



Full Circle

THE INDEPENDENT MAGAZINE FOR THE UBUNTU LINUX COMMUNITY

ISSUE #54 - October 2011

REVIEW:
FREEMIND

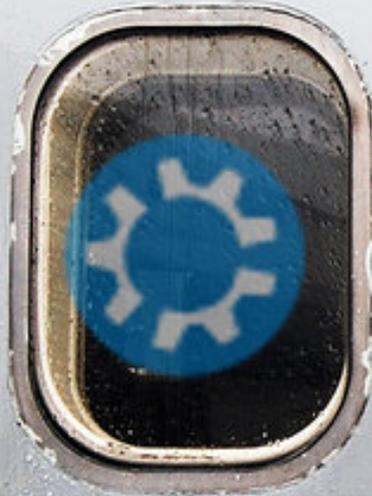


photo: Telstar Logistics (Flickr.com)

NEW
COLUMN!

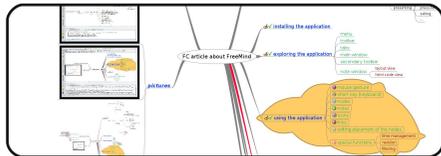
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LINUX EQUIVALENTS OF WINDOWS FEATURES

HowTo



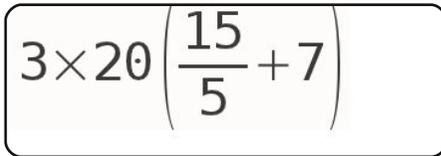
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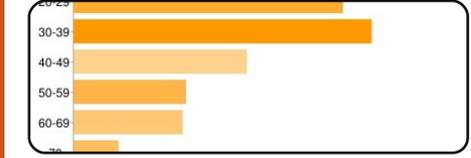
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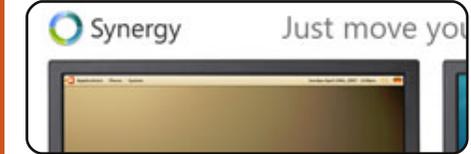
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Welcome to another issue of Full Circle!

We have a whole new section for you this month. As promised, I've begun writing 'Closing Windows'. It'll be a series of articles that will focus on a feature from Windows (XP in this case), then show where that feature is, or how it can be obtained, in Gnome, Unity, KDE, LXDE and XFCE. So, no matter which *buntu you use, this series should help complete beginners. My thanks go to my co-authors on this series. Their names are at the start of this first part, which focuses on My Computer and Windows' file manager, Explorer.

Unfortunately, Elmer is a bit busy this month, so there's no LibreOffice article, but he'll be back next month. In his place is a brief How-To on using FreeMind, the mind-mapping tool. If you've never used a mind-map before, then you're missing out on a great idea tool. As well as the usual serialised articles, we have an article on using Apt-Cache-NG. It will allow you to update several machines from one set of downloaded .deb files. Very handy! The final part of my ZoneMinder series will show you how to include/exclude certain areas of a camera view. It's a very powerful feature, and one that will save you from getting a lot of false positives. Next month's Linux Labs will hopefully have an article on setting up your own voice over IP (VOIP) bits.

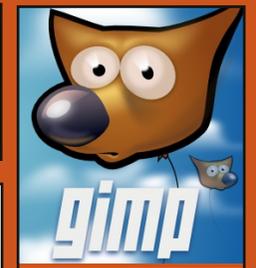
One last thing: last month I gave the Italian translation team the honor of being the only team to have translated all issues of FCM. Sorry Italian team, but the Hungarian team have also translated all issues now. Congratulations to you both. Who else is ready to step up and translate the entire back catalogue?

All the best, and keep in touch.

Ronnie

ronnie@fullcirclemagazine.org

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.

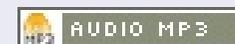
Hosts:

Robin Catling

Ed Hewitt

Dave Wilkins

<http://fullcirclemagazine.org>





BMW May Use Linux In Cars

German car maker BMW spoke about how it might use Linux for in-car entertainment.

In a panel on providing high performance [...] we could see Linux being adopted for use in car entertainment systems in future BMW vehicles.

Andreas Poschl, an IT Specialist at BMW said, *"We are looking into Linux for the car. We also see the possibility of Linux in the car, especially for the entertainment."*

The firm uses Linux [since 2003] for mission critical systems such as its large servers.

Poschl said, *"We are doing business critical stuff with Linux. Linux is high quality, high performance, flexible."*

Source: theinquirer.net

Ubuntu Turns 7, 'Precise Pangolin' Planning Begins

It was exactly seven years ago that the very first version of Ubuntu Linux--dubbed "Warty Warthog"--was released, kicking off a long line of increasingly popular versions of the free and open source operating system.

Fast forward to today, and Canonical is wasting no time moving from last week's release of Ubuntu 11.10 "Oneiric Ocelot" into planning for the next version, also known as "Precise Pangolin."

Perhaps most notable about Precise Pangolin is that it will be Ubuntu's fourth Long Term Support (LTS) release, with a full three years of support.

Source: pcworld.com

Puppy Linux 5.3 "Slacko" based on Slackware 13.37

The Puppy Linux developers have announced the release of version 5.3 of their independent Linux distribution, a new edition code-named "Slacko". According to Puppy Linux founder Barry Kauler, Slacko Puppy (coordinated by Mick Amadio) is to be the project's *"new flagship Puppy Linux"* and is the recommended *"'first stop' for all newcomers"*.

Slacko was built using the Woof build tool, which can build a Puppy release from the binary packages of any other distribution. Slacko Puppy 5.3 is based on Slackware Linux 13.37 binary packages and the 2.6.37.6 Linux kernel, and includes access to the Slackware package repositories. Other software can be installed via PET packages and packages in the Slackware repositories.

Source: h-online.com

OBITUARY



Dennis MacAlistair Ritchie (b. September 9, 1941; found dead October 12,

2011), commonly known by his username **dmr**, was an American computer scientist who "helped shape the digital era." He created the C programming language and, with long-time colleague, Ken Thompson, the UNIX operating system. Ritchie and Thompson received the Turing Award from the ACM in 1983, the Hamming Medal from the IEEE in 1990 and the National Medal of Technology from President Clinton in 1999. Ritchie was the head of Lucent Technologies System Software Research Department when he retired in 2007. The 'R' of the K&R C book stands for his name.

See:

http://en.wikipedia.org/wiki/Dennis_Ritchie



In the process of configuring ArchLinux on a PC, I realized just how much more efficiently I work in Vim than I do in any other text editor. So, when Article Day rolled around, I checked to see if there had been an article on Vim. Lo and behold, there was only a brief introduction to Vim. To start with, I should probably differentiate a text editor from an office suite like OpenOffice/LibreOffice. A text editor is used for editing stuff like *.txt, *.rtf, *.conf, *~, and basically any other plain text document format (i.e. no formatting). An office suite, on the other hand, works on *.doc and *.odt files (among others). I usually use plain text documents for quick to-do lists, and for writing code. I'm fairly certain there are many of you out there who either write quick notes to themselves, write code (be it software or websites), and perhaps edit some configuration files.

What's the difference between Vim and GVim?

Vim is the console-oriented

version of the program (for use in gnome-terminal, rxvt-unicode, tty screens, and so forth). GVim is a graphical front-end for Vim, and allows easy access to some of the more esoteric commands.

Why should I use Vim/GVim?

I'm not going to say that Vim/GVim is the only text editor anyone should use, but it's the one I prefer. Why do I prefer it? Simply because it offers sane defaults and keybindings that allow for very quick editing - without the need for a mouse. I find that keeping my hands on my keyboard actually allows for faster work than pausing to move the mouse (or keeping a hand on the mouse most of the time). If you find yourself nodding along with this, you should give Vim/GVim a shot. For example: Say you wanted to delete 250 sequential lines in some source code because you need to move the method elsewhere. In Vim you would simply type in 250 and then hit the "d" key twice (for delete line). If you then want to paste it somewhere else, simply move

there and hit "p". No need for a mouse or any highlighting whatsoever.

How do you get around if you can't use a mouse?

In GVim you are able to use a mouse, though it's really not necessary. In Vim you get around using page up/page down and the arrow keys (or hjkl where h=left, j=down, k=up, and l=right).

What about syntax highlighting?

Vim and GVim are fully customizable in a configuration file, and allows for custom colors and formatting for code according to file extensions. It also offers a very good syntax engine by default that simply needs to be enabled.

What other useful features does it offer?

- It allows you to:
- Set a custom size (number of spaces) for tab characters, which is useful when coding python.
 - Copy, paste, delete, and insert

controls that allow for careful formatting (dw = delete word, dd=delete line, yw=copy word, yy=copy line, p=paste, etc).

- Printing (with a sane printing default)
- A tutorial that can be accessed with the command 'vimtutor'
- Macros (easy creation and execution).

Some basic commands:

hjkl – movement (h=left, j=down, k=up, and l=right) – this works only outside of any mode. Inside a mode you'll need to use the arrow keys.

y – copy (yy = copy line)

d – delete (dd = delete line)

w -word (used in conjunction with y or d mainly)

1-∞<command> - repeat the command that number of times (i.e. 250dd = delete 250 lines starting at, and including, the line currently selected)

:w – write (can be combined with q to write and quit)

:e – open

:q – quit

Esc – exit any mode

i – insert mode (inserts before current selection)

a – add mode
r – replace mode
u – undo
ctrl+r – redo.
p – paste anything copied or deleted in Vim/GVim
:hardcopy – the command to print
:%s/<regex>/<to replace>/ - allows you to substitute anything you search for in the first block with what is in the second block. This also accepts regular expressions.
:set <option> - allows you to set an option for the running instance. See my configuration file for some examples of settings (which I set for any instance).
ctrl+v – visual mode, allowing the highlighting of multiple lines inside visual mode:
I – insert before all highlighted letters
X – delete all highlighted letters
middle-mouse button (or shift + insert) paste from external linux clipboard after selecting the text to paste.

This is just a basic list of commands I frequently use. The line marked with asterisks is actually a linux shortcut, but it's very useful in Vim/GVim.

How do I use Vim/GVim?

To open a file, you can either append the path after the Vim/GVim command, or open it using :e once it loads. Once you have opened the file that you want to edit, you can then hit “i” (the key on the keyboard) to enter insert mode. It will tell you what mode is active (blank means there is currently no mode being used) in the bottom-left corner. For the sake of this example, let us simply write “Com3mand 6 Conque”. Once you've entered the text, it's time to fix it up. Move to the 3 using the hjkl keys, and then hit the “x” key to delete it. Head over to the 6 and hit the “r” key, and then enter the ampersand (“&”). Once that's done, you should have: “Command & Conque”. Notice that the “r” is missing! Move the cursor over the e and you'll notice that you can't move the cursor past the already entered text. How do you enter the r then? You can either hit the “i” key for insert and move the cursor using the arrow keys and then enter it. Or, you could “append” the text using the “a” key, which moves the cursor to the space after the selected letter. Then type “r” and you're all set. If you want to save it, do so with :w (and if you haven't given it a path or name yet, you must do so after the w). If you want

to just quit, use “:q” (in this case you'll need to add an exclamation point after the q to ignore the changes made). After the “:q!”, you will find yourself back at your desktop (from GVim) or in your terminal if you used Vim.

A few things to remember:

The Vim shortcut keys that use letters (u, ctrl+r, y, d, w, etc) all require you to be in the “blank mode” (i.e. without any editing mode active). Otherwise, you'll just type the letter. Get in the habit of hitting escape after you've made a change so that you don't start typing in gibberish.

Using numbers to repeat commands also works only outside of a mode.

If, when pasting something, you find that it spaces it all out oddly, simply activate the past mode (:set paste) and when you're done, disable it with :set nopaste.

If you want to copy something, and you find you copy the line numbers too, simply shut them off with :set nonumber, and back on with :set number.

If you have any questions, or would like a follow up article with a step-by-step example, please let me know by emailing me at lswest34@gmail.com. If you do email me, please include C&C or FCM in the subject line, so I don't overlook it!

Files:

My .vimrc (I deleted some functions that require external software or are intended for use with Mutt, so it may result in one or two settings not working):
<http://pastebin.com/wv260CJk>
The colorscheme I use (see screenshot):
<http://dengmao.wordpress.com/2007/01/22/vim-color-scheme-wombat/>
Screenshot (full-size):
<http://lswest.deviantart.com/art/Screenshot-October-2011-262486679>



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.



We are going to explore even more widgets provided by tkinter. This time we will look at menus, combo boxes, spin boxes, separator bar, progress bars and notebooks. Let's talk about them one at a time.

You've seen menus in almost every application that you have ever used. Tkinter makes it VERY easy for us to make menus. Combo Boxes are similar to the list box that we explored in the last widget demo article, except the list "pops down" instead of being visible at all times. Spin box controls are great for giving a fixed range of values that can "scroll" up or down. For example, if we want the user to be able to choose from integers between 1 and 100, we can easily use a spin box. Progress bars are a wonderful way to show that your application hasn't locked up when something takes a lot of time, like reading records from a database. It can show the percentage of completion of a task. There are two types of progress bars, Determinate and Indeterminate.

You use a determinate progress bar when you know just how many items you are dealing with. If you don't know the number of items or the percentage of how done your task is at any point, you would use the Indeterminate version. We will work with both. Finally a notebook widget (or tabbed widget) is used many times for things like configuration screens. You can logically group a series of widgets on each tab.

So, let's get started. As usual, we will create a base application and build on to it with each extra widget we add. Shown right is the first part of our application. You've seen most of this before.

Save all of this as widgetdemo2a.py. Remember we will use this as the base to build the full demo. Now we will start the process of creating the menu. Here are the steps we need to do. First, we define a variable to hold the menu instance. Like most any widget we use, the format is...

```
OurVariable = Widget(parent,  
options).
```

```
import sys  
from Tkinter import *  
import ttk  
# Shows how to create a menu  
class WidgetDemo2:  
  
    def __init__(self, master = None):  
        self.DefineVars()  
        f = self.BuildWidgets(master)  
        self.PlaceWidgets(f)  
  
    def DefineVars(self):  
        pass
```

And here is the bottom of our program. Again, you have seen this before. Nothing new here.

```
if name == '__main__':  
    def Center(window):  
        # Get the width and height of the screen  
        sw = window.winfo_screenwidth()  
        sh = window.winfo_screenheight()  
        # Get the width and height of the window  
        rw = window.winfo_reqwidth()  
        rh = window.winfo_reqheight()  
        xc = (sw-rw)/2  
        yc = (sh-rh)/2  
        print "{0}x{1}".format(rw, rh)  
        window.geometry("%dx%d+%d+%d"%(rw, rh, xc, yc))  
        window.deiconify()  
  
    root = Tk()  
    root.title('More Widgets Demo')  
    demo = WidgetDemo2(root)  
    root.after(13, Center, root)  
    root.mainloop()
```

HOWTO - PROGRAM IN PYTHON - PART 28

In this case, we are using the Menu widget and we will assign it to master as the parent. We do this under the BuildWidgets routine. Next we create another menu item, this time calling it filemenu. We add commands and separators as needed. Finally we add it to the menu bar and do it all over again until we are done. In our example, we'll have the menubar, a File pulldown, an Edit pulldown and a Help pulldown (top right). Let's get started.

