottom right). One picks a random letter, the other picks a random drop point. Remember we quickly discussed the random module early on in the series.

In PickALetter, we generate a

```
# Line Specific Stuff
self.GunLine = 22                    #Row where our gun lives
self.GunPosition = 39                #Where the gun starts on GunLine
self.LetterLine = 2                  #Where our letter runs right to left
self.ScoreLine = 1                   #Where we are going to display the score
self.ScorePosition = 50              #Where the score column is
self.LivesPosition = 65              #Where the lives column is

# Letter Specific Stuff
self.CurrentLetter = "A"             #A dummy Holder Variable
self.CurrentLetterPosition = 78      #Where the letter will start on the LetterLine
self.DropPosition = 10               #A dummy Holder Variable
self.DroppingLetter = 0              #Flag - Is the letter dropping?
self.CurrentLetterLine = 3           #A dummy Holder Variable
self.LetterWaitCount = 15            #How many times should we loop before actually
                                       working?

# Bullet Specific Stuff
self.Shooting = 0                    #Flag - Is the gun shooting?
self.BulletRow = self.GunLine - 1
self.BulletColumn = self.GunPosition

# Other Stuff
self.LoopCount = 0                   #How many loops have we done in MoveLetter
self.GameScore = 0                   #Current Game Score
self.Lives = 3                       #Default number of lives
self.CurrentColor = 1                #A dummy Holder Variable
self.DecScoreOnMiss = 0              #Set to 1 if you want to decrement the
                                     #score every time the letter hits the
                                     #bottom row
```

random integer between 65 and 90 ("A" to "Z"). Remember when we use the random integer function we must give a range of minimum-number to maximum-number. The same thing goes for PickDropPoint. We also make a call to random.seed() in both routines, which sets up the random

generator with a different number every time it's called. The fourth routine is called CheckKeys. This routine will look at any keystrokes entered by the user, and deal with them to move our gun. However, we'll stub it out for the moment but we will need it later. We'll also need a routine called CheckForHit,

which we will also stub for the time being.

```
def
CheckKeys(self,scrn,keyin):
    pass
def CheckForHit(self,scrn):
    pass
```

We are going to create a small

routine which will be the "brains" of our game. We'll call it GameLoop (next page, top right).

The logic behind this is to first set our keyboard to nodelay(1). This means that we won't wait for a keystroke to happen, and when it does, we just cache it for latter processing. Then we enter a while loop which we force to always be true (1) so that the game continues until we are ready for it to end. We nap for 40 milliseconds, move our letter and then check to see if the user has pressed a key. If it's a "Q" (notice it's upper case), or the ESC key, then we break out of our loop and end the program. Otherwise, we check to see if it's a left or right arrow key, or the space bar. Later on, you can make the game a bit more difficult by checking the keystroke against the current character and only fire the gun if the user has pressed the same key, ala a simple typing tutor. Just remember to remove the "Q" as a quit key.

We'll also need to create a routine that sets up for each new play of our game. Let's call it NewGame (next page, middle right).

```
IF we have waited the correct number of loops THEN
    Reset the loop counter
    IF we are moving to the left of the screen THEN
        Delete the character at the the current row,column.
        Sleep for 50 milliseconds
        IF the current column is greater than 2 THEN
            Decrement the current column
        Set the character at the current row,column
        IF the current column is at the random column to drop to the bottom THEN
            Set the DroppingLetter flag to 1
    ELSE
        Delete the character at the current row,column
        Sleep for 50 milliseconds
        IF the current row is less than the line the gun is on THEN
            Increment the current row
            Set the character at the current row,column
        ELSE
            IF
            Explode (which includes decrementing the score if you wish) and check to
             see if we continue.
            Pick a new letter and position and start everything over again.
ELSE
    Increment the loopcounter
Refresh the screen.
```

We also need the PrintScore routine that will show the current score and the number of lives that are left (next page, bottom right).

Now we only need to add some code (next page, bottom left) to our main routine to start our game loop. The additional code is below. Add it under the last init_pair call.

Now we should have a program that does something. Give it a try. I'll wait.

```
def Explode(self,scrn):
    pass
def ResetForNew(self):
    self.CurrentLetterLine = self.LetterLine
    self.CurrentLetterPosition = 78
    self.DroppingLetter = 0
    self.PickALetter()
    self.PickDropPoint()
```

```
def PickALetter(self):
    random.seed()
    char = random.randint(65,90)
    self.CurrentLetter = chr(char)

def PickDropPoint(self):
    random.seed()
    self.DropPosition = random.randint(3,78)
```

PROGRAM IN PYTHON - PART 14

Now we have a program that picks a random uppercase letter, moves it from the right side of the screen to the left a random number of columns, then moves that letter down to the bottom(ish) of the screen. However, the first thing you should notice is that every time you run the program the first letter is always "A", and the drop point is always column 10. That's because we set defaults in the __init__ routine. To fix this, simply call self.ResetForNew before you enter the while loop in the Main routine.

At this point, we need to work on our "gun" and supporting routines. Add the code (next page, top right) to the Game1 class.

Movegun will take the current gun position and move it in whichever direction we want it to go. The only thing that is new in this routine is at the end of the addch routine. We are calling the colorpair (2) to set the color, and, at the same time, we are forcing the gun to have the bold attribute. We are using a bitwise OR ("|") to force the attribute on. Next we need to flesh out our CheckKeys routine. Replace the pass

```python
        stdscr.addstr(11,28,"Welcome to Letter Attack")
        stdscr.addstr(13,28,"Press a key to begin....")
        stdscr.getch()
        stdscr.clear()
        PlayLoop = 1
        while PlayLoop == 1:
            self.NewGame(stdscr)
            self.GameLoop(stdscr)
            stdscr.nodelay(0)
            curses.flushinp()
            stdscr.addstr(12,35,"Game Over")
            stdscr.addstr(14,23,"Do you want to play
again? (Y/N)")
            keyin = stdscr.getch(14,56)
            if keyin == ord("N") or keyin == ord("n"):
                break
            else:
                stdscr.clear()
```

```python
    def GameLoop(self,scrn):
        test = 1                    #Set the loop
        while test == 1:
            curses.napms(20)
            self.MoveLetter(scrn)
            keyin =
scrn.getch(self.ScoreLine,self.ScorePosition)
            if keyin == ord('Q') or keyin == 27:   # 'Q'
or <Esc>
                break
            else:
                self.CheckKeys(scrn,keyin)
            self.PrintScore(scrn)
            if self.Lives == 0:
                break
        curses.flushinp()
        scrn.clear()
```

```python
    def NewGame(self,scrn):
        self.GunChar = curses.ACS_SSBS
        scrn.addch(self.GunLine,self.GunPosition,self.Gun
Char,curses.color_pair(2) | curses.A_BOLD)
        scrn.nodelay(1)     #Don't wait for a
keystroke...just cache it.
        self.ResetForNew()
        self.GameScore = 0
        self.Lives = 3
        self.PrintScore(scrn)
        scrn.move(self.ScoreLine,self.ScorePosition)
```

```python
    def PrintScore(self,scrn):
        scrn.addstr(self.ScoreLine,self.ScorePosition,"S
CORE: %d" % self.GameScore)
        scrn.addstr(self.ScoreLine,self.LivesPosition,"L
IVES: %d" % self.Lives)
```

statement with the new code (next page, bottom right).

Now we need to make a routine that will move our bullet "up" the screen (below left).

We need a few more routines (next page, top right) before we are finished. Here's the code to fill out the CheckForHit routine and the code to ExplodeBullet.

Finally we need to flesh out our Explode routine. Replace pass with the following code (next page, bottom).

Now we have a working program. You can tweak the value in LetterWaitCount to speed up or slow down the movement of the letter going across the screen to make it easier or harder. You can also use the variable CurrentColor to create a random color choice and set the letter color to one of the 4 color sets we have made and change the color assignment to the random color. I wanted to give you a challenge.

I hope you had fun this time, and will add some additional code to make the game more playable. As always, the full code is available

at www.thedesignatedgeek.com, or at:

http://fullcirclemagazine.pastebin.com/DeReeh8m.

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.

```python
def MoveGun(self,scrn,direction):
    scrn.addch(self.GunLine,self.GunPosition," ")
    if direction == 0:       # left
        if self.GunPosition > 0:
            self.GunPosition -= 1
    elif direction == 1:  # right
        if self.GunPosition < 79:
            self.GunPosition += 1
    scrn.addch(self.GunLine,self.GunPosition,self.Gun
Char,curses.color_pair(2) | curses.A_BOLD)
```

```python
if keyin == 260: # left arrow -  NOT on keypad
    self.MoveGun(scrn,0)
    curses.flushinp()  #Flush out the input buffer for safety.
elif keyin == 261: # right arrow - NOT on keypad
    self.MoveGun(scrn,1)
    curses.flushinp()  #Flush out the input buffer for safety.
elif keyin == 52:  # left arrow  ON keypad
    self.MoveGun(scrn,0)
    curses.flushinp()  #Flush out the input buffer for safety.
elif keyin == 54:  # right arrow ON keypad
    self.MoveGun(scrn,1)
    curses.flushinp()  #Flush out the input buffer for safety.
elif keyin == 32:   #space
    if self.Shooting == 0:
        self.Shooting = 1
        self.BulletColumn = self.GunPosition
        scrn.addch(self.BulletRow,self.BulletColumn,"|")
        curses.flushinp()  #Flush out the input buffer for safety.
```

```python
def MoveBullet(self,scrn):
    scrn.addch(self.BulletRow,self.BulletColumn," ")
    if self.BulletRow > self.LetterLine:
        self.CheckForHit(scrn)
        self.BulletRow -= 1
        scrn.addch(self.BulletRow,self.BulletColumn,
"|")
    else:
        self.CheckForHit(scrn)
        scrn.addch(self.BulletRow,self.BulletColumn,
" ")

        self.BulletRow = self.GunLine - 1
        self.Shooting = 0
```

```python
        def CheckForHit(self,scrn):
            if self.Shooting == 1:
                if self.BulletRow == self.CurrentLetterLine:
                    if self.BulletColumn == self.CurrentLetterPosition:
                        scrn.addch(self.BulletRow,self.BulletColumn," ")

                        self.ExplodeBullet(scrn)
                        self.GameScore +=1
                        self.ResetForNew()

        def ExplodeBullet(self,scrn):
            scrn.addch(self.BulletRow,self.BulletColumn,"X",curses.color_pair(5))
            scrn.refresh()
            curses.napms(200)
            scrn.addch(self.BulletRow,self.BulletColumn,"|",curses.color_pair(5))
            scrn.refresh()
            curses.napms(200)
            scrn.addch(self.BulletRow,self.BulletColumn,"-",curses.color_pair(5))
            scrn.refresh()
            curses.napms(200)
            scrn.addch(self.BulletRow,self.BulletColumn,".",curses.color_pair(5))
            scrn.refresh()
            curses.napms(200)
            scrn.addch(self.BulletRow,self.BulletColumn," ",curses.color_pair(5))
            scrn.refresh()
            curses.napms(200)
```

```python
            scrn.addch(self.CurrentLetterLine,self.CurrentLetterPosition,"X",curses.color_pair(5))
            curses.napms(100)
            scrn.refresh()
            scrn.addch(self.CurrentLetterLine,self.CurrentLetterPosition,"|",curses.color_pair(5))
            curses.napms(100)
            scrn.refresh()
            scrn.addch(self.CurrentLetterLine,self.CurrentLetterPosition,"-",curses.color_pair(5))
            curses.napms(100)
            scrn.refresh()
            scrn.addch(self.CurrentLetterLine,self.CurrentLetterPosition,".",curses.color_pair(5))
            curses.napms(100)
            scrn.refresh()
            scrn.addch(self.CurrentLetterLine,self.CurrentLetterPosition," ")
            scrn.addch(self.GunLine,self.GunPosition,self.GunChar,curses.color_pair(2) | curses.A_BOLD)
            scrn.refresh()
```

This month, we'll be covering a basic installation of OpenSolaris. Contained within the installation is a GNOME environment, package manager, ZFS filesystem (plus time slider backup system). It's a Unix system, and therefore different from Ubuntu, but should be an easy enough transition for any Ubuntu user, due to the shared desktop environment.