Next (middle right) we concentrate on the File Menu. There will be five elements. New, Open, Save, a separator and Exit. We'll use the .add_command method to add the command. All we really need to do is call the method with the text (label =) and then provide a callback function to handle when the user clicks the item. Finally we use the menubar.add_cascade function to attach the menu to the bar.

Notice that the Exit command uses "root.quit" to end the program. No call back needed for that. Next we'll do the same thing for the Edit and Help menus.

Notice the part in each of the

menu group definitions that says "tearoff=0". If you were to change the "=0" to "=1", the menu would start with what looks like a dashed line and if you drag it, it "tears off" and creates its own window. While this might be helpful sometime in the future, we don't want that here.

Last but not least, we need to place the menu. We don't do a normal placement with the .grid() function. We simply add it by using the parent.config function (bottom right).

All of this has gone in the BuildWidgets routine. Now (next page, top right) we need to add a generic frame and set the return statement before we move on to the PlaceWidgets routine.

Finally (next page, bottom right) we need to create all the callbacks we defined earlier. For the demo, all we'll do is print something in the terminal used to launch the program.

That's it. Save and run the

```
def BuildWidgets(self, master):
    frame = Frame(master)
    #=====
    #           MENU STUFF
    #=====
    # Create the menu bar
    self.menubar = Menu(master)
```

```
# Create the File Pull Down, and add it to the menu bar
filemenu = Menu(self.menubar, tearoff = 0)
filemenu.add_command(label = "New", command = self.FileNew)
filemenu.add_command(label = "Open", command = self.FileOpen)
filemenu.add_command(label = "Save", command = self.FileSave)
filemenu.add_separator()
filemenu.add_command(label = "Exit", command = root.quit)
self.menubar.add_cascade(label = "File", menu = filemenu)
```

```
# Create the Edit Pull Down
editmenu = Menu(self.menubar, tearoff = 0)
editmenu.add_command(label = "Cut", command = self.EditCut)
editmenu.add_command(label = "Copy", command = self.EditCopy)
editmenu.add_command(label = "Paste", command = self.EditPaste)
self.menubar.add_cascade(label = "Edit", menu = editmenu)
# Create the Help Pull Down
helpmenu = Menu(self.menubar, tearoff=0)
helpmenu.add_command(label = "About", command = self.HelpAbout)
self.menubar.add_cascade(label = "Help", menu = helpmenu)
```

```
# Now, display the menu
master.config(menu = self.menubar)
#=====
#           End of Menu Stuff
#=====
```

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program. Click on each of the menu options (saving File|Exit for last).

Now (below) we'll deal with the combo box. Save your file as widgetdemo2b.py and we'll get started. The imports, class definition and the def `__init__` routines are all the same, as is the bottom part of the program. We'll add two lines to the DefineVars routine. Either comment out the "pass" statement or erase it and put in the following code. (I included the definition line just for clarity.)

First we define a label, which we've done before. Next we define the combo box. We use "tkk.ComboBox", define the parent and set the height to 19, the width to 20 and the textvariable to "self.cmbo1Val". Remember that we set textvariables in the last widget demo, but just in case you forgot...this is changed anytime the value in the combo box is changed. We defined it in DefineVars as a StringVar object. Next we load the values that we want the user to choose from, again we defined that in DefineVars. Finally we bind the virtual event

```
self.f1 = Frame(frame,
                 relief = SUNKEN,
                 borderwidth = 2,
                 width = 500,
                 height = 100
                 )

return frame
```

Next we (as we have done multiple times) deal with placing our other widgets.

```
def PlaceWidgets(self, master):
    frame = master
    frame.grid(column = 0, row = 0)

    self.f1.grid(column = 0,
                 row = 0,
                 sticky = 'nsew'
                 )
```

```
def DefineVars(self):
    self.cmbo1Val = StringVar()
    self.c1Vals = ['None', 'Option 1', 'Option 2', 'Option 3']
```

After our the self.f1 definition in BuildWidgets and before the "return frame" line insert the following code.

```
# Combo Box
self.lblcb = Label(self.f1, text = "Combo Box: ")
self.cmbo1 = tkk.ComboBox(self.f1,
                          height = "19",
                          width = 20,
                          textvariable = self.cmbo1Val
                          )
self.cmbo1['values'] = self.c1Vals
# Bind the virtual event to the callback
self.cmbo1.bind("<<ComboboxSelected>>", self.cmbotest)
```

```
def FileNew(self):
    print "Menu - File New"

def FileOpen(self):
    print "Menu - File Open"

def FileSave(self):
    print "Menu - File Save"

def EditCut(self):
    print "Menu - Edit Cut"

def EditCopy(self):
    print "Menu - Edit Copy"

def EditPaste(self):
    print "Menu - Edit Paste"

def HelpAbout(self):
    print "Menu - Help About"
```

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<<ComboBoxSelected>> to the cmbotest routine that we will flesh out in a minute.

Next let's place the combo box and the label into our form (top right).

Save everything and test it out.

Now save as widgetdemo2c.py and we'll start with the separator bar. This is SO super easy. While the updated tkinter provides a separator bar widget, I've never been able to get it to work. Here's an easy work around. We use a frame with a height of 2. The only changes to our program will be the definition of the frame in BuildWidgets after the combo box bind statement and placing the frame in the Place Widgets routine. So, in BuildWidgets put in the following lines (shown middle right)...

Once again, you've seen all this before. Save and test it. You'll probably have to expand the topmost window to see the separator, but it will become much more evident in the next demo. Save as widgetdemo2d.py and we'll add the spin control.

Under DefineVars, add the following line...

```
self.spinval = StringVar()
```

By now, you know that this is so we can get the value at any time we want. Next, we'll add some code to the BuildWidgets routine...just before the "return frame" line (bottom right).

Here we define a label and the spin control. The spin control definition is as follows:

```
ourwidget =  
Spinbox(parent, low value,  
high value, width,  
textvariable, wrap)
```

The low value must be called as "from_" since the word "from" is a keyword and using that would simply confuse everything. The values "from_" and "to" must be defined as float values. In this case we want it to have a low value of 1 and a high value of 10. Finally the wrap option says that if the value is (in our case) 10 and the user clicks on the up arrow, we want it to wrap around to the low value and keep going. The same works for the low value. If the user clicks the down

```
self.lblcb.grid(column = 0, row = 2)  
self.cmbol.grid(column = 1,  
                row = 2,  
                columnspan = 4,  
                pady = 2  
                )
```

And finally we put in the callback which simply prints what the user selected into the terminal window.

```
def cmbotest(self, p1):  
    print self.cmbolVal.get()
```

```
self.fsep = Frame(self.f1,  
                  width = 140,  
                  height = 2,  
                  relief = RIDGE,  
                  borderwidth = 2  
                  )
```

And in PlaceWidgets put in this ...

```
self.fsep.grid(column = 0,  
               row = 3,  
               columnspan = 8,  
               sticky = 'we',  
               padx = 3,  
               pady = 3  
               )
```

```
self.lblsc = Label(self.f1, text = "Spin Control:")  
self.spin1 = Spinbox(self.f1,  
                     from_ = 1.0,  
                     to = 10.0,  
                     width = 3,  
                     textvariable = self.spinval,  
                     wrap=True  
                     )
```

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arrow of the control and the value is 1, it wraps to 10 and keeps going. If you set "wrap=False", the control simply stops at whichever direction the user is going.

Now we'll place the widgets in PlaceWidgets (below).

Again, that's it. Save and play. You'll really notice the separator now.

Save as widgetdemo2e.py and we'll do the progress bars.

Again, we need to define some variables, so in the DefineVars routine add the following code...

```
self.spinval2 = StringVar()
self.btnStatus = False
self.pbar2val = StringVar()
```

It should be pretty obvious what the two StringVar variables are. We'll discuss the "self.btnStatus" in a moment. For now, let's go and define the widgets for this portion in BuildWidgets (right).

```
self.lblsc.grid(column = 0, row = 4)
self.spin1.grid(column = 1,
                row = 4,
                pady = 2
                )
```

Again this goes before the "return frame" line. What we are doing is setting up a frame for us to put the widgets into. Then we set up two labels as guides. Next we define the first progress bar. Here the only things that might be strange are length, mode and maximum. Length is the size in pixels of our bar. Maximum is the highest value that will be seen. In this case it's 100 since we are looking at percentage. Mode in this case is 'indeterminate'. Remember, we use this mode when we don't know how far we've gotten in a task so we just want to let the user know that something is happening.

Next we add a button (you've done this before), another label another progress bar and another spin control. The mode for the second progress bar is "determinate". We will use the spin control to set the "percentage" of completion. Next add the following lines (next page, top left) into the PlaceWidgets routine.

```
#####
# Progress Bar Stuff
#####
self.frmPBar = Frame(self.f1,
                    relief = SUNKEN,
                    borderwidth = 2
                    )

self.lbl0 = Label(self.frmPBar,
                 text = "Progress Bars"
                 )
self.lbl1 = Label(self.frmPBar,
                 text = "Indeterminate",
                 anchor = 'e'
                 )
self.pbar = ttk.Progressbar(self.frmPBar,
                           orient = HORIZONTAL,
                           length = 100,
                           mode = 'indeterminate',
                           maximum = 100
                           )
self.btnptest = Button(self.frmPBar,
                      text = "Start",
                      command = self.TestPBar
                      )
self.lbl2 = Label(self.frmPBar,
                 text = "Determinate"
                 )
self.pbar2 = ttk.Progressbar(self.frmPBar,
                             orient = HORIZONTAL,
                             length = 100,
                             mode = 'determinate',
                             variable = self.pbar2val
                             )
self.spin2 = Spinbox(self.frmPBar,
                    from_ = 1.0,
                    to = 100.0,
                    textvariable = self.spinval2,
                    wrap = True,
                    width = 5,
                    command = self.Spin2Do
                    )
```

HOWTO - PROGRAM IN PYTHON - PART 28

Lastly, we add two routines to control our progress bars (bottom right).

The TestPBar routine controls the indeterminate progress bar. Basically, we are starting and stopping an internal timer that is built into the progress bar. The line "self.pbar.start(10)" sets the timer to 10 milliseconds. This makes the bar move fairly quickly. Feel free to play with this value up and down on your own. The Spin2Do routine simply sets the progress bar to

whatever value the spin control has. We print it as well to the terminal.

That's all the changes for this. Save and play.

Now save as widgetdemo2f.py and we'll deal with the tabbed notebook widgets. In BuildWidgets put the following code (below) before the "return frame" line...

Let's look at what we did. First, we define a frame for our

```
#####
#           NOTEBOOK
#####
self.nframe = Frame(self.f1,
                    relief = SUNKEN,
                    borderwidth = 2,
                    width = 500,
                    height = 300
                    )
self.notebook = ttk.Notebook(self.nframe,
                             width = 490,
                             height = 290
                             )
self.p1 = Frame(self.notebook)
self.p2 = Frame(self.notebook)
self.notebook.add(self.p1, text = 'Page One')
self.notebook.add(self.p2, text = 'Page Two')
self.lsp1 = Label(self.p1,
                 text = "This is a label on
page number 1",
                 padx = 3,
                 pady = 3
                 )
```

```
# Progress Bar
self.frmPBar.grid(column = 0,
                  row = 5,
                  columnspan = 8,
                  sticky = 'nsew',
                  padx = 3,
                  pady = 3
                  )
self.lbl0.grid(column = 0, row = 0)
self.lbl1.grid(column = 0,
               row = 1,
               pady = 3
               )
self.pbar.grid(column = 1, row = 1)
self.btnptest.grid(column = 3, row = 1)
self.lbl2.grid(column = 0,
               row = 2,
               pady = 3
               )
self.pbar2.grid(column = 1, row = 2)
self.spin2.grid(column = 3, row = 2)
```

```
def TestPBar(self):
    if self.btnStatus == False:
        self.btnptest.config(text="Stop")
        self.btnStatus = True
        self.pbar.start(10)
    else:
        self.btnptest.config(text="Start")
        self.btnStatus = False
        self.pbar.stop()

def Spin2Do(self):
    v = self.spinval2.get()
    print v
    self.pbar2val.set(v)
```

notebook widget. Now we define the widget. All the options are ones we've seen before. Next we define two frames named self.p1 and self.p2. These act as our pages. The next two lines (self.notebook.add) attach the frames to the notebook widget and they get a tab attached to them. We also set the text for the tabs. Finally, we put a label on page number one. We'll put one on page number two when we place the controls just for fun.

In the PlaceWidgets routine put the following code (below).

```
self.nframe.grid(column = 0,
                 row = 6,
                 columnspan = 8,
                 rowspan = 7,
                 sticky = 'nsew'
                )
self.notebook.grid(column = 0,
                  row = 0,
                  columnspan = 11,
                  sticky = 'nsew'
                 )
self.lsp1.grid(column = 0, row = 0)
self.lsp2 = Label(self.p2,
                 text = 'This is a label on PAGE 2',
                 padx = 3,
                 pady = 3
                ).grid(
                 column = 0,
                 row = 1
                )
```

The only thing that might possibly be strange is the label on page two. We combine the definition and placement in the grid with the same command. We did that when we did our first widget demo app.

That's it. Save and play.

As always the full code for the full application is up on pastebin at <http://pastebin.com/qSPkSNU1>.

Enjoy. Next time we'll deal with some more database stuff.

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At Below Zero we help you to achieve Zero Downtime.

www.zerodowntime.co.uk



HOW-TO

Written by Hans Vandevreire



FreeMind

NOTE: LibreOffice will return next issue.

FreeMind is a mindmap application: a graphic way of structuring thoughts, opinions, ideas, objects, or any other thing you need to have visualized in a nice way.

A mindmap can be used for structuring any information in any domain: it's a way to organize details, input or records of any kind. Examples could be: a shopping or to-do list; a note-taking tool in classrooms; a presentation tool for board meetings... in fact: the possibilities with mindmap applications are limitless.

Amongst all other mindmap software, FreeMind is a free and high quality program and productivity tool, made in Java, and licensed under GNU 2 GPL V2+, meaning it's free to use the program for whatever purpose you want. As it is developed in Java, it

is available on any computer platform such as Linux, Apple/Mac, or Microsoft environments.

FreeMind is the ideal tool for, let's say, anything you need to organize in your daily life, at school, or at work. Planning and organizing parties, weddings, or any event; projects like moving to another place, building a new house, or reconstructing the kitchen; it's even an interesting way to collect recipes, phone

numbers, or as a catalog of your stamp collection. Teachers can use it to prepare and present lessons; students can use it as an exam preparing program; and even for writing essays it can be very useful. At work I use FreeMind daily for preparing and presenting meetings, brainstorming, and as a to-do list. By the way: this FreeMind article is mainly written in FreeMind and exported to LibreOffice for editing and fine tuning afterwards.

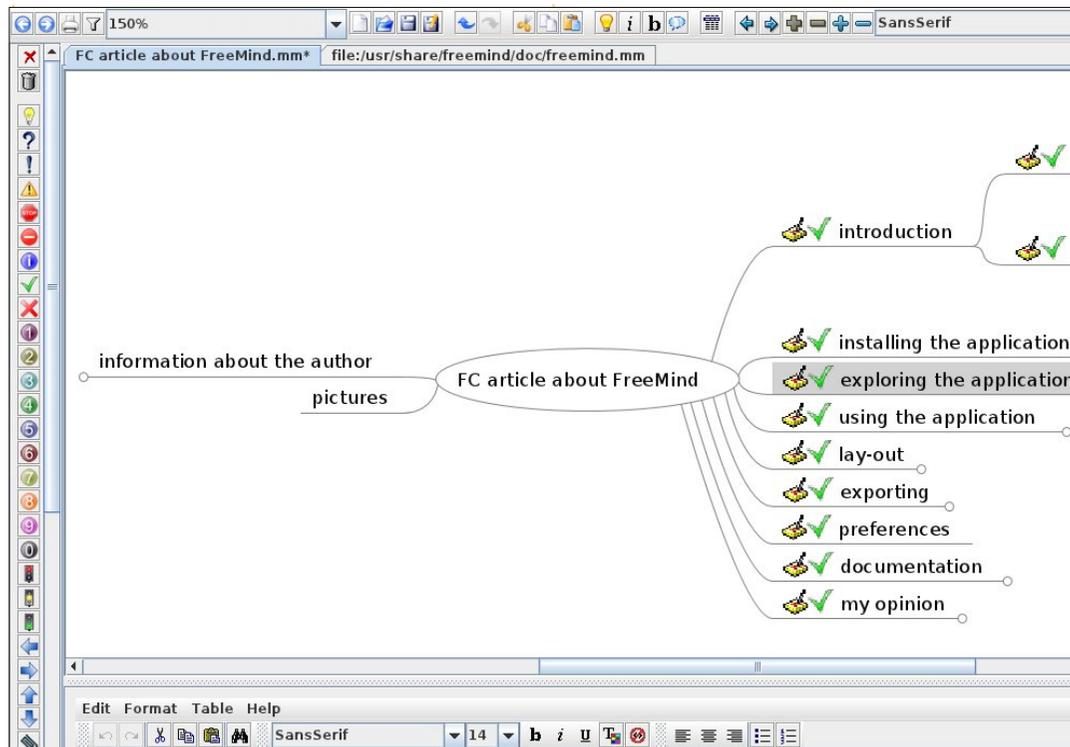
Installing the application

Installing FreeMind is easy: just grab it from the repository by searching for it in KpackageKit (KDE) or in the Ubuntu Software Center (Gnome): all necessary files will be installed in a moment. The FreeMind startup icon will be shown in the office-category: clicking on it will launch the application in seconds.

Exploring the application

As soon as you have the application on your desk, you'll discover:

- the menu: you'll find common 'file', 'edit', and 'view' menu-items and specific application-items (in most cases a keyboard shortcut is also available)
- a horizontal toolbar: you'll find most used application commands as a button or dropdownlist
- tabs: you can open different mindmaps and switch easily from one to another



- the main window: your working place: start thinking, and write what you think
- a secondary vertical toolbar: you can add icons to nodes, here you can pick them
- a note window (at the bottom): you can add text (html) to a selected node

Using the application

The first time you open FreeMind, a brand new empty mindmap is ready for your brilliant ideas: click on 'New Mindmap', and change the title to your subject (e.g. 'FCM article about FreeMind').

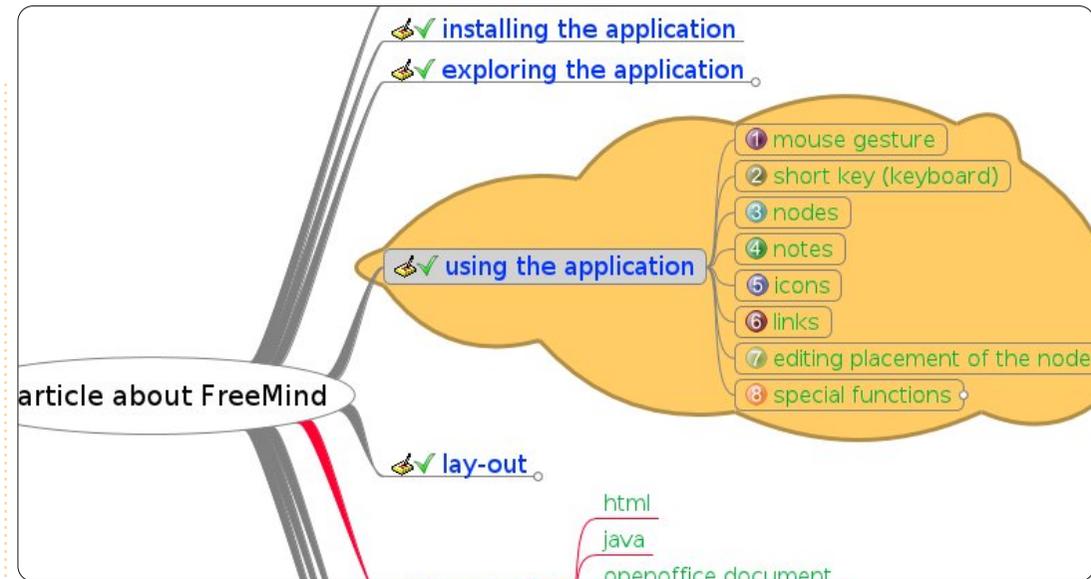
Press the <insert> key for a first-level item (e.g. 'introduction'), and press <enter> for the second first-level item (e.g. 'installing the application'). Create new child nodes and sibling nodes as fresh ideas are bubbling up in your head.

You can use shortcut key combinations: use arrow keys to navigate from one node to another; and <insert>, <enter>, <escape>, and <delete> keys for basic editing; you use <F2> for a selected node to edit the text of the node.

Of course, you can use the mouse to select a node and click on the menu items or buttons to create your entire mindmap. Clicking on a node with child nodes will open or close the nodes (and attached nodes), and you can shift the complete mindmap to any place by clicking and dragging outside a node.

For practical reasons, nodes are usually rather short, although it's possible to create long nodes. It's possible to attach a note for a selected node (bottom window). Use the built-in simple html-editor for good looking text formatting or even tables. Advanced users can try the html code view (second tab at the bottom of the note window). A note can be the text of a chapter (node), or extra information for an item (node).

Pressing the <ALT>+<I> combination opens the icon catalog: you can add icons to a selected node for better understanding (the icon can explain a priority level, a to-do result, a project milestone, ...); icons are also available by clicking on them on the secondary vertical toolbar on the left.



And another function is making this software a high quality product: nodes can be marked as hyperlinks (Insert > Hyperlink) to open a file, website, or e-mail editor, or to navigate to another part of the mindmap. You can even link pictures to a node, and couple nodes with a graphic link (check the items in the Insert menu).

If you want to change the order of the nodes, you can easily drag and drop selected nodes to another place. The shade of the node you're dragging the node to tells you whether it will be a child or a sibling node.

Even some special functions are

available through the Tools menu. Time scheduled nodes can be made for reminding the user in a project mindmap. Revisions can be colored yellow.

As your mindmap is getting bigger, you might want to use the filter (horizontal toolbar, 4th icon from left) to find a node or text (press the filter icon and edit the query you need).

Layout

The layout of your mindmap is still basic. FreeMind has some fancy features to embellish your creation. Clicking on the menu item Format > Automatic layout transforms the simple mindmap

into an awesome presentation of your ideas.

But more is possible: every node (single or multiple selected) can be edited. You can change the font, size, color, and shape of the node text, and also the edges of the node can be edited. Make nodes blink to get the attention of your public, or draw a cloud around a group of nodes to emphasize the priority of the item (Insert > Cloud). The use of styles is possible by right clicking on a node (Physical Style), or by the menu item Format > Physical Style.

Exporting

If content and layout are ready, you might want to export your mindmap to another format (File > Export):

- export a branch to a new map
- export to html-file
- export to flash html file
- export to xhtml file (clickable map image or javascript version)
- export to OpenOffice/LibreOffice text document (the text you're reading was originally made in FreeMind, and then exported to a LibreOffice .odt format)

- export to JPG or PNG image file (shown right). Presenting or using your mindmap can be done in any way, according to your needs.

Preferences

By changing the preferences, the user can change default settings such as automatic layout, language, environment, behavior, keystrokes, and more (Tools > Preferences). This way, FreeMind becomes a very handy tool with a personal touch.

Documentation

More information is accessible through the Help menu:

- a built-in mindmap as a help function is always available, showing all possibilities and functionalities of the application
- a key-mapping quick guide is also available in PDF (highly recommended if you don't change the default settings)
- a wiki with complete project information, documentation, and FAQ page can be found on the FreeMind wiki.

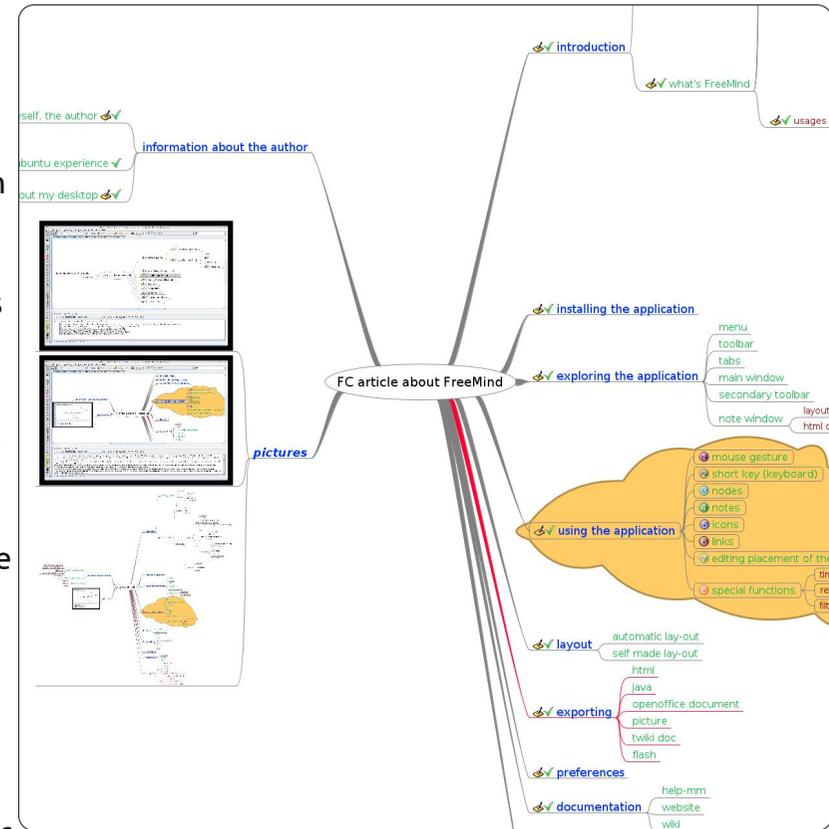
Don't forget to visit the 'Thank

you for the music page' to express your thanks and satisfaction with FreeMind... this is the only way the contributors are being paid!

My opinion

Computers and software are made to make our lives and work easier and more comfortable.

FreeMind is one good example of it: it is easy to install, easy to learn how to use it, very efficient in a wide range of situations, and with interesting exporting functionalities. Some minor points could be (but please, ignore them): a poor picture editing functionality and no kde integration of the software layout. It's a single user program, so collaboration with multiple users at the same time is not possible (yet?); but it is easy to spread the file by mail or by web - thanks to the many ways of



exporting the file.

Install and try it right away; write a review about your favourite (k)ubuntu software with FreeMind and send it to Full Circle.



Hans has been using Ubuntu since Dapper Drake, works as a system tester, and is interested in social media, IT, folk music, and Albania.



Let's rewind. In part one, we posited that the safest data storage plan goes something like this:

- local machine disk: original or master copy
- network storage disk: common or shared copy
- off-line storage, which these days means remote cloud storage, or on-line back-up.

This isn't simply jumping on the bandwagon of 'Clouds with everything.' A true off-site backup uses someone else's data-center, which is itself backed up. This offers maximum peace of mind that your precious, ephemeral data can't be lost, even if your original goes up in flames, down in floods, or gets exterminated by a Blue Screen of Death.

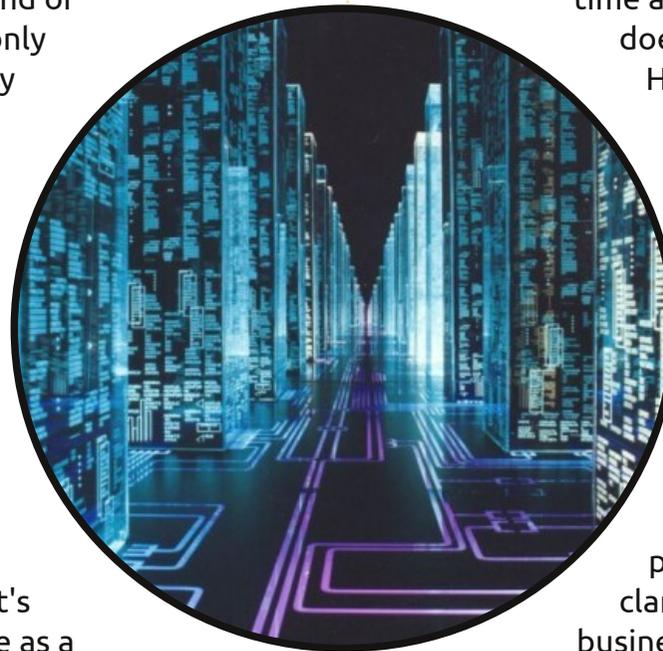
We all know the issues with the traditional backup solution; either it's not done regularly, or somebody sends the wrong generation of tapes to the off-site safe. Or your data DVD sits on top of the book-case for six months when you should have taken it to

Grandma's house. 'The Cloud' may be flavor-of-the-year right now, but that doesn't mean you should ignore, we should say, the multitude of Clouds available. Cloud back-up has become an industry in and of itself. Your only real difficulty is choosing which Cloud and which provider meets your needs. Everyone seems to be offering Cloud storage, that's not the same as a Cloud back-up service.