Recommended minimal requirements for the machine:
osol0906.iso (found here: http://www.opensolaris.com/get/index.jsp)
768MB RAM
16GB (or larger) hard disk

Once you've downloaded the ISO image and created the virtual machine, you're ready to start the machine. After selecting the correct ISO image from the first-run wizard, you'll be greeted by the standard GRUB boot menu (fig. 1). The default option should be suitable for most. After OpenSolaris boots, it will prompt

you for the keyboard layout (see fig. 2), and the system language (see fig. 3). After choosing your preferred layout and language, the GNOME desktop will load (slowly, but surely). Located on the desktop is the standard "Install" icon (see fig. 4), which you'll want to execute.
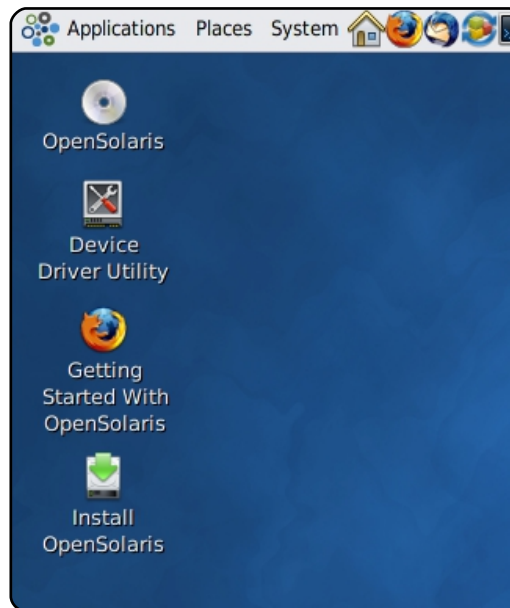
Now that we've opened the installation program, you'll need to hit next on the welcome page (see fig. 5, above right). Thereafter, you'll be asked how the disk
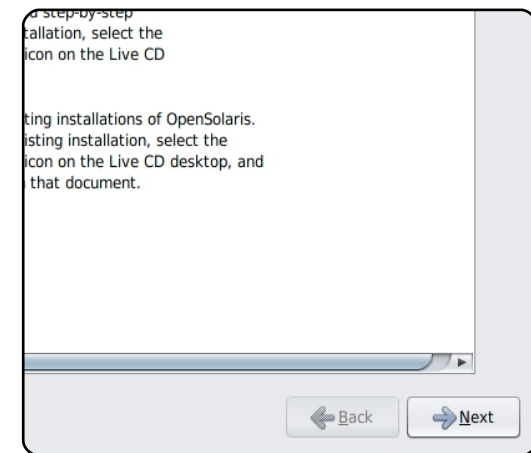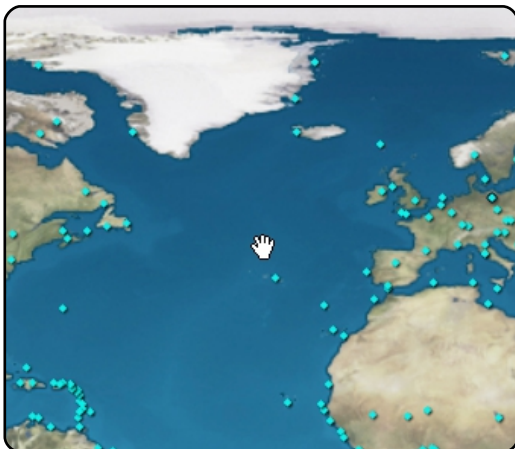
should be partitioned. As usual, I recommend choosing "whole disk" for the virtual machine (see fig. 6).

The next step is a little bit trickier. Locate your timezone on the map and select it (due to the density of certain locations, it is easier said than done – feel free to choose a

city in your same timezone if you can't reach the one nearest you). As you can see in fig. 7, you can zoom in on the map by clicking on an empty area. Thereafter, you're asked to choose your language and locale (the format for currency, decimals, special characters, etc.).

As you can see in fig. 8, I chose en_CA.utf8 (Canadian English).

Once your locale is configured, you are then asked to enter a username, password, root password, computer name and your real name (see fig. 9).

Once you've entered the required information, the installation will progress. It may take a while longer than you are accustomed to, but it should be relatively quick. After hitting the reboot button, you'll need to unmount the ISO image by going to Devices > CD/DVD Devices > Unmount. Upon rebooting, you should be asked for the username and password you chose during the installation, and will shortly thereafter be greeted by your GNOME desktop.

I hope this article has been useful for those of you interested in trying out Unix, and has helped you become a little more comfortable with Virtual Box. Enjoy playing around with your new virtual machine. Next month, we'll be covering FreeBSD. If you have any questions, requests, or comments, you can reach me at lswest34@gmail.com. Please be sure to include "Virtualization" or "FCM" in the subject line - so I don't overlook it.

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.

Oops!

As we went to press, it was brought to our attention that Oracle have now discontinued OpenSolaris. Downloads of the distro are still available and the developer has begun on an OpenSolaris based distro

At home, my brother has been working with a five-year-old Compaq Presario desktop, and I am using an Acer Aspire laptop. Both of these intelligent boxes run Karmic, with a BSNL Broadband connection complete with an ADSL modem. With another Wi-Fi modem (Huawei Quidway WA1003A of Sterlite), I have managed to get some fun out of these three devices. This is how I have set up the circuit.

The desktop is connected with RJ45 cable to the modem, and the laptop is on wireless mode. My intention was to set up the Wi-Fi modem as a switch - in between these two computers - to transfer files using "ssh" or" Nautilus", so that both computers could maintain an Internet connection at the same time. This enables both users to have access to the Internet at the same time. This has been possible by making the modem work as a router instead of a switch, without making use of a router.

Previously, I had configured the modem as a router, but, in that case, a bunch of security measures were not available. So, for security reasons, I set up the configuration through the desktop, and had the modem work as a switch. First I assigned a static IP address for the desktop, using "sudo nano /etc/network/interfaces", and made a few modifications:

```
auto lo
iface lo inet loopback
auto dsl-provider
iface dsl-provider inet ppp

pre-up /sbin/ifconfig eth0
up # line maintained by
pppoeconf

provider dsl-provider

auto eth0
iface eth0 inet static
address 192.168.1.2
gateway 192.168.1.1
netmask 255.255.255.0
network 192.168.1.0
broadcast 192.168.1.255
```

I have replaced the "auto inet dynamic" line with "auto inet static", and assigned the above values. Afterwards, I restarted the network using "sudo /etc/init.d/networking restart". Then I was able to connect the modem using "telnet", though it could also be done using Firefox. After opening Firefox, I used the "http://192.168.1.1/" line to enter into the setup mode, and a login screen appeared (Fig 1):
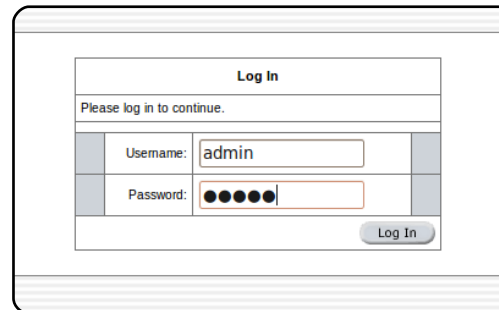

By default, "admin" is the user name and password. Next, the time has to be set up (Fig. 2):
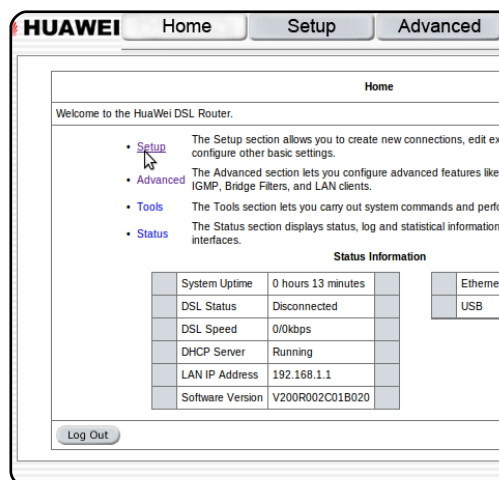
Then I selected the option "setup". I needed a DHCP server, and so I configured the modem accordingly by selecting the option "DHCP configuration" (Fig. 3):
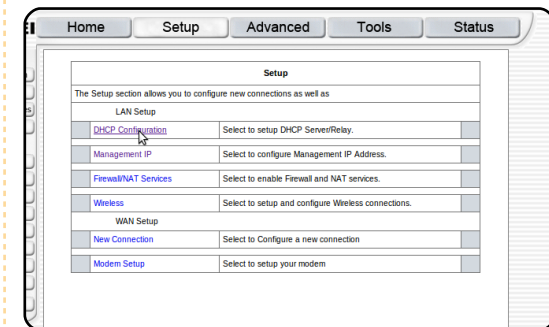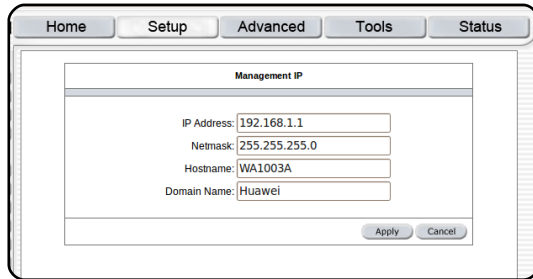

In this configuration the "server on" mode should be enabled, and I have assigned the start IP as "192.168.1.2" and end IP as "192.168.1.254" (Fig. 4). This was to enable the DHCP server:
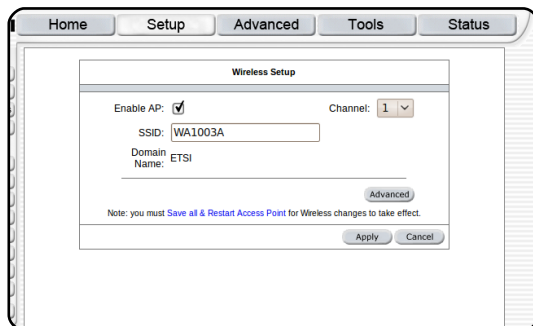
ADSL MODEM AS A SWITCH
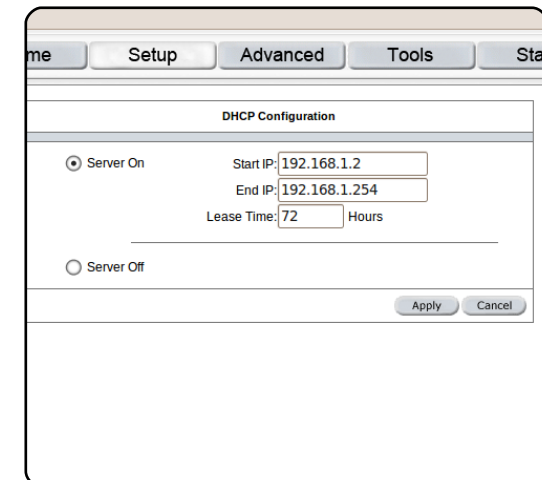
Next, I configured the "management IP" to assign the default gateway as "192.168.1.1", and assigned the domain name (i.e. for the modem) (Fig. 5) for the stable Internet connection:

Then, I enabled all the options for my laptop for wireless mode. Fig. 6 describes the "wireless" option and the corresponding selection option. The SSID is selected according to the host name:

I already mentioned that I needed a switch in between two PCs. So, to do this, I selected the "PVC0" mode, and enabled the "Bridge" mode (Fig. 7). This is how

to enable the modem as a switch in between two PCs:
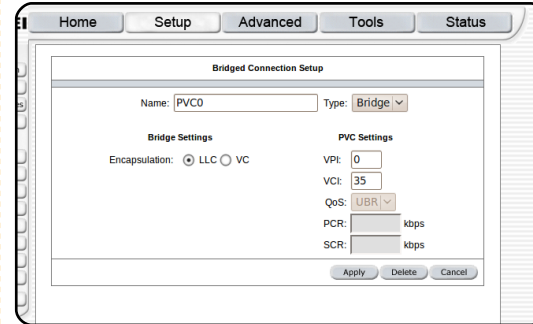
Then I had to take care of the security aspects regarding user authentication. I prefer hardware security to software security for networking. So I assigned the MAC address of the laptop into the modem for storage (Under "Wireless Security" Tab; "Wireless Management" mode) (Fig. 8):
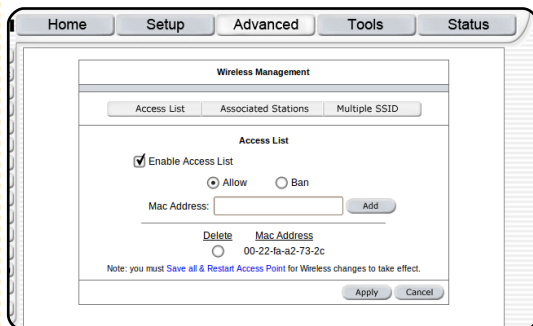
Now to enable the wireless mode I selected the "multicast" option (Fig. 9) in the advanced tab. This was for the laptop to acknowledge the wireless signal.
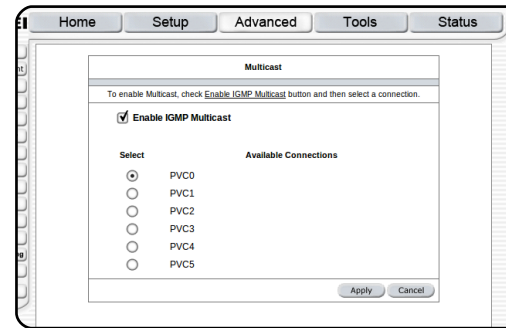
With the set-up completed, I saved the configuration. Then I typed "sudo pppoeconf" in the terminal, and set up the rest for the Internet connection from the desktop. Later I did the same for my laptop, and the laptop got connected with the modem. Now my brother and I are both able to share files from one machine to another, with a lot of security ensured.

Suppose, two computers, A & B, are inter-connected, and another, C, wants to get connected with either of them. To do that, C has to know the usernames and passwords of either A or B. Then C can access A or B - by using either "ssh" or "Nautilus". Again, for entering the Internet connection through A or B, C has to have the usernames and passwords for the Internet connections of those that C wants to get connected with.

```
key_read: uudecode AAAAB3NzaC1yc2EAA
RxrNE6Eq/V3NOwj5x2In6xF3q80PHH3WzXC0
ja/7kwzCNXwIu9xkvqH6D+XSreT6sQkNrUOE
G7wbjm6W6+Yo59lWDqxbyLAcP1/W0t5ahaxO
j8iqajFE8Y78F1/jiIvjNzNZKPQko+ir5WiE
8:bd:0e:04:f2:f5:7e:ec:bf:6b:25:d5:b
  failed
chiru@192.168.1.2's password: █
```

And the modem honours only the MAC addresses of my desktop and laptop. So, no one else can break into the security zone without changing the configuration of the modem.

Any remarks and suggestions for betterment of the system I shall thankfully acknowledge.

An M.Tech student of Micro Electronics and VLSI design at the West Bengal University of Technology. I am a Verilog HDL, Python and C enthusiast, currently engaged in Interfacing Different Digital Devices with FPGA. Email: anirbanphys@gmail.com
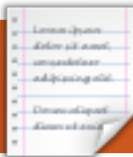
MY STORY

Written by Allan Hambidge

I started dabbling with computers in the mid 80s with an Amstrad PCW 8512. I got to sell my electric typewriter because of Amstrad's Locoscript application. I then graduated to IBM machines running MS-DOS, and then on to Windows from its creation in the 90s.

Ubuntu caught my attention about 18 months ago, and since then I have made substantial progress with Linux. At first I used a dual boot, and then did a complete Ubuntu installation using version 8.04. What decided me to use Linux was the purchase of a new laptop with Windows Vista in Spanish. Windows Vista is painful, and, although I am a Spanish speaker, I like to have all my software in English. Ubuntu was the answer. At first it was very difficult for me as there is a definite learning curve, and it does require an effort on one's part. I read some Ubuntu manuals and searched for more information on the Internet. I signed up to Ubuntu Launchpad and a couple of other Linux Forums. I have used these forums to get answers to technical glitches, and I've always gotten very quick and intelligent replies. I have also managed to answer some questions that I had resolved for myself. I have no plans to use Windows 7, but do have a computer running XP. This will go when Microsoft eventually stops supporting it.

The initial installation of 8.04 was not without hitches. There was no sound and the internal Wi-fi card was not recognized. The sound problem was easy to fix, the Wi-fi not so easy. I settled for a secondary solution by using a USB Dongle. The LAN connection worked from day one.

I then set out to learn about the Terminal and its necessary basic commands - I'm still learning more. Using Synaptic Package Manager was another step for me. Here it's really interesting to see the program choices available to suit all tastes. The extra repositories make the choices even more exciting.

Configuring Evolution Mail for my various e-mail addresses was easy, and importing my bookmarks from a Windows Machine to Firefox was a snip.

Google Earth and Skype installation was not without problems, but, after a struggle, they are both working perfectly.

Calibre has been installed; this is a really superb and highly recommended means of collecting news and publications. I am using it for my Sony e-book reader, which runs on a Linux OS. Plug it in to the USB port and get an instant connection.

I upgraded to 9.10, which took ages to download, but because of problems with this I subsequently did a clean install of 9.10. Amazingly, this resulted in the Wi-fi card being recognized. With the installation of 9.10, the Acer Aspire laptop suffered with CPU overheating and shut down, but this was fixed by upgrading the BIOS. Fixing this problem may sound simple (it wasn't), but I must say that, without the help of the Linux forums, I would never have solved it. I would stress to all Full Circle readers this point: if you have a problem with Ubuntu-Linux, you will almost always get a satisfactory answer to it when you present it to the community of users. This helpful community is part of what makes Ubuntu and Linux special. I love it. It works.

I worked in the Graphic Arts market for many years using Windows and Mac software. Scribus has a comparable typesetting function to the desktop publishing programs in these OSs, and a lot to offer besides. So I am trying it out. In addition, the GIMP image editor is a viable alternative to Photoshop.

A few months ago, my 8-year-old grandson was given an unwanted and very old Dell laptop running Windows ME. It's a real organ grinder of a machine, but it did work somewhat. I found out, through him and his friends, to my surprise, that kids like to use presentation, writing and drawing programs. These applications in ME worked, so he spent time drawing and creating shapes of one kind or another. However, I saw that this machine was not a lot of use as a real learning tool, and would not keep my grandson amused for any length of time. I had a Linux magazine with a Linux distro DVD, so I installed it to see if this would improve the laptop's performance. It brought the laptop back to life with all the flashing lights. It even recognized the PCMCIA Wi-fi network card. It was astounding, as the laptop was all but useless before this installation and destined for the scrapheap. This distro was not familiar to me, so I installed Ubuntu 9.10 and configured all the basics. I went a bit further and installed Childsplay and some science stuff to tweak the imagination (his and mine). The Periodic Table of the Elements is a big hit with this young man and his friends, who are now getting more interested in computers. There are loads of educational games aimed at kids, and this is a real plus in the world of Ubuntu.

My grandson is really pleased that he has his own laptop and does not have to hog the family desktop. He has an educational tool that should keep him interested in Ubuntu and Linux. He is an avid and very capable player of Club Penguin, and plays on-line with all his mates. He is therefore a Penguinista times two.
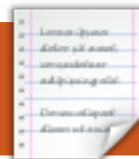
MY STORY

Written by Carlo Angelo V. Marcelo

The first computer I ever owned was an iMac G3 333MHz - bought in a thrift shop for roughly $100 in 2006. It had Mac OS 9.0.4 installed, and nothing else. I didn't know much about computers or Macs then, and for the first few months (with the help of iMac for Dummies by David Pogue), I was just encoding a few of my writings on Simple Text, playing around with the read aloud feature, listening to my CDs, and experiencing buyer's remorse because I seemed to have bought a CD player with a monitor and not much else. It was frustrating since I couldn't even find a way to connect it to dial-up Internet and to our HP printer. I did a bit of research, and found out that I could upgrade the RAM from the stock 32MB to the maximum 256MB, and also upgrade the hard drive from 6GB to 20GB. I then sent the computer to a local Mac specialist shop and had Mac OS X 10.3 (Panther) installed. Afterwards, I signed up for DSL. I was able to purchase my own copy of Mac OS X 10.3 and Mac OS 9.0.4 for re-installation, a new OS X compatible printer, and a matching iMac keyboard and mouse from eBay.

For more than a year, the iMac was my only computer. When, in 2008, I had enough money to buy a new computer - I decided on a laptop - I considered my choices: buy a second-hand Macbook, iBook or Powerbook; save a little more money to afford a new Macbook; buy a peecee (as MacAddict magazine calls them); or install this OS I read about in the Internet called Ubuntu.

Initially, learning about Linux was frustrating; there was so much information available that I didn't know where to start. The site linux.com wasn't too much of a help either, but I found myself browsing ubuntu.com, with its "Linux for human beings" tag, and signed up for a free CD. I didn't expect the CD to come to my door - why should Ubuntu send me a free CD all the way from the UK to the Philippines? - but I signed up anyway.

MY STORY

I received the CD - Gutsy Gibbon - a month later. There was something striking about the CD's art, its logo, the promise of software libre, and the freedom to install it on any number of PCs. With the iMac, it is exciting to try out free applications, but in Ubuntu, "free" means much more: free as in free speech and free as in free beer. I won't pretend that I totally grasped its meaning then, but it was certainly appealing.

I installed Gutsy Gibbon on my brother's virus-crippled Windows XP desktop, and I found the OS mysterious, welcoming, warm, beautiful, and, well, human. It was a whole new world for me, and, the more I played around with it, the more immersed and addicted I became. However, my brother's PC's hard drive gave out, so my initial dabbling with Ubuntu was cut short. I had a few more weeks left to decide whether to buy a PC laptop (I was looking at a Compaq) or a Macbook. I did some research on Linux applications, and linuxapp.com was immensely helpful for that. Once I had a list of applications I needed, mainly DAW (digital audio workstation) software, I finally made up my mind. I seem to remember reading

about either Ardour or Elisa Media Center when I finally said to myself "I'm sold". I then backed up my files on my Mac, converted AppleWorks files to Word and Excel, and so on, to prepare for the migration to Ubuntu.

I purchased an Asus A8HE and immediately installed Gutsy Gibbon, but my excitement turned to disappointment when the sound didn't work. My wireless card wasn't working. A lengthy tutorial in the Ubuntu Forum taught me a lot. Although Hardy Heron was still in beta at the time, I decided to try it because I had home recording work to be done, and thousands of MP3 files. So I downloaded the ISO image and burned it onto a disc. I tried the live CD first. The sound worked! The over-all look of this OS was more refined. Although I had never used a beta release before, by then I knew about its possible instabilities. My webcam didn't work nor did some of the function keys, but this mattered much less than not having sound. By the time the final release of Hardy Heron came out, my enthusiasm for Ubuntu and its community was high. I even attended a LoCo meeting.

I've upgraded to the newest Ubuntu version as soon as it's in beta. So, I've used Intrepid Ibex, Jaunty Jackalope, Karmic Koala, and now Lucid Lynx. Ubuntu keeps getting better with every release. With the advancements and the refinements (and now the logo and colour scheme change), it's like history unfolding before one's eyes. I have a special place for Hardy, though. It was the Ubuntu version that seems to have been the one I spent the longest time with. Of course, given the strict 6-month release schedule of Ubuntu, my impression is not true. For stability and dependability among the versions with the "classic" Ubuntu look, Jaunty Jackalope stands out as the most rock solid.

As for Lucid Lynx? I'm mad for the new design, the new logo, the new boot splash, and the new colour scheme. Also, with Lucid Lynx, I finally was able to successfully install Ubuntu Studio (audio apps with RT kernel), configure Jack, and come up with a decent output. I installed Ubuntu Studio on top of the vanilla installation, partly because I'm

kind of a purist and I find the Ubuntu choice of colours (brown, orange, yellow, and now aubergine) appealing. I'm also not interested in the Ubuntu Studio look (I'm not a fan of dark themes). Basically, I'm most interested in the essential audio apps: Hydrogen, Ardour, Jack, Audacity and ZynAddSubFX Software Synthesizer.