Perhaps we should begin by running down a check-list to help make the decision.

Cost

It's where I always start. Is there



an up-front fee? What's the ongoing monthly or annual fee?

How much storage do I get for my money? What service level – that's performance and up-time availability – does that buy me? How big is the jump between price and storage bands?

Cloud backup is a crowded, immature market right now, with providers clamoring for our business. For the average householder, there are introductory offers of basic packages at zero cost, all luring us in with the prospect of the up-sell later. I like free storage space. It seems everyone's providing it, so we have to refine our criteria.

Software

All the mature services offer dedicated software clients to manage the upload and download process. All claim to be cross platform, so long as that means Windows and Mac. Many now have a Linux client available.

I like the idea of browser-based upload and download, also called "NOT having to use a proprietary program to access the service." This is where Ubuntu One scores, even though it's basic Cloud storage rather than a fully-fledged cloud backup at present.

Ease of Use

We also want ease of use, whereby;

- setup and installation is simple, and completed within a few steps of downloading the software.
- on-line backup can run in the background while we get on with our normal activities, without hogging all our bandwidth; a user-setting for the upload speed is

essential.

- includes and excludes are easily defined for each back-up set, to the lowest granular level of file name or file type, using wild-cards.
- the scheduler should allow unattended back-ups to a frequency and time-of-day set by you, preferably down to the minute.
- data can be restored easily and immediately, with some notion of versioning of back-up sets.
- we have easy, centralized management of all our backups sets with sufficient meta-data to distinguish sets from each other.

Encryption

These days we should take data security very seriously. Thank you, Sony and the DoD. A true back-up of all your important stuff is going to include your personal stuff, banking, and correspondence. Nobody wants to suffer identity theft.

As far as the Cloud is concerned, there are several ways of doing this, the best being to implement a solid version of 128-bit encryption, minimum, at the client end, before it leaves your machine to travel

over the wire. Preferably this should include blind signing so that nobody at the provider has your key which could compromise your data, either through an inside job or as the victim of an external hack. You have to be your own policeman.

Performance

We absolutely need speed and reliability. The platform at the providers' facility also needs to be scalable; it shouldn't slow down or fail every time the US East Coast wakes up and goes on-line en mass at 8am EST. The theory also needs to work in practice, as Amazon S3 discovered earlier this year.

The service also needs to maintain our data mirrored for resilience and fail-over, as protection



against data loss due to sabotage, fire, theft, flood, virus, or other disasters. Put another way, your Cloud service shouldn't be keeping boxes of tapes at Grandma's house. This is what we in business call a compliance test.

Convenience

Now things get interesting, separating men from boys, sheep from goats, and mixed-metaphors from clichés. It may be that the deciding x-factor is one of these;

- file-sharing capabilities; being able to define shares, 'rooms', 'peeks', or public links at the granular file level, with some tiered security according to permissions that you alone are able to set from your management console.
- remote web access to data, at anytime. Ideally it's that browser-based client that allows you

to securely access your data (perhaps without all the capabilities as the dedicated client) from any machine.

- true 24-by-7-y-365 data availability. See Performance.
- status reporting for verification and audits. We need to have confidence demonstrated by proper management information.

Very little of this is new; in fact, most conventional client-side backup applications and web-hosting services have all these covered; now is the time to put the two together in the Cloud. With these considerations in mind, you can now look at the various services on offer, and judge for yourself how they stack up.



Allan J. Smithie is a journalist and commentator based in Dubai. His blog, 'No Expert,' is at: <http://allanjsmithie.wordpress.com>



Quick, what is $20 \times 3 + 5$? If you can read this, and answer the previous question, you can thank a teacher. Did you use a calculator, or a specific set of eyeglasses, to solve the equation? The teacher taught you the mental process to it. From these basic building blocks, you learn increasingly complex concepts. It is not until you get to a university that you are limited to a certain set of tools to complete the task at hand, and sometimes due to a physical need (think of a microscope). Let's look at two other equations:

$$3 \times 20 \left(\frac{15}{5} + 7 \right)$$

$$3 \left(20 \cdot \frac{15}{5} \right) + 7$$

The results for both equations are different. There is a mnemonic, PEMDAS, that reminds us that the order to solve an equation is:

parenthesis, exponentials, multiplication, division, addition and subtraction. When I started college, my parents bought me an HP-42S because I needed a graphics calculator. It was an excellent calculator, but it did not work for me at first. The calculator was based on the Reverse Polish Notation (RPN)

(http://en.wikipedia.org/wiki/Reverse_Polish_notation), which I did not know at the time. It took me about an hour to get the hang of it. RPN is not the usual way we are taught in school. In RPN, the operators (mathematical operation) come after the all the operands (numbers) it will be applied to.

Thus, the equations in RPN will be:

$$15 \ 5 \div \ 7 \ + \ 20 \ 3 \times$$

$$15 \ 5 \div \ 20 \ 3 \times \ 7 \ +$$

In order to solve the equations, in the traditional or RPN way, you have to know how it is done. The tool that you use, traditional or RPN calculator, will give the same results. The important part is the mental process. Think for a minute how different things will be if we were only taught to punch

numbers in a calculator, a specific calculator at that, and then have the calculator die on us. In the US, those of us that hold a bachelor's degree have to go through around 16 years of school. We are taught to use tools, yes, but mostly to think, to push ourselves to resolve problems in a creative way - so that the people around us and the next generation can do better. Back in the Greek empire, grown men were taught algebra. What they learned we now call pre-algebra, and teach it to seventh graders!

Once you have learned, you start using tools to improve your work. Scribes learned how to read, write, and do math. They were also employed to copy old texts. This copying was done by hand which was slow and painful. When Gutenberg introduced the printing press, the process of creating books changed forever. Today, we have word processors that make the process easier. And still, learning to write by hand is a required skill. Tools exist just to improve our basic skills.

As a kid, papers I had to turn over to the teachers were always done by hand. I would really like that this be a requisite up to sixth grade because it ingrains the syntax and grammar rules in our kids. My daughter has used computers to do school-work since fourth grade. One time, I looked at the screen and told her that several words were misspelled. Her answer was that I should not worry because the computer will fix them for her. I was astonished! She did not care about proper spelling because a "tool" could do it for her. Here was a prime example that learning was changing and not for the better.

Where does Ubuntu fall in all this? Ubuntu, like Windows, Android, OSX, iOS, and many others, is an environment for tools. They all offer their capabilities for those who use them. What Ubuntu offers that really differs in a meaningful way to school administrators is cost savings. I had a computer for nine years. That computer started as a Windows XP machine, and died with Ubuntu in

it. That is nine years of not acquiring new hardware, and not paying (a lot) for software. The saved money can be used for capital improvements to the school - which endure for a long time, and benefit generations of students.

For students, it offers tools that they can use at home without a huge cost and, in many instances, for free. It also offers a deterrent to (some) software piracy. It always blows my mind when a kid pirates 1GB of Adobe CS when they could freely download Kompozer, Scribus, Inkscape, and GIMP, and get the same results (meanwhile their parents do nothing about it). Getting used to a different set of tools also forces the student to learn the basics to be able to transport that knowledge to different tools.

Take, for example, web pages. Some schools offer courses in web page creation. These schools buy Dreamweaver, and go through the templates. They spend little time explaining what HTML and CSS are, and how they are integrated. You can always learn to use Dreamweaver or Expression Web, but, no matter what your tool is,

the basics are the same. In Ubuntu, you may use Bluefish or Kompozer. With Bluefish you have to know your basics because there is no WYSIWYG interface. Kompozer has such an interface, and, once you know your basics, the WYSIWYG interface will help you a lot but not all the time.

Another tool to emphasize proper skills is Latex. Latex is all about writing and producing written documents. Latex philosophy is that the writer should worry about writing and the software worries about the presentation. Go to the repositories and try Lyx. You will notice that it is not your regular word processor. You cannot add meaningless space to separate words or paragraphs, or set capricious fonts throughout the document. As it says in their web page: "What you see, is what you mean." You have to concentrate in just writing. Sections, paragraphs, syntax, lists, definitions, emphasis, and flow are your realm; presentation is Latex. A great tool for aspiring writers to really concentrate on their writing.

You will notice that I have not

mentioned Edubuntu. That is because I have had mixed success with it. Edubuntu offers a broad set of tools to students. It offers pre-school to high school (and some more) software. The basic Edubuntu distribution is good as a starting point for people with mixed needs (think grades). If the population you will serve is uniform, you can download Ubuntu and just install the target school grades you need. Another thing to consider is that you may not want the software offered by Edubuntu, and a plain Ubuntu install will suffice.

One of Edubuntu strongest points is the use of iTALC (<http://italc.sourceforge.net/>) and LTSP (<http://ltsp.org/>). iTALC provides classroom management. With it, the teacher can see all the computers in the room, and provide remote help and tutorials. LTSP lets schools use less powerful computer hardware for the students, and moves the OS and computational needs to a powerful server.

School administrators flock to Windows because that is what they are used to, because it is agency

policy, because it is in their comfort zone. As personal trainers everywhere say: "You have to move out of your comfort zone to get results." Andalucía, think of it as a state in Spain, in 2003, established a law to use free software. To that effect, in 2003, a Linux distribution was created to use in schools. The distribution is called Guadalinexdu (<http://www.guadalinexdu.org/>), a mixture of Ubuntu and Guadalinex (<http://www.guadalinex.org/>). It is in use in over 2,500 centers and 500,000 computers. For those of you that can read Spanish, check Andalucía's Board free software declaration at <http://www.juntadeandalucia.es/organismos/economiainnovacionycomunicacion/temas/tic-telecomunicaciones/software-libre.html>.

For those who install Ed/Ubuntu in their schools, be aware of the use of codecs. As I said previously, Ubuntu does not provides the licenses to create mp3, mp4, wma, wmv, mpg, and so many others. You will have to obtain those licenses if you want to create content in those formats. That will

not limit your capabilities. You can always encode to FLAC (lossless compressed audio), ogg Vorbis (lossy compressed audio), and ogg Theora (video), and, pretty soon, to Google's VP8/WebM.

I have had mixed success in my Ubuntu installations. Ten (a puny number, I know) of the installations, I have followed through the years. Some have had Ubuntu since 8.04. Just one installed a pirated Windows version. That one is in a church, and used for the youth in the community. Shame on them! Two have Edubuntu, used by kids in elementary and middle school. All say that they will not change their Ubuntu computers. The only bad thing is that they will not buy a new computer pre-installed with Ubuntu. I stay hopeful.



Jesse is an industrial microbiologist from the environmental field who now works for the government. Along the way loving FOSS and ways to help people with it.

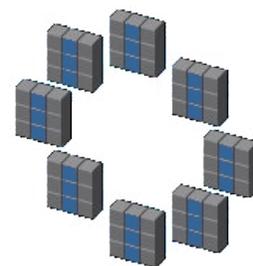


The Ubuntu Podcast covers all the latest news and issues facing Ubuntu Linux users and Free Software fans in general. The show appeals to the newest user and the oldest coder. Our discussions cover the development of Ubuntu but aren't overly technical. We are lucky enough to have some great guests on the show, telling us first hand about the latest exciting developments they are working on, in a way that we can all understand! We also talk about the Ubuntu community and what it gets up to.

The show is presented by members of the UK's Ubuntu Linux community. Because it is covered by the Ubuntu Code of Conduct it is suitable for all.

The show is broadcast live every fortnight on a Tuesday evening (British time) and is available for download the following day.

podcast.ubuntu-uk.org



ServerCircle

Server Circle is a new question and answer site run by techies.

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answer now				
by t0x1nman (50 points) in Linux Servers - 1 votes				
Help with mod_security in Apache please				

NOTE: Server Circle is not affiliated with, nor endorsed by, Full Circle magazine.



I've only ever had two computers running Ubuntu, I somehow tolerated the need to download the same packages twice. But, now I'm planning to add one or two more. And it seems such a waste of time and traffic. So, I started looking for a solution, and found the apt-cacher program. I have installed it and was rather satisfied with the results... till I upgraded my server machine to Ubuntu 11.04. While apt-cacher was enabled, all my updates were returning errors. So, I started again looking for a solution, and have encountered another deb-package proxy – apt-cacher-ng. I have replaced my old package proxy with the new one, and now updates on my second machine take no time at all.

So, what is apt-cacher-ng, and why do you need it? This is the program that caches all your downloaded .deb files, and shares them among all your computers in the LAN - eliminating the need to download the same package again and again.

Below, I will describe the step-by-step procedure I followed to install and configure it in my network.

As a source for the procedure, the tips from the following discussion were used: <http://ubuntuforums.org/showthread.php?t=1327179>.

I had apt-cacher already installed, so:

- I copied all my deb-files stored in the apt-cacher cache (folder - /var/cache/apt-cacher/packages) to a temp folder on my home partition.
- removed apt-cacher completely.

If you do not have apt-cacher installed, you'll just skip these two steps as not relevant.

Next, install the apt-cacher-ng package on your server using your preferred package install method.

Start the program. In terminal mode, run the command:

```
sudo /etc/init.d/apt-cacher-ng start
```

Configure the package routines on your other computers to use apt-cacher-ng as a proxy. There are several approaches to do this. The one that worked for me, and seems to be the simplest, uses the /etc/apt/apt.conf configuration file. Edit this file, or create it if it does not exist. You can use the following command in terminal mode:

```
sudo nano /etc/apt/apt.conf
```

You can replace nano with the name of your favorite text editor, for example, gedit. Add the following line to the file:

```
Acquire::http { Proxy  
"http://192.168.2.11:3142";  
};
```

Replace the 192.168.2.11 with the IP Address of your server computer. The same action should be done on each Ubuntu computer in your network.

Next, run the “update” using your package management software. For example, in terminal

mode, you can use the following command

```
sudo apt-get update
```

This ensures that the apt-cacher-ng builds the package index. Now it will know which packages it should store in the cache.

Actually, at this point the proxy is ready to work, but the cache is empty, and it will take time to populate it with packages. But wait – I have already stored some deb-files just for this moment. So now is a good time to make use of all the deb-files I have saved:

- Go to the /var/cache/apt-cacher-ng folder, and create _import sub-folder.
- Copy all deb-files stored in your temp home folder to /var/cache/apt-cacher-ng/_import (and delete the temp folder and its contents).
- I also have some packages in the local apt caches on both my Ubuntu computers. So I also copied all deb-files from /var/cache/apt/archives on both

HOWTO - APT-CACHER-NG

my computers to the `/var/cache/apt-cacher-ng/_import` folder on my server computer.

Now it is time to actually run the import process. The program is controlled through a web page. So open

http://<IP_address_of_server>:3142

and you will get the page explaining the usage of apt-cacher-ng, and with the small link “Statistics report and configuration page” in the “Related links” section. Clicking on the link will bring you to:

http://<IP_address_of_server>:3142/acng-report.html

Scroll down and click the “Start Import” button. This will open another page detailing the package import process as it goes. It will take some time depending on the number of packages you want to import.

From now on there will be no need to download the same packet several times for different computers. For further reading, you can open the documentation

installed with apt-cacher-ng and available through <http://localhost/doc/apt-cacher-ng/html/index.html> on your server computer. Note that you will need to change the default configuration of the apache2 server to make the server documentation available on all your LAN computers. To do so:

- open the `/etc/apache2/sites-enabled/000-default` file for editing as root. For example use the following command

```
sudo nano /etc/apache2/sites-enabled/000-default
```

Replace nano with your favorite text editor if you wish.

- Find the section that starts with `Alias /doc/`

Modify the entry 'Allow from' to give access to all computers in your LAN.

For example:

```
Allow from 10.1.0.0/255.255.0.0
```

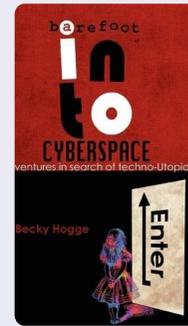
will give access to the documentation directory through your apache2 web-server from all IPs in the range 10.1.x.y

I hope this guide will help you set your home network for more efficient use.

Book Review

Barefoot into Cyberspace by Becky Hogge

Written by Robin Catling



Can we keep the Internet an open, democratic and free tool for the betterment of mankind? Barefoot into Cyberspace tackles this question. Written by a recent guest of ours on the Full Circle Podcast, Becky Hogge is a journalist and former director of the Open Rights Group. In it, Hogge seeks out the radical hackers opposing the old institutions gathering to control the Internet.

Documenting a personal journey into 'hack-tivism,' Hogge begins and ends at the Chaos Computer Club's annual conferences in 2009 and 2010, in the company of four recurring guides; Stewart Brand, Cory Doctorow (author, blogger and copyleft campaigner), Phil Booth of No2ID and Rop Gonggrijp, co-founder of the Dutch ISP XS4ALL. Along the way, Hogge interviews Wikileaks' Julian Assange and Global Voices founder Ethan Zuckerman.

Touching the issues of copyright versus copyleft, personal privacy, the surveillance society, freedom of information, censorship and the commercial takeover of the Internet, this is a study of individualists against institutions, questioning how we might oppose the vested interests of moneyed entities with largely amoral agendas.

You also get the slightly anti-climactic story of how Hogge declined to join Wiki-leaks, albeit in recognition of the commitment it takes to be that kind of activist. This running series of encounters highlights the one weakness of a book that never quite ties together all its themes into one coherent narrative, but you could argue that's how life is, amplified by the disjointing effect of technology and the rapid pace of change.

[CONT ON PAGE 26...](#)



Guidelines

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

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

Writing

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

Images

Images should be JPG with low compression.

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

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

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

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

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

Non-English Writers

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

REVIEWS

Games/Applications

When reviewing games/applications please state clearly:

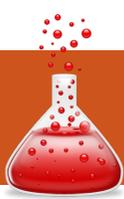
- title of the game
- who makes the game
- is it free, or a paid download?
- where to get it from (give download/homepage URL)
- is it Linux native, or did you use Wine?
- your marks out of five
- a summary with positive and negative points

Hardware

When reviewing hardware please state clearly:

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

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



So, we've got our CCTV to run as a monitor to see what's going on outside; we can record said events; and we can even detect motion to trigger a recording. But, how do we deal with false positives? Read on.

With 'Modect' (motion detection) enabled as your 'Function' in ZoneMinder, click the '0' (zero) under 'Zones', and you'll see a new window:



This is where we will define zones to include, or exclude, from the motion detection. Click 'Add New Zone' to get another new

window (shown below).

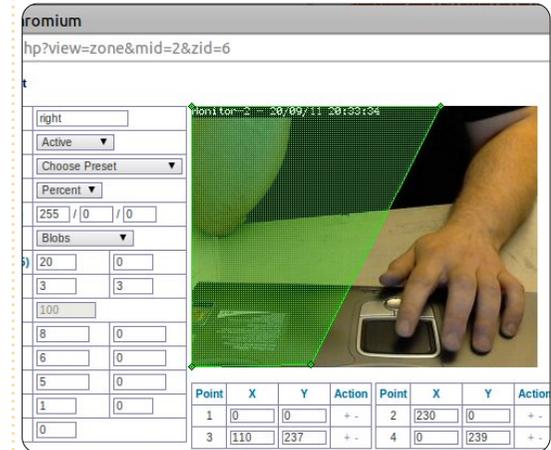
The zone window will let you assign a name to your zone; then, in the drop down menus, you can tell ZoneMinder what you want this zone to be. Active is just that, the zone is activated and ready for movement within it. Inclusive, Exclusive, and the other types, are best explained in the ZoneMinder wiki at:

http://www.zoneminder.com/wiki/index.php/Documentation#Defining_Zones. For example, you could create a zone around your car which would be active while



another zone could be inclusive. This means that, when your car zone becomes active, it would trigger your inclusive zone(s) to record catching the thief leaving the scene of the crime. To edit the first zone (the first one is already created in the window and is waiting for you to edit it), you simply drag the corners of the (in this case) green box to surround the area. You can click the small '+' icon beside a point to add another point after it - to help in creating complex zones. Next, choose a preset for the zone, the preset will depend upon your hardware and

how precise you want to be in the monitoring.

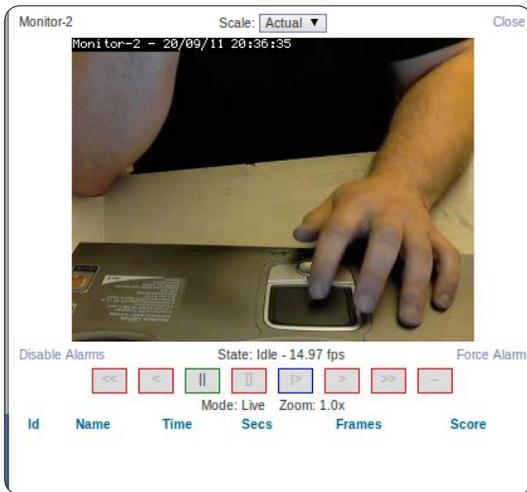


So, I've created an active zone which excludes my left hand.



If I move my left hand to my right side, or move my right arm, then an alarm will be activated, but if I keep my left hand on the track

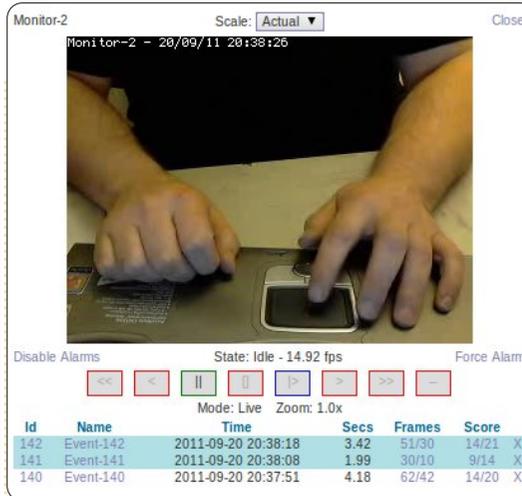
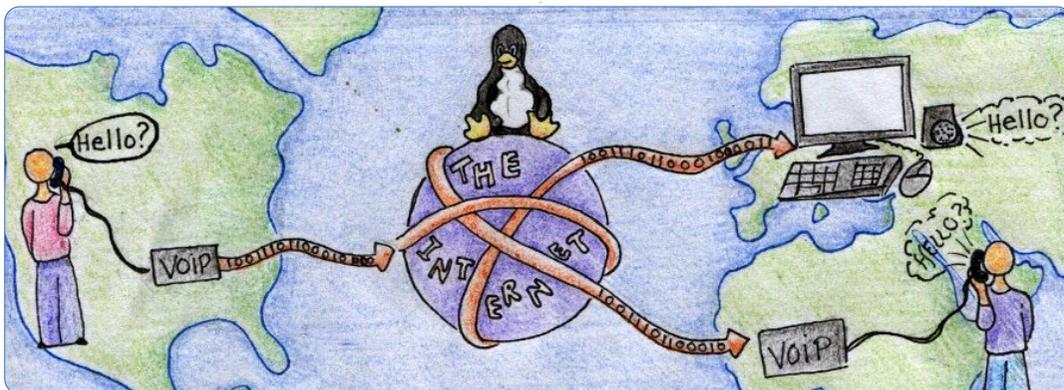
pad - even while moving it - then no alarm will trigger.



I knew it! I've always had my suspicions that my right hand was trying to steal my laptop!

Like we did last time, you click the number below events to see your list of events, and click to play back the recorded alarms.

You can get really complex zone



patterns in ZoneMinder, so take the time to play with them!

Next month we'll have an article from John D showing you how to set up VOIP at home.



Ronnie is the founder and editor of Full Circle, and a self-taught artist who's website is at: <http://ronnietucker.co.uk>

If you want a grand 60 Minutes-style expose of dark deeds, conspiracy theory and armed insurrection - this won't be the book for you. It's altogether gentler than that. Enjoy the retrospective of the "hacker" movement and origins of the 1970's counter-culture; communes seeking freedom, peace and love, through the early examples of Brand, Stallman, Lessig and the pioneers of the hacker movement, which, remember, is about more than just getting free stuff.

Rop Gonggrijp gets all the best lines - well, they are his lines:

"I think most of what we're fighting still today in the world is incompetence. Most of what we're fighting is stupidity, and maybe a little bit of opportunism. There is also the ominous, control-seeking large corporate interests."

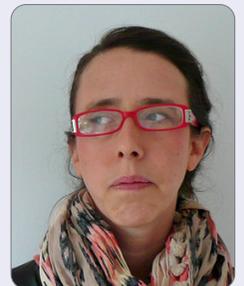
The cover illustration invokes Alice on the threshold of Wonderland, which chimes with the book's sub-title Adventures in Search of Techno Utopia. Hogge writes with the small, quiet voice of an Everyman, certainly no innocent, but in the spirit of the hacktivists, struggling to navigate foggy and potentially dangerous roads to the neon Utopia we are still promised. Gonggrijp again:

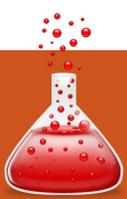
"We come in peace. We're not called Chaos Computer Club because we cause chaos. If anything, a lot of our collective work has actually prevented chaos by pointing out that maybe we should lay some decent virtual foundations before we build any more virtual skyscrapers."

Barefoot into Cyberspace is available as a download and as a paperback on Amazon.

Barefoot into Cyberspace: Adventures in search of techno-Utopia by Becky Hogge illustrated by Christopher Scally ISBN 978-1-906110-50-5 (print) | 978-1-906110-51-2 (Kindle)

Becky Hogge is interviewed in Full Circle Side-Pod Episode Ten: Dancing in Bare Feet





CLOSING WINDOWS

ZoneMinder CCTV - Part 3

Written by:

Ronnie Tucker (KDE)

Jan Mussche (Gnome)

Elizabeth Krumbach (XFCE)

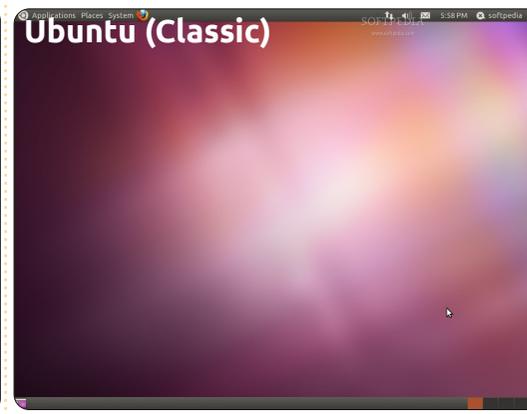
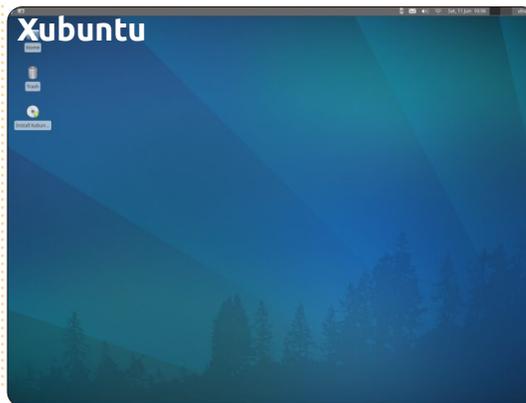
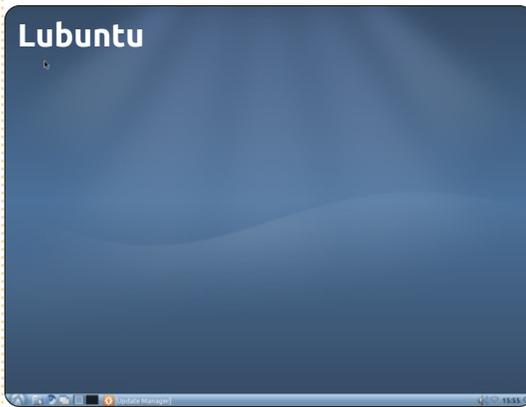
Mark Boyajian (LXDE)

David Tigre (Unity)

In this new section of Full Circle, I'd like to show certain features of Windows (XP in this series of articles, as I feel it's the most widely-used edition of Windows) for the sole purpose of showing beginners their *buntu equivalent. I say *buntu as I will not focus solely on Ubuntu - I will also include Kubuntu, Lubuntu, and Xubuntu, as they each have their own way of doing things due to each of them using their own desktop manager (Gnome/Unity, KDE, LXDE, and XFCE respectively).

DESKTOP

Windows XP has its familiar blue and green taskbar with a particular style and layout on each window that is opened. That is the Windows desktop. Each version of Ubuntu has its own desktop. Gnome (and Unity, the Ubuntu-only front-end to



Gnome) has a different way of doing things compared with KDE (used in Kubuntu), but each version (or derivative) has the same underlying Ubuntu foundation. So, whether you install Kubuntu or Lubuntu, you're still using a version of Ubuntu; it's just that the desktop looks, feels, and works, differently. For each Windows feature that I discuss, I'll attempt (with the help of my co-authors) to show how things are done using the four most popular desktops as mentioned in my introduction.

C:\ AND MY DOCUMENTS



Every Windows user is familiar with the 'My Computer' icon. Double-clicking 'My Computer' on the Windows desktop/menu presents a window showing your storage devices such as C:\ and any USB media.