I see Ubuntu getting stronger, prettier, and more dependable with every release. Canonical gives me two dates every year to look forward to. At present, Maverick Meerkat will be released in five months. I'm sure to upgrade when its beta is out. As for my iMac? Sadly, once I completely switched to Ubuntu, I never had time to spend with it again. It's in a corner of my bedroom, peacefully covered and protected from dust. I have great memories with my iMac, and I keep myself up to date with the latest news from Apple, but Ubuntu and open source has been the center of my digital life since 2008, and I imagine it will be for many more years to come.

Please visit my blog: http://mydelicatehead.blogspot.com
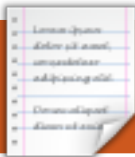
MY OPINION

Written by Alexandr Mertviy

Ubuntu 10.04

My computer's life became easier as soon as Ubuntu appeared in my house. It has changed much. I started from version 7.10 long ago, and I'm still with Ubuntu now. I tried and used 5.10 and 9.04 versions. And, finally, when version 10.04 appeared, I downloaded it and installed it as my operating system.

Installation

During the installation from the CD, three errors appeared. Perhaps only I had such strange proposals during installation. I firmly pressed OK and continued installing. The installation finished successfully and the system launched. I was afraid the system wouldn't work, but fortunately my fears weren't realized.

First impression about Gnome 2.30

Its interface is impressive. I've spent about 15 minutes watching the default theme. I still like looking at it any time I work with my PC. It's very pleasant on the eyes, and it's really well done, intelligent, and beautiful. I liked from the first sight that the buttons have been moved to the top left edge of the screen. The black-rimmed white windows and their icons look good.

The keyboard layout panel, and Ubuntu One, is everything you need for comfortable work.

Nvidia drivers were set up very well, which allowed me to set 3D effects which I couldn't set in either 7.10 or 9.04 versions. But there is one difficulty here. When I press any Ctrl+Alt+F1-F6 combination, there is no transmission to the console. A black screen with a yellow line at the left appears instead.

"Travelling inside the system"

Connection to home Ethernet had no difficulties. I liked that Network Manager is already installed as a default, which allows me to add any VPN connections. I wrote standard scripts, and the Universe named Internet was at my service!

As I got into the way of using the Russian language interface, I started localization immediately after the Internet connection. I chose "Russian language", and I was surprised greatly. Instead of starting a download and setting up the necessary packages, the system screened an error alert. After reading this message closely, I understood that the system hadn't two important catalogues including apt-get and Update Manager.

I wrote in terminal:

```
sudo chmod 777
/var/cache/apt/
```

```
dir /var/cache/apt/archives/
```

```
dir
/var/cache/apt/archives/parti
al/
```

Then, I started localization, and it successfully began. And now the system has a language I understand.

And there is one advantage here. The whole system was Russianized at once. It means you don't need to Russianize your Office or any other programs separately, as was needed in the previous versions. Here you can apply localization to the whole system.

The GRUB loader has been changed. Now it is more comfortable to use and more easily readable.

The speed of downloading is increased by 1.5 times. As an example, I can say that when I installed Oracle XE — 10g using version 9.04, the loading time increased. And now Oracle 10.04, with the full 20GB base, downloading doesn't change the loading time.

The speed of sleeping and awakening modes have increased by 1/2. I tried Apple MacOS 10 in Virtual Box. All the parameters including the speed of loading, sleeping and awakening in 10.04 are equal to those in MacOS.

The graphic terminal's interface has become more attractive. I didn't have to settle the colours myself. A lot of interesting logic games were also added.

But GIMP has disappeared from the standard installation. I had to set it up, and Pidgin too.

Concerning external devices, I may say that most everything is now wonderful. I had to write full scripts during the setting of a Canon printer at the previous versions because the system didn't recognize it. And finally I gave up trying at the 9.04 version, and decided simply not to use my printer.

Now I've downloaded drivers from the Canon official website and installed CUPS. I wrote a short script in bash and placed it in the button at start panel. When I need to use printer, I just click on this button to mount the printer into the system before printing.
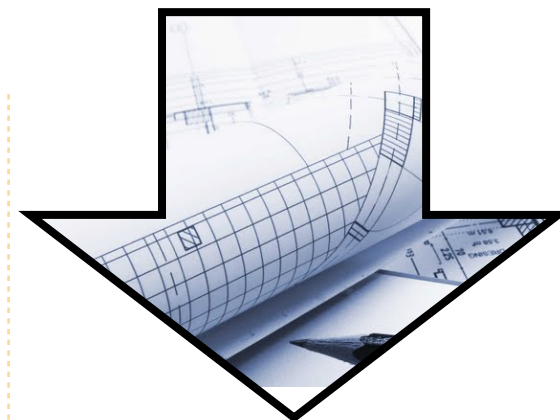
I didn't use web-camera and microphone, and I still do not. This is why I can not say how they will operate in this version.

Conclusion

In spite of some problems with installation, and the absence of /var/cache/ base net catalogue, Ubuntu 10.04 has taken its worthy place at my home PC, and it's continuing to fill the bill which I have for the system.

It is a perfect operating system for those who have never used Ubuntu at home before. Ubuntu 10.04 LTS (Lucid) Desktop Edition is all you need for a home system. It is quick, handy, and its main feature is safeness applying in all cases.

I'm impatiently waiting for Ubuntu 10.10. How this system recommends itself time will show. But I have no doubt that Canonical will issue a worthy release.

Full Circle Survey 2010

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.**

Lots of people who are not statisticians sometimes need to do analysis, reporting, or statistical tests. SOFA is designed for such people – students, business analysts, managers, researchers – not just for statistics experts. SOFA stands for Statistics Open For All, and two of its main goals are ease-of-use and learn-as-you-go.

With over 15,000 downloads already, there seems to be a demand for a simple statistics and analysis program.

What sorts of reports can you do? Simple frequency tables are easy to make with optional totals and column percentages. You can also design a cross-tab report with nesting of rows and columns as required, and with row and column percentages. While configuring the report, an example version is displayed as you go, so you can check that it will look like you require.

Creating report tables with summary statistics such as mean, median, and standard deviation can also be done from the GUI. Report tables can also display selected fields of raw data from the underlying data table, with optional totals and special formatting for the first column - if it is a label.

Tables can be styled by selecting from a drop-down list. Four styles are currently available including: Pebbles and Lucid Spirals. Inspiration for the latter, called lucid_spirals, should be obvious to Ubuntu users.
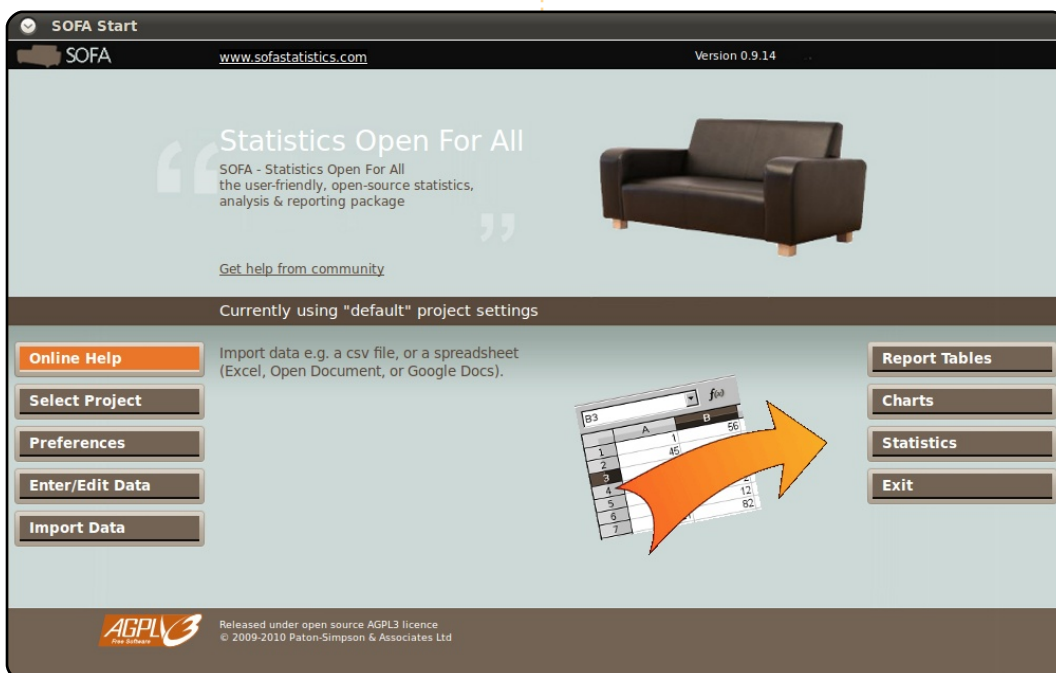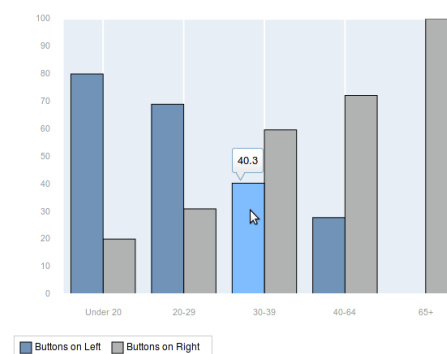
SOFA is designed to have accessible output. Unlike some statistics packages, SOFA output doesn't require proprietary viewers. Output can be viewed in your default Web browser, and can be emailed or distributed like any other HTML file. No special work is required to make it suitable for an intranet or the Web. And because there is no Flash, everything prints in the standard way. There is no point having attractive output if it is hard to share with others.

SOFA Statistics is currently part-way through implementing output charting, e.g. bar charts, pie charts, etc. Consistent with SOFA's "beautiful output" goal, it is intended to use SVG and Javascript to deliver appropriate levels of eye candy. Two libraries are being considered – RaphaelJS (http://raphaeljs.com/), and Dojo (http://dojotoolkit.org/). Once output charting is in place, SOFA Statistics will be ready for a version 1.0 release. You can track the project via the blog http://www.sofastatistics.com/blog or twitter http://www.twitter.com/sofastatistics
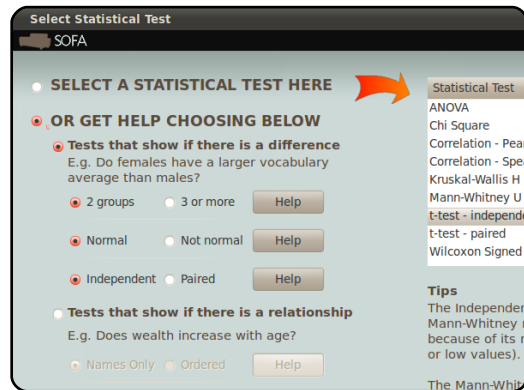
Button Placement Preference by Age

Demonstration data only

40.3

| | Under 20 | 20-29 | 30-39 | 40-64 | 65+ |

■ Buttons on Left   ■ Buttons on Right
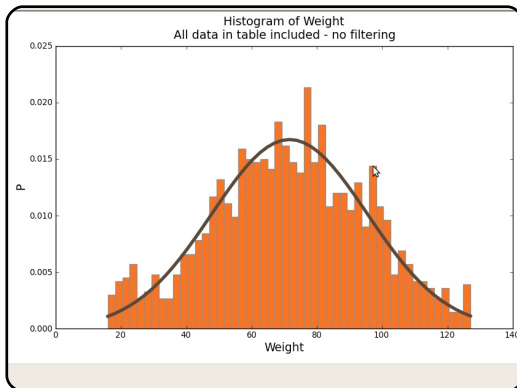
REVIEW - SOFA STATISTICS

Helping users choose appropriate statistical tests is one of the priorities of SOFA. The Statistics Selection dialog lets you explore the data in a directed way and make an appropriate choice.

To decide on the normality of the data, for example, it is possible to open the Normality dialog and visually explore the data.

Whereas programs such as R aim for maximum flexibility and power, the SOFA philosophy is to concentrate on making the most

important tests easy to use with confidence. Similarly, output is focused on helpfulness, bundling relevant information together. For example, when evaluating linear correlation, scatter plots are shown alongside the summary statistics.

SOFA can work with your data wherever it is. You can enter data directly into SOFA; import a csv file or spreadsheet, including Google Docs spreadsheets (see http://www.sofastatistics.com/wiki/doku.php?id=help:online_surveys for details on how to get your data directly from a Google Docs survey form); or connect directly to your database.