Kubuntu has a similar option in its menu. Clicking the K button in your

CLOSING WINDOWS

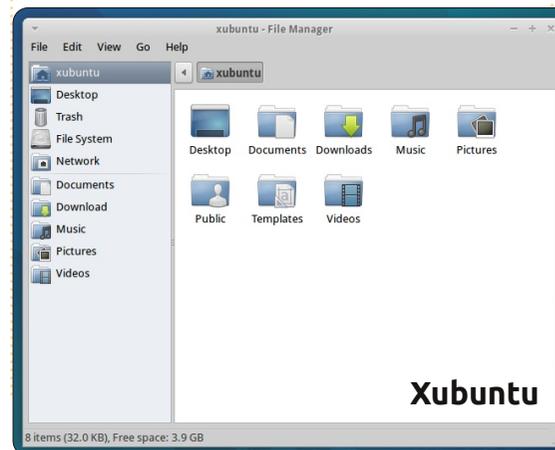
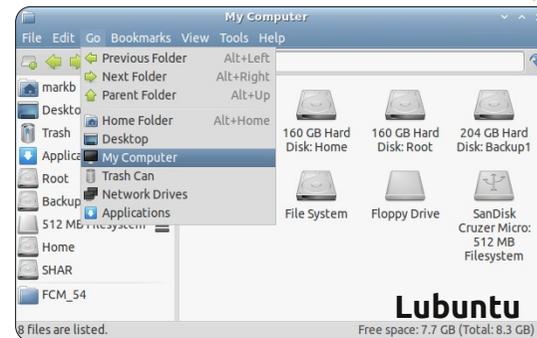
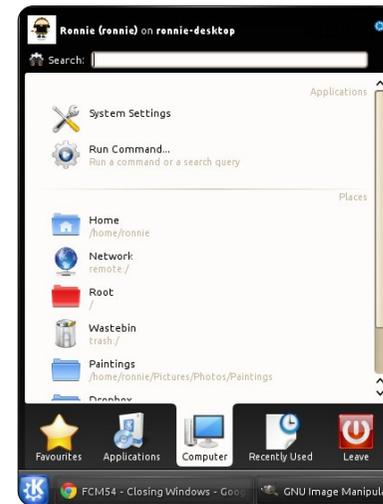
bottom taskbar will give you a menu with tabs along the bottom. Clicking the 'Computer' tab will give you access to your storage devices, just like in Windows' 'My Computer'. As does Gnome - you simply click the menu Places in the upper panel, followed by the choice: Computer. Unity (which is still under heavy development as I write this) does it by clicking on the 'Home Folder' icon in the launcher on the left hand side of the screen. The icon is an orange file folder with a house on it. Ubuntu will show the root of the hard drive on the left hand side, along with other storage devices and favorite folders. In the right hand side of the application, it will show the folders inside the currently logged-in users personal home directory.

Open the C:\, and you'll get a list of folders including things like 'My Documents', 'My Pictures', and so on. Linux (which is what Ubuntu is based around) works quite differently in this respect. The Linux file system has a 'root' folder. Think of that as your C:\ and your Windows folder. In other words: don't tinker with them! One folder in root is called 'home'. This home folder is where each user gets their own personalised folder - which

will contain all their stuff. You could, in essence, think of your personal home folder as your own C:\ drive, but, like Windows, your home folder has a list of pre-made folders for documents, video, and so on. Again, like Windows, you're free to create whatever folders you like in your home folder. Clicking K > Computer > Home will give you the Kubuntu equivalent of the C:\ drive. For Gnome, you click on the menu Places again, this time followed by Home Folder, and in Ubuntu it's done in the same way as before - click on the 'Home Folder' icon in the launcher. Also you can search through your files and folders by clicking on the 'Dash Home' icon in the launcher. Once inside the 'Dash', click on the 'Files and Folders' lens. It is located at the bottom center of the 'Dash', and looks like a piece of paper with the top right hand corner folded over.

Lubuntu has no exact equivalent to the Windows "My Computer". In Lubuntu, all access to storage devices (network and local devices) is done in the File Manager (called PCManFM). The File Manager, which is found by clicking the Lubuntu logo on the taskbar and selecting Accessories >

Kubuntu



Ubuntu (Classic)



CLOSING WINDOWS

File Manager, has two panes; all available local storage locations (drives and partitions) are displayed in the left pane above the horizontal divider.

For Xubuntu, you double-click on the 'Home' icon on your desktop to gain access to your storage devices. All equivalents to the My Computer folder (or Home in *buntu) are shown right.

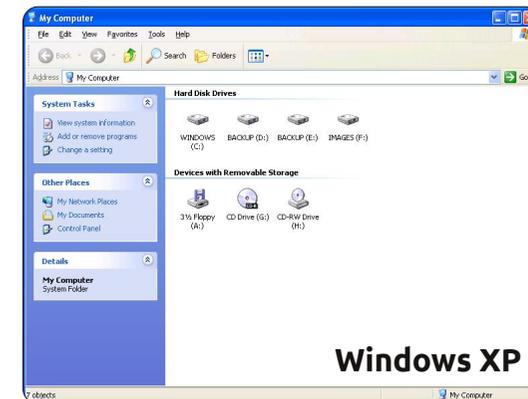
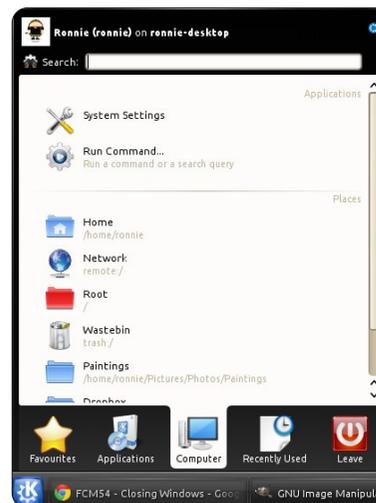
PROGRAM FILES

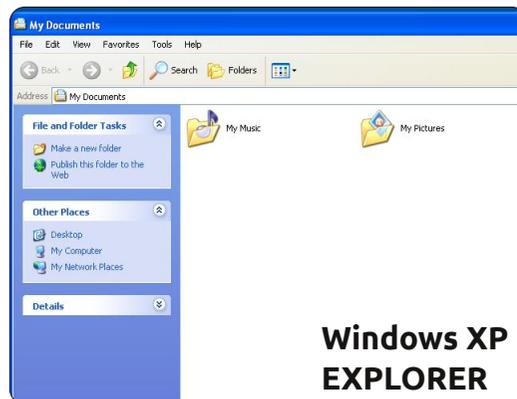
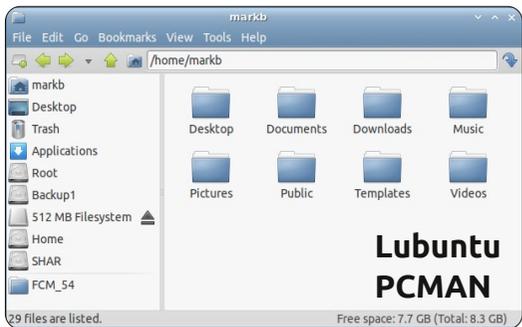
Windows has a special folder called 'Program Files' and it's in here that most Windows applications are installed. Linux, again, works differently. It installs applications either in your home folder (so that only you can run the application), or in the root (so that several users can run it), but, either way, the application is installed to hidden/restricted folders. Don't worry about this for now as we'll get to installing applications in a later article, but suffice it to say that you shouldn't manually delete applications as, just like in Windows, it can cause instability.

EXPLORER

To open folders in Windows, you double click an icon, and a window appears. That window is called Explorer. Windows Explorer lets you look at your own computer and the files on it, just like Internet Explorer lets you look at the Internet. Each Ubuntu desktop has its own equivalent of explorer. Gnome has Nautilus. Clicking the Gnome icon in the taskbar, then System Tools > File Browser, will show you the Gnome (Ubuntu) equivalent of explorer, and it will, usually, open by default in your home directory. Unity does this by, once again, clicking on the 'Home Folder' in the launcher on the left side of your screen. You can go back to the root and explore there if you wish, but try and change anything and it will ask you for a password. This is to prevent accidental deletion of critical files. It's also called the 'root' password. Think of it as being like the administrator password in Windows. Once it's entered, you have ultimate access to the file system and could, in theory, wreak havoc. Kubuntu has its KDE equivalent of explorer called Dolphin; it's found by clicking K > Computer > Home (or K > Favorites > File Manager) on the taskbar.

Kubuntu



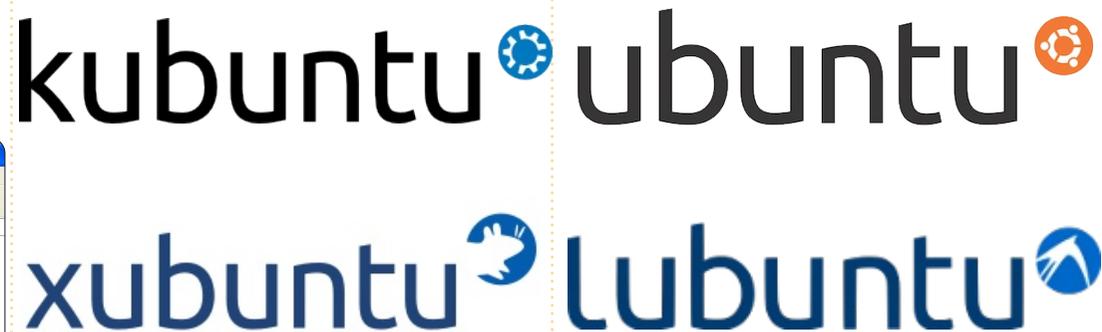


Lubuntu (using LXDE) has the File Manager, and it's found by clicking the Lubuntu logo on the taskbar and selecting Accessories > File Manager. Xubuntu (XFCE) has a file manager called Thunar - which can be accessed by clicking on the Xubuntu mouse icon at the top left of your screen and going to Accessories > File Manager. Like Windows, you click the X icon in the corner of the window to close it - with the other two icons letting you maximise and minimise each window. With Unity, the buttons to Close, Maximize, and Minimize, are located on the top left of the window when it is not full-screen, but, once the window has been maximized, the buttons will be

hidden in the main panel in the top left hand of the screen. You have to move your mouse pointer up to the panel for the buttons to reveal themselves.

We could devote an entire issue to the items within Explorer and the *buntu equivalents, but have a look at the menu items in your desktop's windows. Most of the items are quite self-explanatory, and I'm sure we'll touch more upon them in future articles.

Next issue, we'll talk about the *buntu equivalents for the ever familiar Control Panel and Device Manager.



MY STORY

Written by Kavinda Bandara

I'm a doctor in Sri Lanka, currently waiting till I get my first appointment.

I had my first experience with GNU/Linux when I came across Redhat, which was used by one of my cousins, in 2004. Then I got to know about Ubuntu through him, and he made me get free CDs of Ubuntu and Kubuntu. It was in 2006, when I was a med student, I tried it on my home computer, but the experience was not that nice, as I didn't have Internet, hence no further source of information.

I had my laptop in 2007. It was an HP Pavilion DV9000 with 1 GB RAM. The default OS was Vista, and you can imagine the picture. It was good at first sight, but became creepy and annoying whenever I used it. And it was consuming the majority of my RAM and 160GB hard disk, so I wanted a solution.

I again came across Ubuntu, and learned that it had improved a lot, with frequent updates, upgrades, and new versions. So I requested

the CD in shipit, and could get them delivered to home within a couple of weeks. First, I tried it as a live-CD, and, once I was comfortable enough, I installed it as dual boot with Vista. I had a big learning curve ahead, so I waded carefully, and took my time to repeatedly go through the try-break-mend-learn cycle. When I could get Internet later, as it was then somewhat affordable, I could move fast with great forums and support pages maintained by experts. Ultimately, I even could identify the script for prepaid Internet connections of my ISP, which was not available according to their customer care!

I continued to move with each version of Ubuntu, which became simpler, user friendly, and attractive every time. Every time it was a clean install, but I stayed with dual boot. When 10.10 arrived, I decided to give up Vista. I upgraded to 11.04, but, since it had many bugs, I reverted back to 10.10. Now I'm fully comfortable with Ubuntu and always recommend it to others. And I have

started a blog on Ubuntu, and I try to continue it - even with my busy schedule.

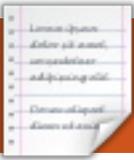
Now, my friends find my laptop being a "hotspot" to have a peep in, but still many stay with Windows. Main fear they have is the learning curve ahead of them. But I was able to change one of them to Ubuntu, and he found it so easy that he stayed with it. Also, my girlfriend loves my system, and knows how easy it is. My sister recently requested dual-boot with Ubuntu in her new laptop.

The drawbacks I came across were many. We had some software that need windows to run, but I could manage with alternative tools, WINE, or with a virtual machine with windows XP. And the false belief of being difficult-to-use is another deeply established idea, that is strengthened by the market sellers and the authorities we have. So, they tend to buy an expensive OS, or have a

pirated version and spend some more money on software, specially on virus guards. Reliability is another issue for them, but not for me. This is far more reliable than Windows.

I would like to have a good organization/forum/community such as Ubuntu community in Sri Lanka, as it would solve many problems we, the users and the newcomers, have. This is a community product after all, right?





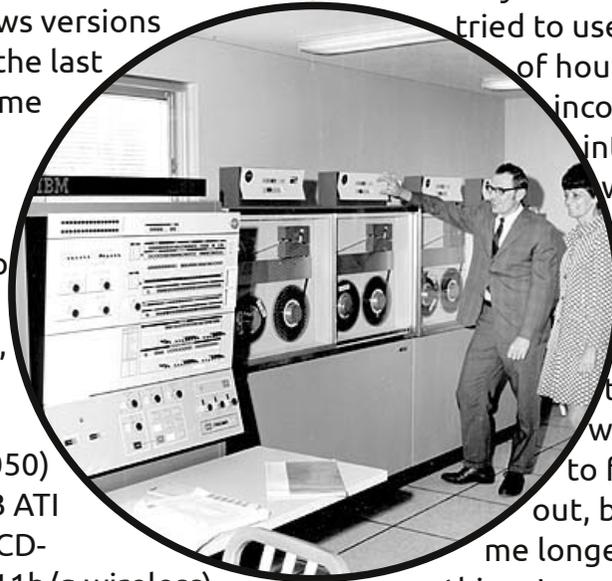
MY STORY

Written by Jim Roche

My history with computers dates back to the 1970's starting with using Fortran on a Honeywell mainframe at University. This was followed by Basic on HP minicomputers and afterwards some experience with IBM mainframes and DEC VAX and PDP systems. My first personal computer was an Apple IIe running CP/M followed by adventures with the DEC Rainbow before moving on to IBM PC XT, DOS and later Windows. I can actually remember Windows 1.0 becoming available in 1986 and being very unsure as to it's acceptance. Around the same time, I had a Mac SE and an Apple Laserwriter for desktop publishing. In short, I worked with multiple hardware platforms, various operating systems, many different applications and became quite comfortable with all of them.