Sometimes, the data you wish to analyse isn't in the right form. SOFA has some built-in tools to let you modify or label your data to make it more useful for reporting or analysis. It is possible, for example, to recode an age field into an age group field.

You can also add labels to variables and values which will be used when displaying output.

And if you are interested in only a subset of the data, it is easy

to add filters to data tables, e.g. patients at one clinic only.

SOFA has many more features than can be covered in a brief article, but this one has hopefully given you a taste. On the technical side, SOFA Statistics is developed in Ubuntu, but packages are also available for Windows and Mac OS X.

The program is written in Python, and you can view the code on Launchpad (http://bazaar.launchpad.net/~launchpad-p-s/sofastatistics/main/files). The internal scripts SOFA uses are also Python code. And, because Python is easy to learn, users can integrate these internal scripts into larger scripts of their own to

automate analysis, e.g. for routine monthly reporting. Being Python inside and out fits nicely with SOFA's goal of being open for all.

I encourage you to give SOFA a try (http://www.sofastatistics.com/downloads.php). It is available under the AGPL3 open source licence, and if you have ideas, discover any bugs, want to write tutorials, or want to help in some other way, please feel free to contact me directly at grant@sofastatistics.com. Of course, if you like SOFA Statistics, please spread the word and vote for it at: https://sourceforge.net/projects/sofastatistics/ or http://freshmeat.net/projects/sofa-statistics

MOTU INTERVIEW

Robert Ancell

Taken from behindmotu.wordpress.com

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: Old enough
Location: Sydney, Australia
IRC Nick: robert_ancell

How long have you used Linux, and what was your first distro?
Been using Linux since at least 2000, first distro was probably either RedHat 4 or 5.

How long have you been using Ubuntu?
I think since its start. Before that, I was using Debian Unstable, and I transitioned to Ubuntu around 2004.

When did you get involved with the MOTU team, and how?
I've been proposing packages for uploading for the last five months, and two days ago I was accepted as a MOTU.

What helped you learn packaging and how Ubuntu teams work?
I learned packaging by creating Debian packages for upstream projects I produced by following the Debian maintainers guide. I'm still working out how the Ubuntu teams work :)

What's your favorite part of working with the MOTU?
Getting the latest stuff out there so people can use it!

Any advice for people wanting to help out MOTU?
Triage, reproduce and fix bugs!

Are you involved with any local Linux/Ubuntu groups?
No. I do go to the Sydney Python (http://www.sypy.org) group meetings from time to time however.

**What are you going to focus on in Karmic and Lucid?**
I've been spending most of my time working on general bug fixing for Karmic. I plan to spend some time working on the GDM login screen and user management for Lucid.

What do you do in your other spare time?
I'm about to do a 90km bike ride in a few weeks – I've been training for the last month or so after not having done any serious biking for some years.
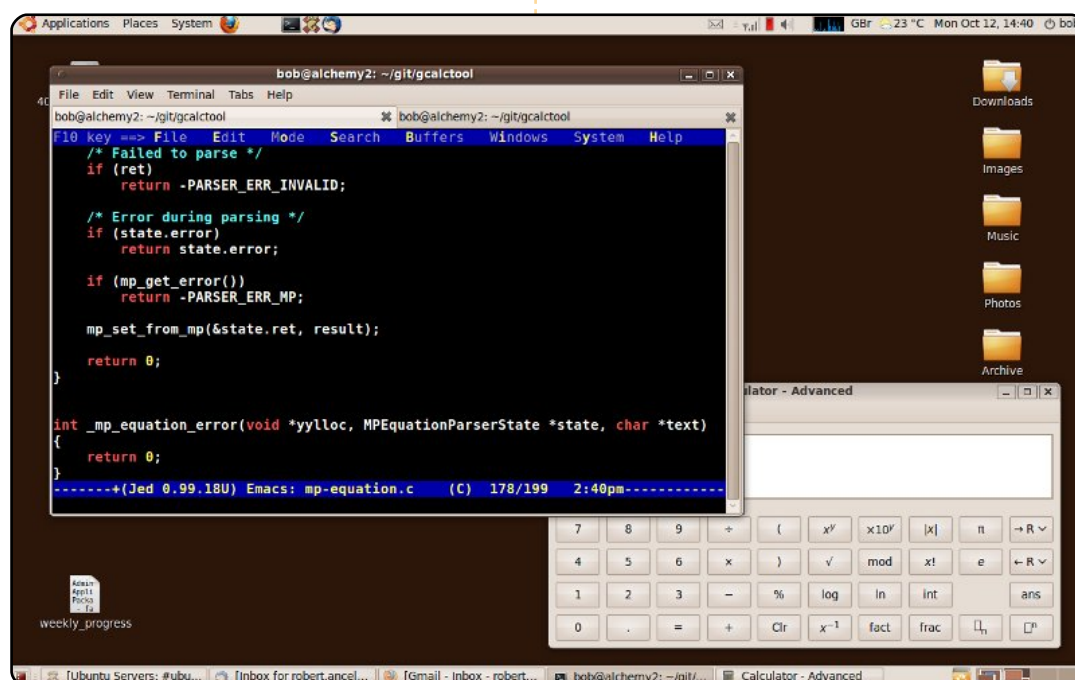
TRANSLATION INTERVIEW — Aron Xu

Supplied by Amber Graner

Simplified Chinese translation team

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?
My name is Aron Xu, a high school student, and it will be my senior year from Sept, 2010. Now I am working as the leader of Ubuntu Simplified Chinese translators, committer on GNOME/KDE, and translator on the TP (translationproject.org) to help translate Ubuntu and other free software to Simplified Chinese (zh_CN), and being a member of the Ubuntu Translations Coordinators team to help on general problems in the Ubuntu translation community.

How and when did you become an Ubuntu translator?
My first contributed string was submitted via Launchpad in July, 2008. Soon I was accepted as an official member of the Ubuntu Simplified Chinese Translators team. In Sept, 2008, I started my work on GNOME translations as a translator.

What other projects do you help with inside the community?
Apart from helping in translating Ubuntu (upstream projects like GNOME/KDE/Debian and Ubuntu specific things) and coordinating work between teams, I am also helping with some separate projects like Pidgin, Enlightenment, etc.

Do you belong to an Ubuntu LoCo team? If so, which one?
Of course yes, I belong to Ubuntu China LoCo team, and work as a core member on event organization and infrastructure administration.

How can people who want to help with translating Ubuntu and all the various pieces and parts into your language get started?
We have quite a few documents about how to start translating various kinds of free software and what the requirements on quality are. People who want to start working can simply find the documents on our LoCo Wiki and contact the correct team to get more help if needed.

What's the desktop experience for Ubuntu users in your language? Is Ubuntu in your language popular among native speakers?
User experience in Simplified Chinese is quite good now, but there are still some unresolved issues in font, input method and encoding fields. We are working with the relevant developers and trying to get rid of them in the near future.

Ubuntu is still not so popular in China, but the amount of users is increasing rapidly. Most people had learned about Windows during their education at school; we need to work harder to promote Ubuntu to let them know it and fall in love with it.

Where does your team need help?
Although Ubuntu is not so popular compared with Windows in China, the number of users is still very large. We have 245,190 registered users on our LoCo forum and I believe there are much more users in reality. One of the most important problems getting in the way of more people switching to Ubuntu is that they would like to have a fully localized environment with the Live CD or at the very moment that installation has completed, so our team wants to have full Simplified Chinese language packs and usable input method shipped with the official CD in future releases.

We know that Ubuntu has the ability to install language support during/after the installation, but

TRANSLATION TEAM INTERVIEW

new users always get confused when they boot the system with the Live CD and complete the installation without active Internet connection. In the Lucid release cycle, we had tried to get the language packs into Live CD in daily builds, but they were finally removed because of disk space arguments without any notification sent to us, which disappointed so much Chinese users. We need somebody to tell us how can we get our language packs into the CD without final removal. Ubuntu will have a considerable number of new users in this simple way, why not regard Chinese language packs as other ones already in the CD that are preferred not to be removed because of disk space?

Do you know of any projects or organizations where Ubuntu is used in your language?
Several commercial groups have started to use Ubuntu with a commercial Canonical Support subscription. Some middle schools have adopted Ubuntu as an essential part of their computer class, such as Chengdu Foreign Language School.

What do you feel is the most

rewarding part of translating Ubuntu?
It is simple to explain, I feel really happy when I see people running software that I've worked on.

Is there anything else about your team or translation efforts that I haven't asked you about that you would like to talk about?
Ubuntu Simplified Chinese Translators is a big team formed by over 80 members, and the number of contributors is over 300 as recorded in the Ubuntu China Translations Contributors team in Launchpad. We don't have the problem of lacking contributors, but such a big amount of people caused some difficulties in team management. I'd like to say it's better to have more translators upstream like GNOME/KDE to work on the body part of translations, and only keep a suitable number of translators to work on Ubuntu specified strings in Launchpad. So, we are having a Restricted team policy to keep the team from growing out of control, then send new contributors to upstream and add them to Ubuntu China Translations Contributors team to have a clear membership in reward of their contribution.

As a member of Ubuntu Translations Coordinators team, I found there are problems on the position definition of Ubuntu Translators during my routine work. It is a topic that is worth discussing and maybe some changes could be made by teams in the Ubuntu translation community.

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

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 Martin Owens of the Ubuntu Massachusetts LoCo Team. Martin talks about the tools the team uses, events they attend as well as help with, and what advice the Massachusetts LoCo Team would give to other teams and community members and much much more!

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

Martin Owens: My current role in the Massachusetts Local team is as a leader and official contact to the world wide community, I provide each member with assurances and self-authority in cases where members are too shy to take the initiative and I also supply the local team with news and interesting updates that may affect us.

US: When was the Ubuntu Massachusetts LoCo team started? How long after it was started did it take to get approved?

MO: It was started way back in 2007 when a group of us went out for pizza, since then it's become much more formalised now that there is some direction and definition about what a local community group is supposed to do. Once you've found your feet and got some events organised it's possible to get approved. We got approved way back when you had to go to the council directly. It was easier to set up events since Ship-it would still give people small amounts of CDs to get started back then.

US: What tools do you use for your team? Mailing Lists, Forums, IRC, websites, Micro-blogging sites etc.

MO: At the moment our primary communication is IRC for transient discussion and mailing lists for announcements and more permanent discussions. We do announce on websites, broadcast accounts and forums but we tend not to use them for more than that.

US: On the road to LoCo approval what were some of the challenges the team faced and how did the team overcome them?

MO: The team has had not unexpected criticism from the geek community here in Massachusetts about the singular focus on one distribution, from the FSF (based in Boston) and the very old and well established LUGs and university groups who don't want to look like they favor one commercial product.

This has made event organizing challenging since we have to attract people who are outside of universities in a university town and try to spark interest in advocacy in unusual places.

US: What are the biggest challenges your team faces now and what strategies does the team use to over come them?

MO: Apathy is the biggest problem with any team I think, keeping things energetic over a long time without having any full time members to keep on top of the little administrative burdens which make everything less fun. That's why things like loco.ubuntu.com are needed, to take away the burdens and help us make events awesome and enjoyable.

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

MO: We used to have training sessions every Tuesday for two years and sometimes special sessions on Wednesdays for advanced classes but the

LOCO TEAM INTERVIEW

community center we were teaching at moved to Apple iMacs and now those have stopped. We also run events at Sci-Fi or similar events, booths at these events can pull in people who are slightly non geeky and introduce new people and add a layer of authenticity which is missing from something not on a shelf in a shop.

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?
MO: After the success of Anime Boston we've got another similar event at Pi-Con5, it's a mid state event which should attract people from a wide area who can't normally get into Boston proper. There is also Ubuntu Hours happening and some random community work sparking off which plans are not yet confirmed for.

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).

MO: Traditionally we've tried to keep our advertising to Ubuntu itself, the thinking was that attracting new Ubuntu members would grow the pool of interested people who would come and help out inside the group for advocacy. Now I think it's time to reassess that thinking and perhaps have adverts for the group itself in places such as universities.

US: What do you think is the best aspect of being part of a LoCo team is?
MO: Getting support from people whom you know.

US: What has been the most rewarding and exciting moment for the LoCo Team to date and why?
MO: Probably setting up a community lab with Ubuntu, including servers then training people how to use the PXE boot to install ubuntu on many new machines to go out into the community.

US: What suggestions would you offer for newly formed LoCo teams or those teams working toward approval right now?
MO: Make sure you do social events, get a home base organized

even if it's a coffee shop somewhere and make sure there is an official contact, and don't worry about stepping on people's toes at the start. Too many times people are too cautious with their organisation plans.

US: What tips, tricks, tools, references etc would you suggest for the leadership of a LoCo team?
MO: Use all the resources available to make great posters and flyers, http://openclipart.org/ http://spreadubuntu.neomenlo.org or: http://ubuntu-artists.deviantart.com anything that you can legally use to make wonderful looking designs and work them into local targets.

US: When you think of the

Ubuntu Community and the spirit of Ubuntu how does the LoCo embody and share that spirit?
MO: We embrace the code of conduct and look to make sure there aren't any mean spirits; everyone should be free to enjoy Ubuntu and it's community.

US: Is there anything else about the LoCo team, or suggestions for being an effective and successful LoCo team you would like to share that you haven't already?
MO: Make sure that you set everything up and listen to advice from other leaders, they've usually got great ideas in what kind of events to set up.

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.

Editing

I'd like to thank everbody in the FCM editor team for editing my (Virtual Memory) article thoroughly and making it better. In the final release of FCM#39, it reads really nice.

Mulyadi Santosa

Ronnie: *There you have it folks, proof that you shouldn't be embarrassed by your English. The FCM proof-readers (listed on the last page of each issue) will polish your rusty text.*

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GNU/Linux

Robin Catlin's piece in FCM#39 holds a great deal of truth. Much of what society garners as a plus has hundreds of unsung heroes -- Torvalds, Knuth, Stallman, Malcolm McLean. Malcolm McLean? Yes. He has nothing to do with IT or computers yet his invention has done more to make the computer ubiquitous around the globe than nearly anything else that Bill Gates has ever done.

That invention was the ISO standard shipping container. Without it the global economy that exists today would not. Nor would compute devices assembled in Taiwan be as cheap as they are in Peoria. There are hundreds of contributors like McLean who go unsung but we benefit from their efforts everyday unknowingly.

John McGinnis

Ronnie: *It appears that Robin agrees with you 100%.*

Robin: *It appears there was a mixed reception to the last (apparently 'mindless') My Opinion column. Frank, you deserve a prize; first reader to miss the point. Not sure I appreciate the 'WTF' exclamations (and various other 'colorful' words! - Ronnie) from a man preaching about attitude, but each to their own. As for Dominic Humphries' article, I am very familiar with it and applaud it heartily. Sadly I doubt many Linux newcomers will ever find it, much less read it to the end.*

I am not demeaning GNU, or Unix, or the legions of people over the last thirty years who have shaped and formalised the free software movement to the healthy state it's in today. There are many people who are rarely credited for their original contributions to things we now take for granted; Nikolai Tesla, Edward Jenner and Mel Blanc.

_____

DPKG BACKUP

The last issue of FCM mentioned dpkg. This seemingly simple command, showing a list of installed packages, is actually a very handy tool if you look at it from a backup perspective.

I have a cron job which runs this command everyday and writes this to a file. The file is then backed up to my external USB hard disk along with my /home folder

```
dpkg --get-selections "*" >
/etc/Installed.txt
```

The file is 53K in size. In the event of a failed harddisk, all I need to do is to use:

```
dpkg --set-selections
```

and run the Synaptic or apt-get again. This will qucikly re-install all my packages and bring me to the state I last used.

Chandra

_____

SketchUp Problem

I have tried to follow the procedure given in FCM#35, but when I try to run Sketchup I get the error message *"SketchUp was unable to initialise OpenGL. Please make sure that you have installed the correct drivers for your graphics card - Error: ChoosePixelFormat failed"*

As far as I can tell my graphics drives are fine. I have no problems with Ubuntu. Do you have any suggestions?

Trevor

LETTERS

Ronnie: *Sorry to hear you're having problems with SketchUp and Wine. You could try the solution offered in this Ubuntu Forum's post: http://ubuntuforums.org/showthread.php?t=237742 or: http://swiss.ubuntuforums.org/showpost.php?p=9163322&postcount=2*

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Video Tutorials

I create video tutorials covering many areas of Ubuntu but my pool of ideas is drying up, and I was wondering if your readers could come up with some ideas.

I've produced over fifty video tutorials that've been published on my blog after uploading them to YouTube and BlipTV. Many of my videos are hosted under the ubuntuvideotutorials.blip.tv channel. The remaining videos are still awaiting voice narration, but they are available on YouTube with annotations.

So, the question remains: what should my next video be?

Tobias Mann
http://ubuntuvideotutorials.wordpress.com/

MPD + Screenlets

I read about Screenlets in FCM#37 and MPD (Music Player Daemon) in FCM#32, so let's stick the two apps together!

I've used Screenlets for a long time, they're really cool. Then I thought, why can't I have a screenlet for my favorite player - MPD? I started to search and I was really happy, when I found an MPD Screenlet at: http://goo.gl/WZEV.

You can read how to install screenlets in FCM#37, and all that I have to tell you is just its functionality: it can update the library, reconnect to server, add files from library, sort, shuffle and clear playlist, play/toggle/stop (of course!).

It already has half a dozen skins for it, but my favorite is "Black winter".
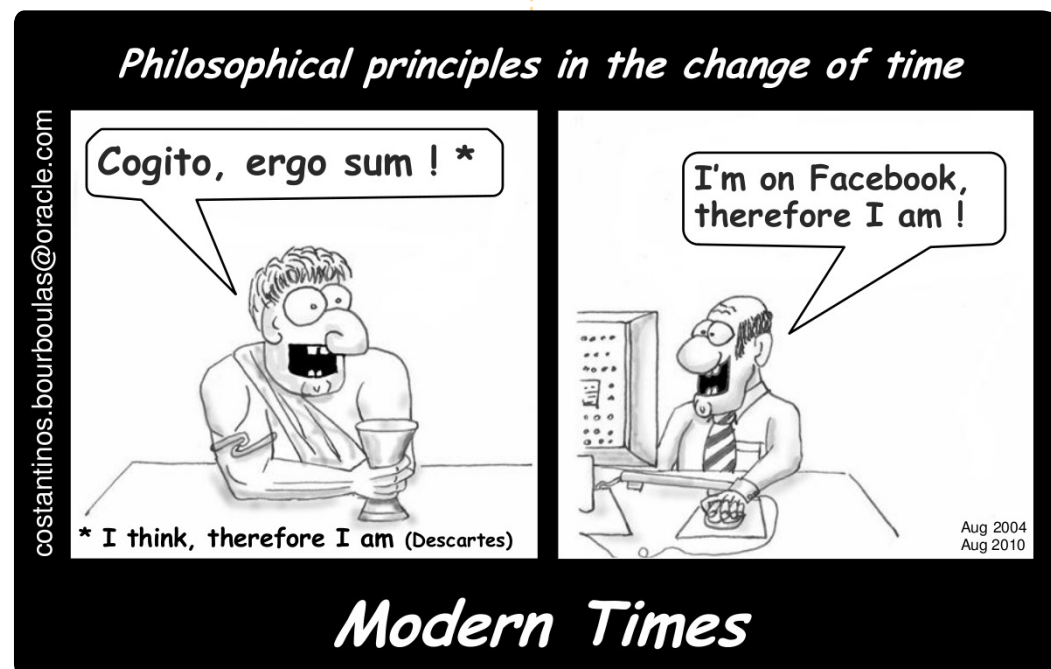
Nestor Oak

Intel = Bad

I'm one of many disgruntled Ubuntu users that cannot upgrade to Lucid Lynx as we use one of the, now many, Netbooks with the Poulsbo/GMA500 chipset. I use the *Acer Aspire One ZA3* (AO751h) and it seems that Intel has just left us out to dry. We really need something done, and I know most of the users don't want to install anything by Microsoft, but it seems that Intel is forcing us to go that way.

I'm currently using Ubuntu 9.10 without a hitch, and I've looked at other distros that would support the Poulsbo/GMA500, and it seems like Fedora 11 and Jolicloud are the only ones I've come across. So I'm awaiting with bated breath to see what Intel (who say they support Linux) will come up with when they release the next update of *MeeGo* and hope that they've done something about it. I know for one thing, I certainly won't be buying Intel based products anymore.

Dave

Philosophical principles in the change of time

Cogito, ergo sum ! *

* I think, therefore I am (Descartes)

I'm on Facebook, therefore I am !

Aug 2004
Aug 2010

costantinos.bourboulas@oracle.com

Modern Times

UBUNTU WOMEN

Written by Penelope Stowe

This month, we're following up with Mackenzie Morgan, who Amber Graner interviewed for the August 2009 issue of Full Circle.

Penelope Stowe: Please tell us some of the new things you've been working on since Amber interviewed you last year.

Mackenzie Morgan: Since then, I've become a MOTU, and I'm now an uploader on a package in Debian.

P.S.: One of the programs you've written in the past year that has me excited is Gally, can you tell us more about that?

M.M: Gally is a program to teach sign languages. I've got one last KDE-integration thing to do before release, but I hope to get it into Debian, then sync to Universe in time for Maverick (though I'm likely to miss feature freeze). This first release will support only American Sign Language, but the next release will use the

KGetHotNewStuff protocol to download lesson packs for other sign languages. If you want to give it a try, it's hosted on http://launchpad.net/gally, and there is a daily PPA. If you want to submit changes to lessons, check out http://launchpad.net/gally-project for links to sign languages I figured were popular enough to start with. Email me if the one you want to help with isn't listed.

P.S.: What are you looking forward to with Ubuntu 10.10 (Maverick Meerkat)?

M.M: I wouldn't have said this until I got a netbook a week ago, but Harald's Ubuntu One KDE client is catching my eye. Suddenly I am likely to actually use more than one computer regularly, so I'd like to be able to sync things like my address book and calendar.

P.S.: I know you're graduating university in a few months, any plans after that?

M.M: No firm plans yet. I've got a few ideas tossing around in my

head, but we'll see how those pan out. I've got a steady job that I can just go full-time with after graduating, so it's not very urgent for me to find something new to do. Since I'll be graduating in December, and Jonathan Riddell keeps telling me how amazing Hogmanay (Scot's name for New Year) is, I think I'd like to see that.

P.S.: What would you like to see in K/Ubuntu that we don't have yet?

M.M: Hard to say "in K/Ubuntu" since missing features/apps are a bigger problem than just one distro. We need a desktop-wide accessibility framework. Qt uses whatever the platform's accessibility framework is, and there's no overarching one for Linux, so KDE is really inaccessible. This not only breaks things for people needing screen-readers, it also means I can't write automated test-scripts for Qt programs!

P.S.: What are you involved with outside of Ubuntu and the F/Loss communities?

M.M: There's the usual work/school stuff. Nothing in particular takes up the bulk of my remaining time, but hanging out with the Young Adult Friends (Quakers) group, looking for and going to wheelchair-accessible vegan-friendly restaurants (these are, unfortunately, almost mutually exclusive) to practice ASL with my friend Jen, reading, and textiles, use up what remains of my awake-time.

GAME NEWS

Wine 1.2 released! - Wine 1.2 has now gone stable, which adds a new UI style, Tango, and support for 64bit applications.

This month, I'm continuing the reviews of the selection of games featured in the Humble Indie Bundle. The present review is on Aquaria.

Aquaria is a side-scrolling action adventure game set underwater. You play what seems to be a mermaid called Naija exploring the underwater world of Aquaria. You'll explore the world by solving puzzles with music and combat. You'll also explore the past of Naija, which forms the majority of the back story of the game.

The game centers on your exploring Aquaria via swimming. All the controls are mapped to the mouse, which makes swimming feel effortless. You can casually glide Naija around, and can also add quick bursts of speed with a left mouse click. One of my favorite aspects of the game is the ability to compose your own music. By holding the right mouse, you are presented with a circle of different sounds. By moving your mouse across each sound, you can quite easily create some music. The music feature is a factor on completing the game, since you will have to use certain music on objects, and for protecting Naija from enemies. The combat is the weakest part of the game. Naija has very limited attacks and protection. You will feel very vulnerable swimming around Aquaria, because you could take damage from most creatures.