The creation of Linux in the early 90's was of some interest to me but I admired it from afar as I was busy with other things. Ubuntu was the first distribution I ever used and that was the Feisty Fawn

release in 2007. However, I always installed them in a dual-boot arrangement and never really committed to Ubuntu. In the meanwhile, I had pretty much reached frustration levels with the various Windows versions and Vista was the last straw. It was time to commit: I decided to dedicate an IBM T42 laptop (Pentium Mobile 1.7GHz, 1.5GB RAM, 60GB HDD, 15" XGA+(1400x1050) TFT LCD, 64MB ATI Radeon 9600, CD-RW/DVD, 802.11b/g wireless) to Ubuntu and did that with Lucid in 2010, followed by Maverick and Natty. As I moved through the various releases over the years, the improvements seemed slow and steady rather than dramatic to the point where a Natty clean install went without a hitch. Previously, I had tried the upgrade route from Maverick to Natty but had problems I was unable to resolve.



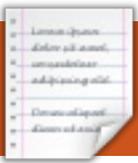
Of course, Natty arrived with Unity and that caused me some bother. My comment in Full Circle #49 was "I don't like it. Immediately after installing Natty, I tried to use it for a couple of hours but found it inconvenient and intrusive. Things were not where I expected them to be, or didn't do what I expected them to do. After a while, I was able to figure things out, but it still took me longer to do anything. I was glad to have the option to switch back to "classic". Since then I have taken the time to switch to Unity and now use it full time with fewer and fewer issues. There are still some odd things like the inability to move the Launcher and the consequent "conflict" with the Back button on Firefox.

Having worked with Maverick and Natty daily for over a year, I

can see no reason not to recommend Ubuntu to other people although I am frequently surprised by the number of people who know little of Linux and less of Ubuntu. However, given the costs associated with the Windows route, it makes a lot of sense to make the switch. The main concern is the compatibility issue with applications running on other systems. Unfortunately, that means compatibility with MS Office and web sites optimized for or requiring Internet Explorer. Again, these issues are very minor in all practical applications.

At this point, I have one other PC running Windows 7 mainly for Adobe Lightroom photo management software. As soon as there is an equivalent Linux product, that will be the end of Windows on any of my PC's. I am waiting for the latest release of Darktable with great interest.

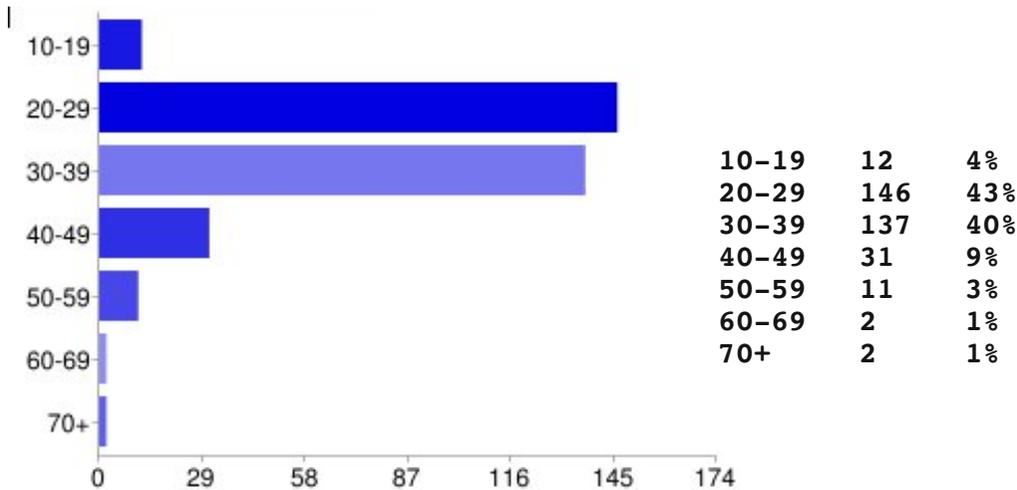
I also have an older PC running XP which is used for occasional browsing and this will be my next upgrade project.



I THINK...

Last month's question was:
What age do you think the average Linux user is?

What age do you think the average Linux user is?



I think this is the age range where the majority of Linux users are today -- most are college students and young professionals. (20-29)

Young people might have more knowledge to separate a computer from an OS, and they are willing to try something new. (20-29)

No longer caught up in fads and peer pressure. (40-49)

I imagine younger users don't

really care about their choice of OS, and only know Windows or Apple OS. (30-39)

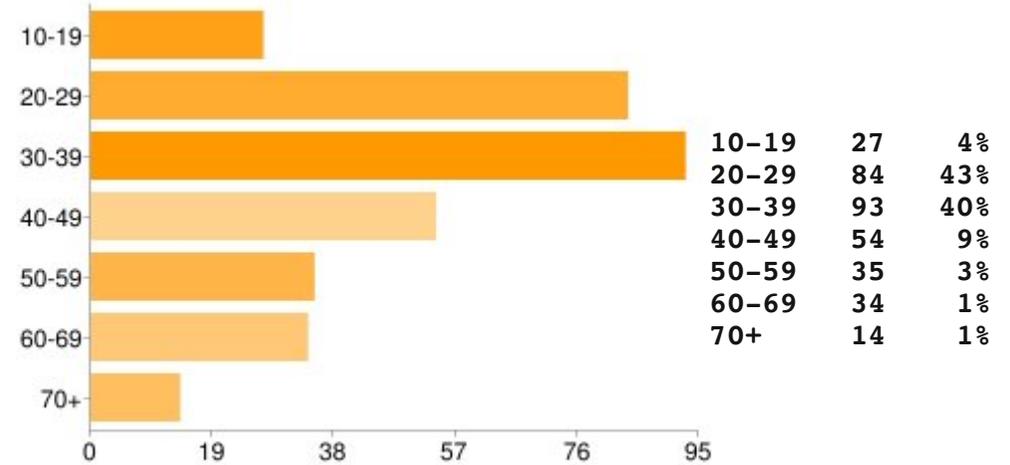
Silver Surfers want a fast, easy, dependable PC! (60-69)

Visual observation at Ohio Linux Fest (40-49)

When they become aware of the Microsoft tax! (30-39)

That was the age I got started, and older people usually want the corporate jobs. This means

... and what is your age?



Windows is predominantly used. (20-29)

I see more and more young people using Linux, whereas I think most of the older people

just stick with the preinstalled Windows, which just works. (20-29)

The question I'd like to pose for FCM#55 is:

Did you upgrade your current *buntu to 11.04? If so, how? If not, why? Or did you do a fresh install?

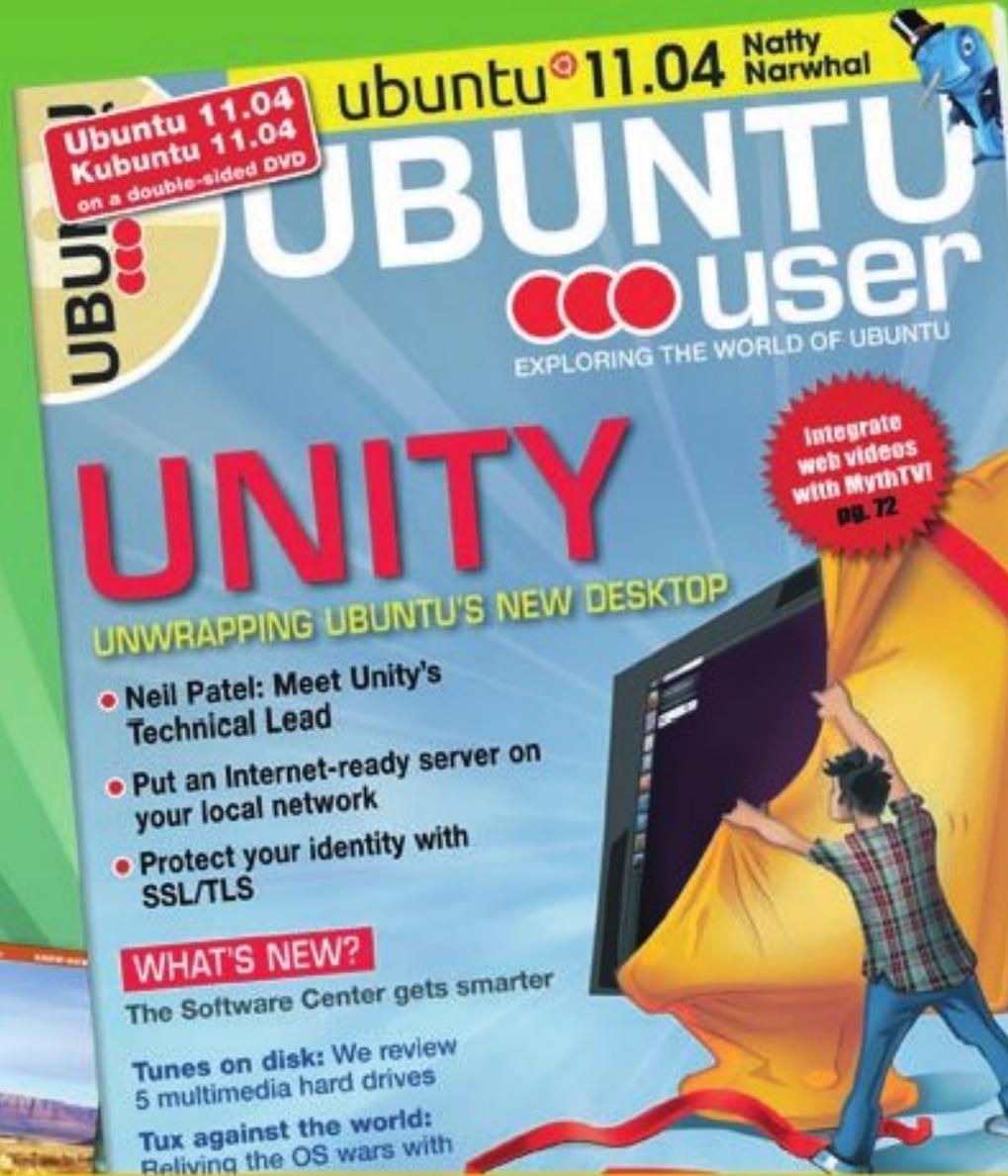
To give your answer, go to: <http://goo.gl/huUna>

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As per the results of the latest research, working with more than one monitor can increase your productivity by 9 to 50 percent. Often, modern PCs have two video outputs, but what can we do if we have a graphics card with a single output and we want to connect two or more monitors? In this situation, it is not possible to connect the second screen without changing the video card. A solution can be to connect the second monitor to another PC so you can work with two screens, but also on two different computers with two sets of keyboard and mouse. The solution is Synergy (<http://synergy-foss.org/>). Synergy is a free and open-source software released under the terms of the GNU General Public License. With this software, you can share your mouse and keyboard between multiple computers, where each PC has its own display.

The first version of Synergy was created in May 2001 by Chris Schoeneman; it was written in C++ and it worked with the X Window

System only. In 2009, Chris Schoeneman, Sorin Sbârnea, and Nick Bolton started a fork of Synergy named Synergy+ with the aim of making a cross-platform software. Now, this fork project has been merged back into Synergy. The latest stable version is 1.3.7, while 1.4.3 is a beta version.

Synergy uses a local area network and it can share mouse, keyboard, and clipboard between two or more PCs. Another advantage is that Synergy is supported on Windows, Mac OS X, and Linux, so each PC can have a different operating system. In this manner, you do not need emulators or virtual machines, each program runs on its operating system. Clipboard works with a small ftp client-server application within the main program which allow you to copy and paste between PCs, regardless of their operating systems. Redirecting the mouse and keyboard is as simple as moving the mouse off the edge of your screen. Key presses will be delivered to whichever computer the mouse-pointer is located in.

The program is based on a client-server architecture. The server defines which screen-edges lead to which machines, and share its mouse and keyboard. Clients are connected to the server to offer the use of their desktops. With Synergy, you have a multiple monitor system with the computing power of many computers, and you can work on many operating systems concurrently.

You can download the program from <http://synergy-foss.org/download/>. Here is an example of a configuration file for the server (two PCs, pc1 on the

right and pc2 on the left, both in front of you).

```
section: screens
    pc1:
    pc2:
end
section: links
    pc1:
        left = pc2
    pc2:
        right = pc1
end
```

If you do not like to write config files, you can install a GUI, for example Qsynergy (<http://code.google.com/p/quicksynergy/>). The version for Windows has the GUI within the installer. To run the programs use these



REVIEW: SYNERGY

commands:

```
client: synergyc ip_addr_pc1
```

```
server: synergys --config  
filename.conf
```

The main problem of Synergy is security, if you work on a non-trusted local network. In fact, communications are not encrypted and key presses, mouse movements and clipboard contents sent to Synergy clients can be easily sniffed on network traffic. You can solve this problem by configuring an SSH server so all communications are tunneled through a secure encrypted connection. In this page there is a guide to configure Synergy with SSH: <http://synergy-foss.org/pm/projects/synergy/wiki/Security>

For my own experience, I use Synergy every day at work, where I have a laptop and two servers. The laptop has its own screen and a second monitor, while each of the servers has a video card with only one output. I use all PCs with a keyboard and a mouse connected to one of the servers. When I need a Windows program, I do not need emulators or virtual machines, I

simply restart the laptop in Windows and I can work as before, with my four "monitors-PCs" system.

Score: 9/10

Good:

- Works on Windows, Linux, and Mac OS X, and allows communications between them
- Clipboard works between PCs, regardless of their operating system
- You can connect several PCs (and monitors), and control all of them with only one keyboard and mouse
- No latency for mouse movements and key presses

Bad:

- Communications are not encrypted
- Sometimes does not write some special character on a client, even with the same operating system (é, ë, â, etc.)
- If the PC with the server is locked, you cannot use client PCs

A PLEA ON BEHALF OF THE PODCAST PARTY

As you often hear in the podcast, we're calling for opinion topics for that section of the show.

Instead of us having a rant about whatever strikes us, why not prompt us with a topic and watch for the mushroom clouds over the horizon! It's highly unlikely that the three of us will agree.

Or, an even more radical thought, send us an opinion by way of a contribution!

You can post comments and opinions on the podcast page at fullcirclemagazine.org, in our Ubuntu Forums section, or email podcast@fullcirclemagazine.org. You can also send us a comment by recording an audio clip of no more than 30 seconds and sending it to the same address. **Comments and audio may be edited for length. Please remember this is a family-friendly show.**

It would be great to have contributors come on the show and express an opinion in person.