Throughout the story, you will discover many different areas from caves to underwater ruins to sunlit oases. The atmosphere and look of the game are excellent. The look of the game - as you move around Aquaria - is beautiful: it has the vibrant look of the underwater world. The graphics are basic, but they are stylised to suit the game.

The soundtrack is excellent, with many great tracks to suit the underworld nature of the game. The overall atmosphere is of high quality.

Aquaria is a high-quality game, mainly due to its excellent visuals and soundtrack. Composing music adds to the atmosphere, and adds a different game mechanic to Aquaria. Controls are solid, and swimming around Aquaria is a joy. The decent story is strengthened by the added element of being able to go into the past. However, the combat is disappointing for an action game, especially since you feel very vulnerable in Aquaria.
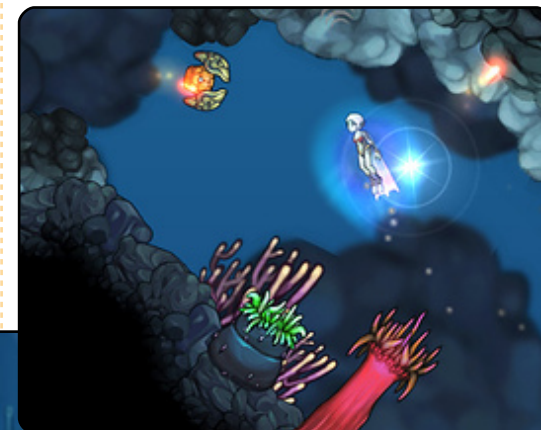
Score: 7/10

Good:
Excellent Autmosphere
Enjoy the music
compose feature

Bad:
Poor Combat

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 I have messed up my hard drive, but I can boot from a LiveCD and see what is on the hard drive. How can I save my Evolution emails before I re-install?

A After booting from the liveCD, enter the terminal command:

```
gksudo nautilus
```

Set nautilus to display hidden folders. Navigate to the home folder on the hard drive, and copy the folder .evolution to your flash drive. Likewise for .gconf/apps/evolution/ and .gnome2_private/Evolution. (The later might not exist.) After you re-install Ubuntu, and install Evolution, you can restore the folders.

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Q I was attempting to install the package 'gnustep-devel', but the package 'gorm.app,'

which gnustep-devel depends on, is not available.

A Download gorm.app from http://www.debian.org/distrib/packages and install it. Then you can install gnustep-devel.

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Q Upon restarting Ubuntu, I found that there were two versions of linux listed:

Ubuntu, with Linux 2.6.32-23-generic
Ubuntu, with Linux 2.6.32-23-generic (recovery mode)
Ubuntu, with Linux 2.6.32-21-generic
Ubuntu, with Linux 2.6.32-21-generic (recovery mode)

Do I need to remove those 2 "old entries" from the menu?

A When Linux kernel updates are installed, they don't replace the currently running kernel, but are installed alongside the old version. You can remove the old kernel, but most people prefer keeping at least one older version always available. If you remove the old kernel, the menu will change automatically.

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Q Ubuntu 10.04 is using too much memory on my computer. How can I reduce its memory usage?

A Have a look at this message thread: http://ubuntuforums.org/showthread.php?t=1535067. It describes how the poster reduced his memory usage from about 340 MB to around 120 MB. The biggest items were removing me-menu, switch user, and the envelope from the toolbar. He also stopped several services from starting, and removed several applications.

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Q I upgraded from 9.10 to 10.04, and my wireless card no longer works. The card is a Dell 1450 USB a/b/g card.

A Install linux-firmware-nonfree somehow. (Perhaps by getting it from packages.ubuntu.com, or by hard-wiring your computer to your router.) Reboot.

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Q I want to give a hard drive to a friend, but I want to make sure none of my information is left on the drive.

A Darik's Boot and Nuke ("DBAN") is a self-contained boot disk that securely wipes the hard disks of most computers. DBAN will automatically and

completely delete the contents of any hard disk that it can detect. http://www.dban.org/ Be careful when you run it, it will delete the contents of all your hard disks!

——————————————

Q I have installed Ubuntu 10.04 64-bit on my Dell Inspiron N4010 laptop. I'm unable to use my wired ethernet. The command lspci shows it as:
04:00.0 Ethernet controller: Atheros Communication AR8152 v1.1 Fast Ethernet (rev c1)

A (Thanks to *Pytheas22* in the Ubuntu Forums) Your ethernet hardware seems to be quite new and doesn't have a driver built into Ubuntu as of yet. However, there's a driver included in the compat-wireless stack that you can use. To download, compile and install the driver, first go to http://linuxwireless.org/download/compat-wireless-2.6 and download the file named "compat-wireless-2.6.tar.bz2". Save it to your desktop, put the installation CD in the drive, then run these commands:

```
sudo apt-get update

sudo apt-get install build-essential

cd ~/Desktop

tar -xjvf compat-wireless-2.6.tar.bz2

cd compat-wireless*

scripts/driver-select atl1c

make

sudo make install
```

Hopefully, your ethernet will work automatically after a reboot. Whenever you get a new kernel from Ubuntu Updates you will have to recompile the ethernet driver.

Tips and Techniques
Sometimes, it's not that complicated!

I spend too much time browsing the Ubuntu Forums. One of the things which bothers me is when a well-meaning person writes a long, complicated response when the answer is probably a lot simpler. I'll give two examples.

A new user, technically competent with Windows, writes, "I just bought a wireless adapter. How do I install the driver?"

The simple answer is, "put the wireless adapter in your computer, and see if it works." In a majority of cases, the driver is included in the Linux kernel. The best answer to that question is in a YouTube video called, "connect to wireless networks in Ubuntu."

Linux is not Windows; sometimes it's simpler! Yet I often see a long response spelling out how to do something complicated, such as installing ndiswrapper. The new hardware might need that, but first, let's see if the simple answer works. When it turns out that ndiswrapper is the answer, don't say how to install it, provide a link to the community documentation where it's spelled out, step-by-step. And if the community documentation is out of date, fix it!

The second example is, "on our home network there is a Windows computer with a shared folder. How can I access it?".

I've seen incredibly complex answers to this question, some of which begin, "you will need to install the following software in Ubuntu." Or maybe not.

Actually, there is a long message thread in the forums which deals with all the complexities which might arise, but I prefer trying the simple approach first, which has always worked for me. Perhaps it works because I do things the simple way: my username is the same on all computers, as is my password. I also edited /etc/samba/smb.conf so the workgroup name on my Ubuntu computer is the same as the workgroup name the rest of the family uses.

I select the "place" Network. I double-click on Windows Network, then on the workgroup, then on the computer name, then on the share name, and that's it, I'm looking at a list of the shared files.

My message is: if you're trying to help someone, first suggest the simple approach, and only get into more complicated suggestions when the simple approach fails.

MY DESKTOP

Hi, this is my desk in dark colors. I've been using Cairo-dock (theme Dust_Sand), Conky (theme is CONKY-colors from gnome-look.org), and Compiz Fusion. I'm using Ubuntu 10.04 beta 2.

Computer Configuration:
Processor: Intel Pentium 4 2.66 GHz
Graphics Card: nVidia GeForce GTX 275 (896 MB)
RAM: 4 GB
Hard drive: 500 GB

Sergey Kolesnikov

As a member of the Hungarian Translation Team, I often read the 'My Desktop' column. I thought about sending a picture and a little information on my computer which I do all my editing on. I have a Fujitsu Siemens Amilo Pro 3405 laptop, with 2.5 GB RAM and an Intel Core 2 T5500 processor, 250 GB HDD. I have Ubuntu 10.4 with Gnome and Avant Window Navigator. Regarding my desktop picture, it's from our dear Japanese friends who were obsessed enough to write a manga (comic) about Ubuntu:
http://divajutta.com/doctormo/ubunchu/ or
http://seotch.wordpress.com/ubunchu/

Pércsy Kornél
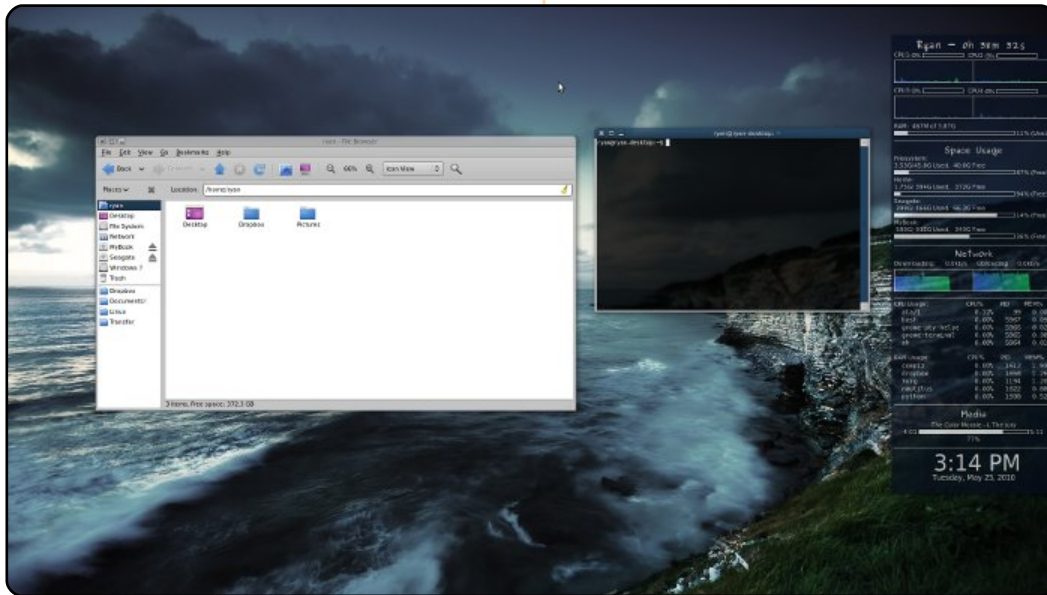
MY DESKTOP

This is my desktop for my 1920x1080 Monitor. I like to keep things clean and simple. I do not like to have panels or anything of the sort take up my precious screen space. Therefore, I placed my panel in the Compiz widget layer (so it's only one button press away if I need it). Instead of using the panel, I use a combination of metacity keybindings and gnome-do to open all of my applications. For checking up on my system, I simply refer to my conky setup on the right side of the screen. My system is running Ubuntu 10.04, my icon set is a customized Humanity theme, my theme is clear-looks, and my wallpaper comes from interfacelift.com.

Ryan Mitchener

This is my Ubuntu 10.04 desktop. I have been using Ubuntu since version 6.06. I use AWN dock, and my icons are 'dropline neu'. For desktop widgets I use 'screenlets daemon'.

The machine is a Core 2 Quad 8200, with a DG41TY motherboard, 160 GB HDD, 17" LG CRT 700e and 2GB RAM. Ubuntu works fine except I cannot connect with my bluetooth dongle. I have a dual-boot system with Windows 7 which I use only when a Windows application is required.

Kaykay

digiKam

Homepage: http://www.digikam.org

digiKam is a program for editing, importing, and exporting digital images. It's excellent for both amateurs and professionals. In the main window on the right can be found information on the camera, the picture taker, the time and date of the image, and a number of other useful attributes such as metadata and geotagging. The program has a great ability to organize images, and for each collection of imported images you can specify whether it's on your hard disk or on external media.

digiKam is in the main repository

F-Spot

Homepage: http://www.f-spot.org
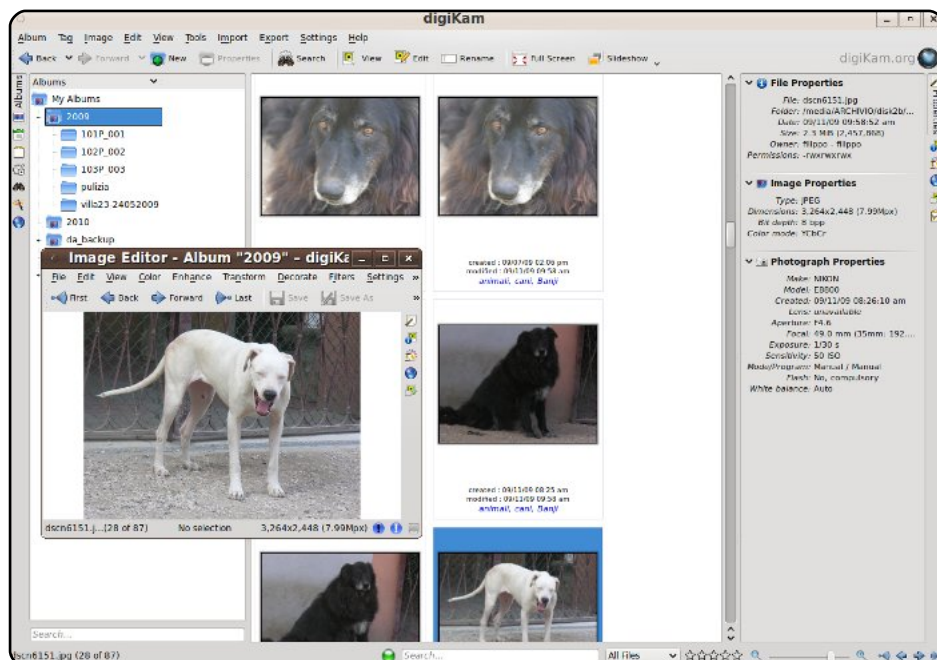
F-Spot is a program for organizing photos; it's the default program in Ubuntu Karmic Koala. The search for duplicates - when new images or a new folder are imported - is extremely useful. Importing a large number of images is not fast, but this small flaw is offset by other features such as the built-in editor, or the automatic tagging of images from other applications.

F-Spot is in the main repository

TOP 5 - PHOTO MANAGEMENT APPS

Picasa

Homepage: http://picasa.google.com/linux/
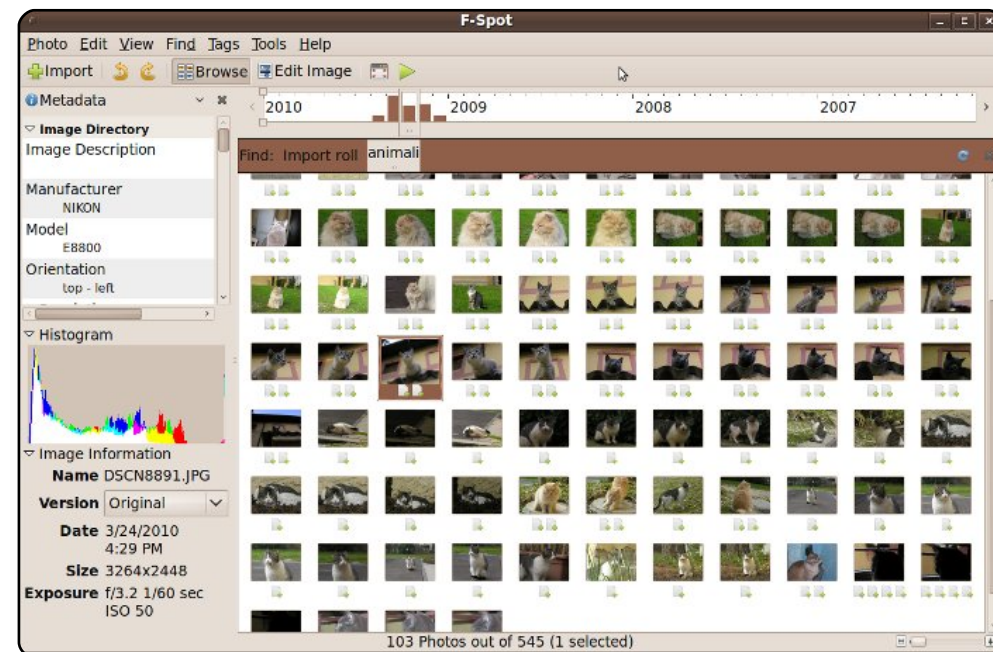
Picasa offers advanced organization of digital images, in addition to its common features of editing, resizing, and tagging images. It can scan all your photos, identify the ones with faces, and group photos with similar faces together. It can burn backups to a CD/DVD. It can create slideshows from the photos in a folder.

Install it by downloading the package from Picasa's Linux page noted above.

Solang

Homepage: https://savannah.nongnu.org/projects/solang
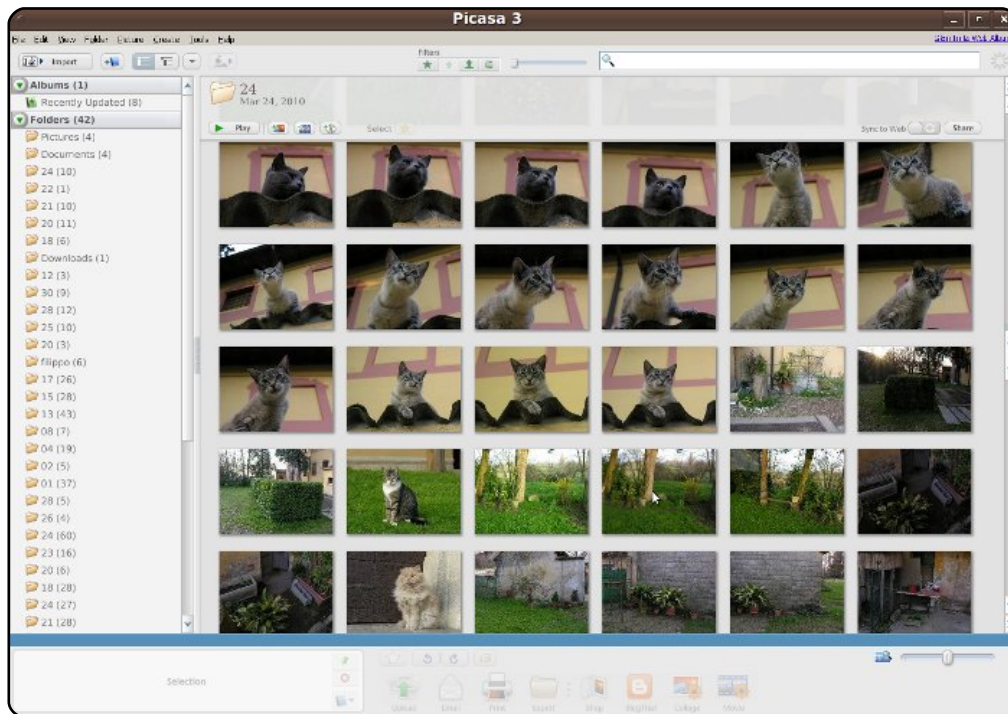
Solang is an image management program, which should continue to add features as it improves. Some features are really interesting for those who manage large numbers of images. For example, with a few clicks you can see the timeline of an image collection; duplicates are recognized; and archives are easily created.

Solang is in the universe repository

TOP 5 - PHOTO MANAGEMENT APPS

imgSeek

Homepage: http://imgseek.sourceforge.net
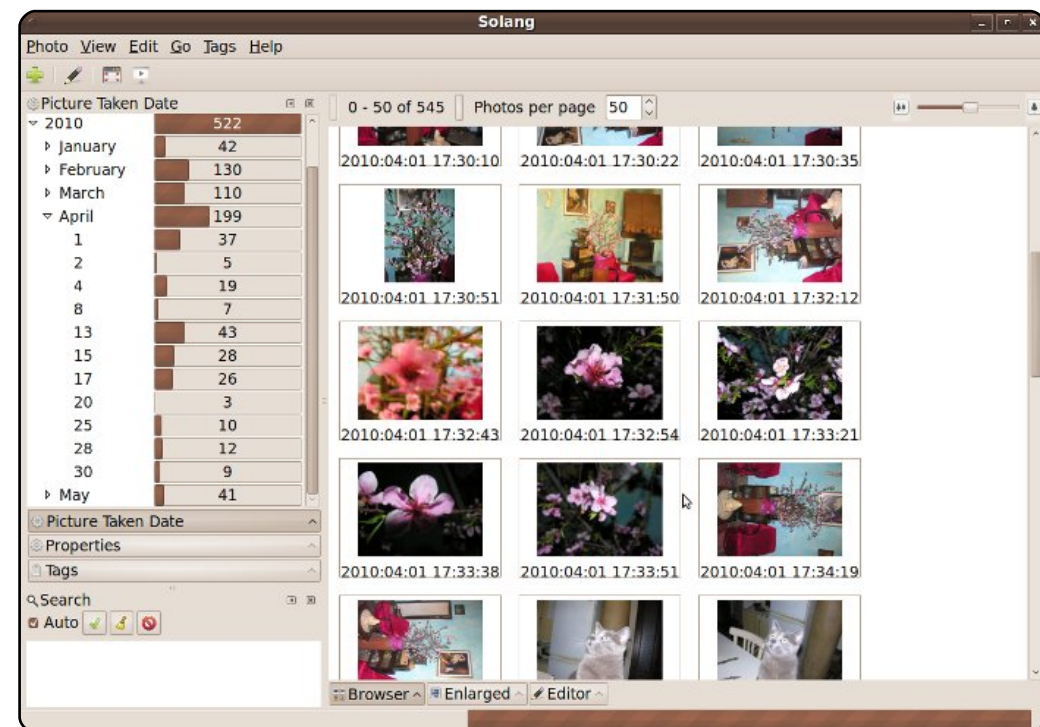
imgSeek is a photo collection manager and viewer, which can catalog images according to their attributes. It can find similar images in the database, such as those with certain basic colors, which you can supply with a crude sketch. It has the ability to create a slideshow of the whole collection, and it can create an HTML album, both with ease, even for those not accustomed to using this type of program

imgSeek is in the universe repository
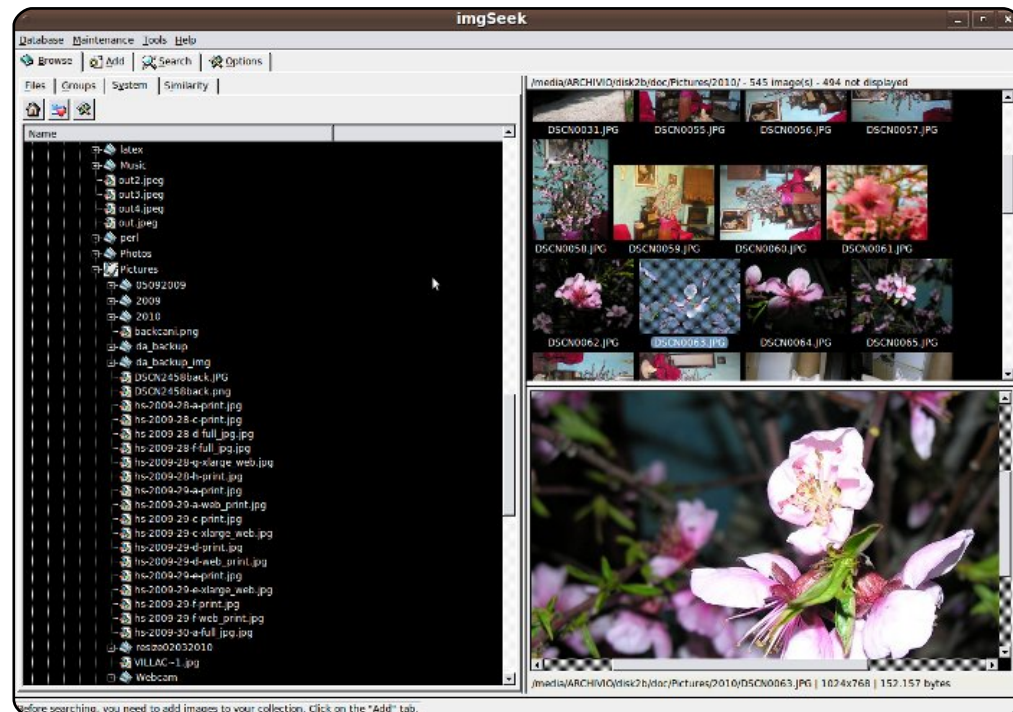
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We aim is to provide current, topical information about, and for, Ubuntu Linux users the world over. We cover all aspects of Ubuntu Linux and Free Software, and appeal to everyone from the newest user to the oldest coder, from the command line to the latest GUI.

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.

http://podcast.ubuntu-uk.org/

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