Robin





FoxPro

What I need is a substitute for Microsoft FoxPro - the database program Microsoft bought from the originator, and then effectively buried. I use FoxPro to run a big youth baseball league. I don't need a big multi-user relational database program: I am the only user. But Fox has a great structure for what I do, and I hate to leave it behind in order to switch to Linux. Does anyone know of a good substitute that does not require learning an entire new database manipulation paradigm?

Bob Nelson

Ubuntu To The Rescue!

I'm an Ubuntu user now for 3 years. I still work on Windows systems. The other day, I showed up at a friend's house who was receiving the "blue screen of death". I attempted to get the machine to boot but kept receiving

"do you want to format the drive?" message. I took the hard drive home and decided to take a look at it with my Ubuntu system. Guess what, one pop up window - and I'm viewing the hard drive content. Back to my friend's new machine now, and trying to copy XP external hard drive data to a win7 system, and can't get past the permissions. After researching on the net, I saw advice to use Ubuntu cd to copy files. Why is it that Ubuntu has to bail out Windows all the time? Anyways, with Ubuntu, I'm able to copy his recent files off of his hard drive, and he is one happy camper. The more I use Ubuntu, the more I'm happy with it.

Bob K

Genealogy Addition

This page, www.fileyourpapers.com, has some great ideas concerning filing paperwork so that there is a minimum of fuss in finding what you're looking for. For Gramps, try

the method shown for PAF - I think the numbering schemes are the same.

Dave Rowell

Garmin GPS

Iwould like to see an article on "How to Update my Garmin GPS" - using Ubuntu or any GNU/Linux distribution. Garmin seems to be stuck on using MS products, and forcing their customers to do the same. Also, I think a small article in each month's issue about some vendor that all of us should write to requesting that their product be made compatible with GNU/Linux, preferably Ubuntu. Maybe starting with Garmin, TurboTax, and Netflix - even though Netflix is going down the tubes. I stopped using TurboTax and now use TaxSlayer.

Not bad for a 75-year-young avid Ubuntu user.

Jim Bainter

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[ubuntuforums.org/forumdisplay.php?f=270](https://ubuntuforums.org/forum/display.php?f=270)

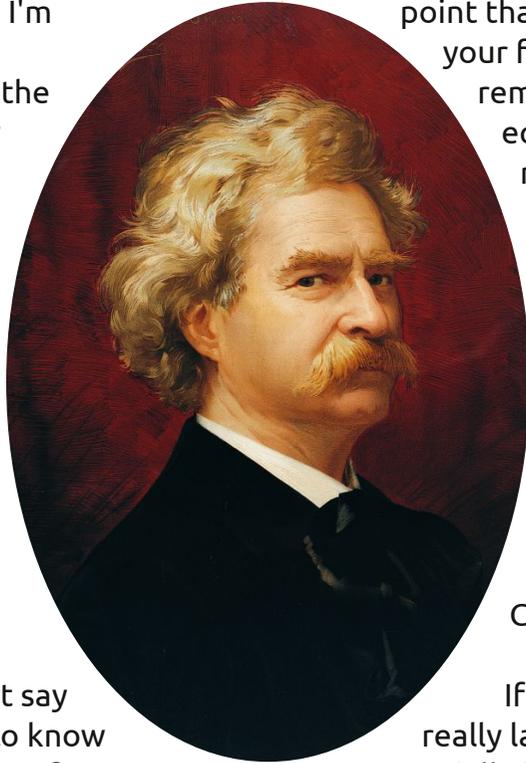
If anyone out there can help Jim with his Garmin GPS, please drop me an email with info, or an article, and I'll pass it along. - ED

First Cousin - Twice Removed

Iwant to thank the editors, cast, and crew, and especially Dave Rowell, for the review/article on GRAMPS in FCM#51. It motivated me to get off my duff and begin my own family research. I look forward to FCM#52, and the article showing how to get started. I have begun using GRAMPS, but, it is rather counter intuitive, and I'd rather

spend my limited time doing research than learning how to use the program. I'm starting to get overwhelmed by the amount of family data that I am finding, and I am just now starting to correlate that data, and I think this is where GRAMPS is going to be a huge asset.

It's like the commercials for ancestry.com that say "You don't have to know what you're looking for; you just have to start looking!" One of their commercials is of a woman who says she found out her grandparents lived next door to the Wright Brothers and she says, "How cool is that?" Well, I think I can top that. How about knowing all your life from family folklore that you are related to Mark Twain (Samuel Langhorn Clemens), but never knowing the exact relationship. Then you find very concrete evidence, without much searching or cost, that Mark Twain



was actually your grandfather's first cousin, and realizing at that point that Mark Twain is your first cousin-twice removed. That's the equivalent of realizing that Tom Sawyer, Huckleberry Finn, and even Becky Thatcher are really your cousins and that the former slave, Jim, is your favorite uncle. "How super-duper COOL is that?"

If you are part of my really large family, especially if you are on the British side of the pond, please go to genforum.com and look for the thread 'Clemens in Virginia', and see what we have come up with so far, and add anything to it that you can. It is evident that there is an African-American branch to the family. How and when did that branch occur? Bruce Spingsteen's saxophonist, Clarence Clemens recently died. Was he a close cousin also? Inquiring minds (mine!) want to know. I can't speak for everyone in my family, but, for me,

that would be almost as huge as discovering that I'm related to Mark Twain.

John D. Clemons
jclemons@naxs.com

Upgrading 11.04

A quick remark about the article "Upgrading From 11.04" on page 42 of FCM#53:

When upgrading to a newer version, or re-installing the same version, or installing a new version it is always good to back-up your data. But, when you are really careful and know what you are doing it is not necessary. So, if you don't have means to make a back-up outside your computer read on. There is, however, one thing you need to have done already: give your home folder a separate disk or partition. In other words don't let it be inside the installation of your OS. Have a disk or partition for "/", one for "/home", and maybe others for "/var", "/usr" or whatever.

During installation of a new

version or re-installation of your present OS you have to make sure you choose the right answer when the installer comes to the question where you want to install. Don't choose entire disk, but choose something like: Manual, or choose: Let me decide. (I don't have the right text here at the moment). This way you can install the OS on the same partition as you have done before. Simply point to the old "/" partition, give it the name "/" again and format it. Do the same for the other separate partitions (var, usr, ...) but for "/home" you only point to the partition and DON'T format. This way it will be included in the installation but you will keep your data.

I have done it this way for many (re-)installs and never lost a thing. I must say I do make back-ups regularly (every week) and before a new install. But I've never had to use the back-up because I never lost my data.

Jan Mussche.



Q&A

Compiled by Gord Campbell

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

Q I am using Evolution for my email. I cannot move an email from Junk Mail to another folder, it just makes a copy of the message, still in the Junk Mail folder.

A (Thanks to **Barry** in the Yahoo Ubuntu Linux group) Mark it as 'not junk' before trying to move it.

Q I am using the long-term version of Ubuntu, but I would like to have later version of applications.

A Have a look at this article in the Community Docs: <https://help.ubuntu.com/community/UbuntuBackports>

Q I'm looking for Linux software that does what the following software does for Windows:

EMCO MoveOnBoot 2.2.5
Unlocker 1.9.1
XPLite/2000Lite
nLite
Faronics Anti-Executable 3.40 (or)
Faronics Deep Freeze 6.62
DriveShield Plus

A Most of those are not required for Linux. Remastersys is similar to nLite or Deep Freeze.

Q In Libre Office or Open Office, how can I find and replace paragraph breaks?

A (Thanks to **David Shaw** in the Yahoo Ubuntu Linux group) In the Find and Replace dialogue, click on "More Options." Tick the 'Regular expressions' box. A list of common regular expressions can be found at http://help.libreoffice.org/Common/List_of_Regular_Expressions

For instance, to find a tab, or

replace with a tab, use `\t` in the relevant box. Paragraph breaks are found/replaced with a '\$' symbol. Should you actually want to find/replace a dollar symbol, you need to use `\$`, or switch regex off.

Q I have 11.04 installed without problems for about 2 weeks now. I changed something in compiz, and now, when I started up the computer, there is no menu on the left or the top.

A Follow this troubleshooting guide: <http://www.tuxgarage.com/2011/04/missing-top-and-side-panels-in-unity.html>

Q I want to buy a monitor - what's compatible?

A Any monitor should work just fine, as long as your PC has the right connector for it (HDMI/DVI/VGA/Displayport).

Q Wind Mobile offers a mobile broadband service with the E1691 device from Huawei. How can I use it?

A http://hireknowledge.ca/pdf/Tutorial_Huawei_E1691_Linux_v1.0.pdf
This tutorial might also provide hints for people with other Internet sticks on other wireless networks.

Q I installed Ubuntu 9.04 from CD to an old computer I had lying around. I tried installing versions 10 and 11, but the computer ran very very slowly, while with 9.04 it's pretty good.

Q & A

Trying to do `sudo apt-get update` fails on everything because it can't find the files online. I read that version 9.04 is not supported and even these old files are not available anymore. What should I do?

A Try the current version of Xubuntu or Lubuntu.

Q I have an AMD Radeon HD5770 graphics card. The GPU cooling fan always runs at full speed, regardless of GPU load. It makes my PC sound like a jet-plane taking off.

A It turned out that installing the FGLRX driver solved the fan issue.

Q I use Ubuntu 10.04. My HP B110A prints fine, but it won't scan.

A Install the latest version of HPLIP:

```
sudo add-apt-repository
ppa:hplip-isv/ppa
sudo apt-get update
sudo apt-get install hplip
```

Q I like the Xfce desktop environment, but the only problem is that I can't run any programs because I have no idea how to give it permission to run. For example, I've installed a .jar file and have Java 6 Runtime installed, but I don't know how to give it permission to run.

A It turns out that a jar doesn't have to be tagged as executable to run. From Terminal, CD to the folder where the jar is, then issue this command:

```
java -jar
```

(where jar is the name of the file).

Q If I download the 64 bit 10.10, and install from the live usb, will it "overwrite" the old 32 bit install?

A Yes.

Q I can no longer run Update Manager because I'm getting the "Not enough free disk space" problem.

A Running the command:

```
df -h
```

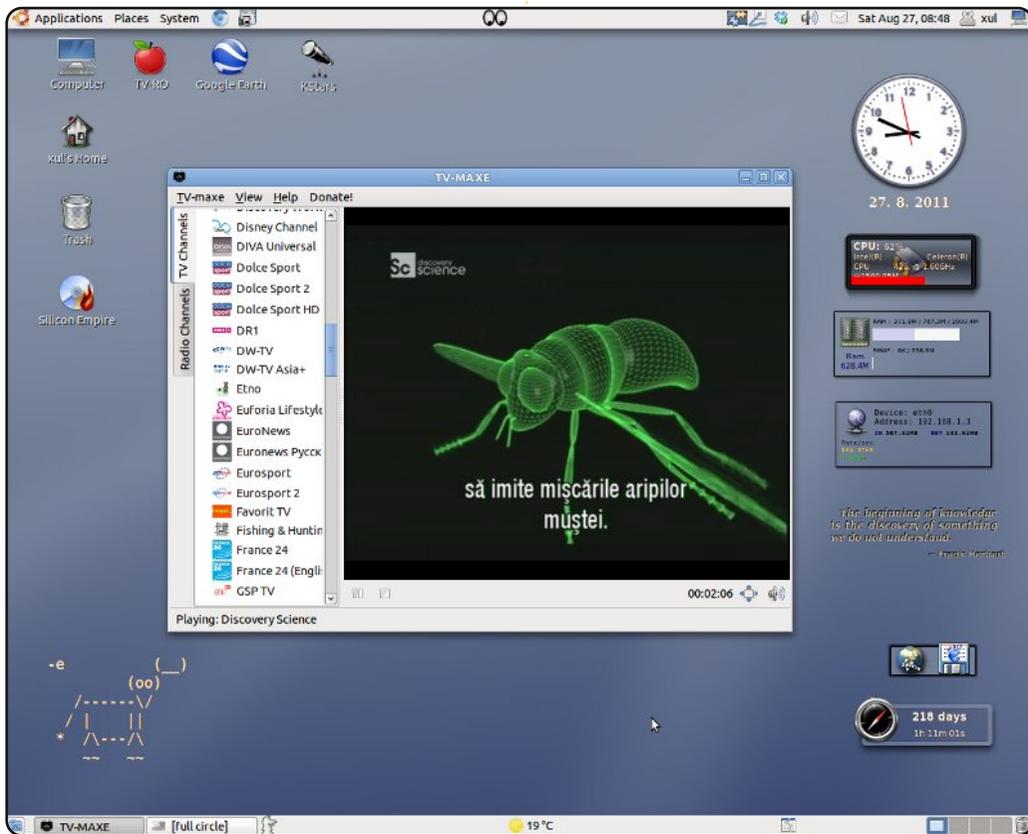
showed that only the boot partition was low on space. Run Synaptic Package Manager to completely remove old kernels, then:

```
sudo update-grub
```



MY DESKTOP

Your chance to show the world your desktop or PC. Email your screenshots and photos to: misc@fullcirclemagazine.org and include a brief paragraph about your desktop, your PC's specs and any other interesting tidbits about your setup.



This is my desktop screenshot. My OS is a homemade mixture from Debian base, Ubuntu, Back Track, Hymera, and a lot of extra repositories. I'm using a lot of software for astronomy, radio communication, and spectral analysis.

PC specs:

Processor Intel Celeron 1.6Ghz

1G Ram

Alternating Gnome with OpenStep and BlackBox

Bratu Florian



This is my screenshot on my laptop, it is an HP from 2006, but works nicely to surf the Internet, write mail, read newspapers, and use the bank. I like Unity - easy to use on the laptop - and I use gkrellm to monitor.

Per Gylterud





Here is my current Ubuntu 11.04 desktop.

PC Specs:

RAM 2GB

Processor core-i3 2.2GHz.

Resolution:1366x768

Laptop: lenovo thinkpad E420

Simple efficient ubuntu classic desktop. I use Avant Window Navigator, Divergence IV – “A New Hope” GTK2 theme with single panel at the top for better efficiency to do my daily tasks.

Nilimoy Buragohain



I am running Ubuntu 10.10 on a Dell Vostro laptop - with Intel core 2 duo, 2GB RAM, 160GB HDD, resolution is set to 1280*800. I have been using Ubuntu since 8.04, and, since then, I am in love with it. I am using Ambiance theme with wallpaper from Ubuntu-art.org. The bottom dock is aligned using AWM manager; for the gadgets I am using screenlets. My friends ask me which operating system is this!! (open mouthed).

Nityanand Sharma



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... or you can visit our **forum** via: www.fullcirclemagazine.org

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