Full Circle

THE INDEPENDENT MAGAZINE FOR THE UBUNTU LINUX COMMUNITY

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FOREMOST DATA RECOVERY
HOW TO RECOVER DELETED FILES

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#An alias to make the command more detailed alias ls = "ls -la --color=always --classif

EDITORIAL

Welcome to another issue of Full Circle!

t's March 2012, and that can mean only one thing: it's our birthday next month! It was in the showery month of April that the first issue of Full Circle was released. Expect next month's issue to, I hope, contain free party hats and a reflective article or two.

But back to this month. We've got the usual Python and LibreOffice articles, an article on making a USB stick, one on adjusting the virtual disk size in your VirtualBox machine, and an article on how to create your own greeting cards in LibreOffice. If you've ever accidentally deleted something important then you should read Charles's Linux Labs article on Foremost for recovering deleted files. Ubuntu Games takes a bit of a detour with Riku discussing SNES emulation, while Jennifer interviewed the makers of Tomes of Mephistopheles. For those of you fighting with Unity, you might want to read My Story this month, which talks about an application called MyUnity which lets you easily configure Unity.

If you haven't checked out our website recently, you'll find a couple of new Special Editions. The most recent (as I write) is from the virtualization series that we did a little while ago, with more Special Editions from Robin in the pipeline. FCM#58 is now available as an EPUB, while Jens is playing catch-up with back issues. I also want to thank all of you who've subscribed to the FCM issues on Google Currents. We need over 200 subscribers per issue to appear in the Google Currents search results, and FCM#58 has over 400 subscribers. You folks are awesome!

All the best, and keep in touch!
Ronnie
ronnie@fullcirclemagazine.org

Full Circle Podcast

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

Hosts:
Robin Catling
Ed Hewitt
Dave Wilkins

http://fullcirclemagazine.org

AUDIO MP3   AUDIO OGG

LINUX NEWS

Finnish game developer *Frozenbyte* is pleased to announce that **Trine 2** will be released for the Linux platform on April 2, 2012. Trine 2 will be available via the Humble Store widget on the official website http://www.trine2.com/.

The "Humble Store" is a new type of widget where customers can buy the game direct from the developer. Currently the store sells the Linux copy as well as keys for Steam. Other Non-DRM versions will be added next year to all buyers.

"We see Linux as a very potential platform and are glad to see more developers embracing it. New campaigns like the Humble Bundles have really paved way for the Linux gaming community and we see it as a growing market that we really want to be part of. And what a community it is, these guys will gladly pay even extra for their game and also help you fix it." said Mikael Haveri, the Marketing Manager of Frozenbyte.

Jukka Kokkonen, the lead Linux coder had this to say about the process:

"Linux porting of Trine 2 turned out to be mostly easier than expected as the game had already a working Mac OS X version, which also used an OpenGL renderer. The initial OpenGL rendering port took less than two days, after which the renderer was mostly functional, with only bugs to iron out."

The original Trine was released in 2009 and has since sold 1.1 million copies. Largest contributors to the unit numbers have been Steam and the Humble Bundle, with PlayStation Network and Mac App Store also generating major sales. In addition, supporting growing platforms like OnLive and Linux have played notable part in keeping Trine 1 viable and a well-selling title to the day.

Trine 2 for Linux will be available through http://www.trine2.com/buy/. The regular edition is priced at $14.99/12.99 euros/11.99 pounds. The Collector's Edition is available for $24.99/19.99 euros/17.99 pounds. The Collector's Edition includes a digital artbook and the original soundtrack by the acclaimed composer Ari Pulkkinen.
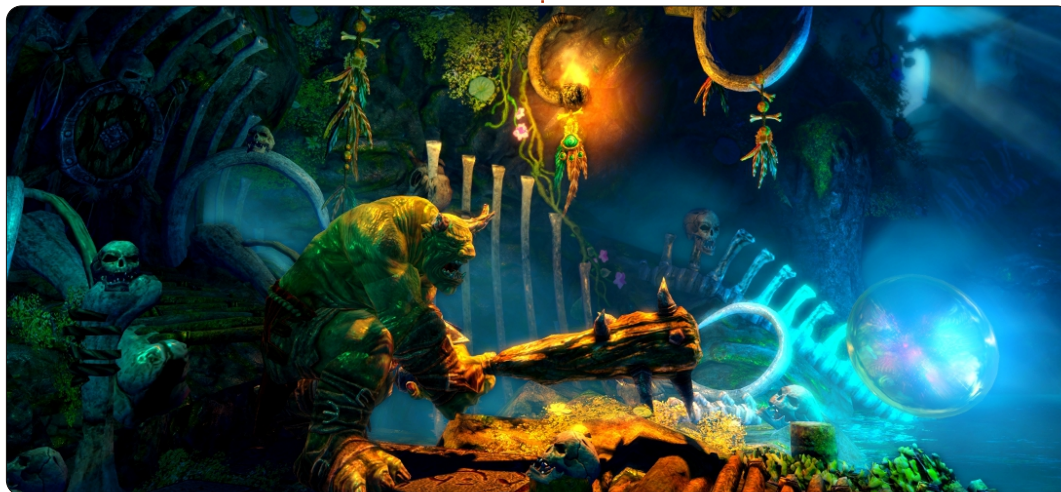
EPUB

Finally, we have mobile editions of *Full Circle* on the downloads page. At the moment there are only a couple of issues online, but we're hoping to have back issues online shortly. If you've any problems with the epub file/formatting, you can drop an email to Jens at: mobile@fullcirclemagazine.org

Big thanks to Jens, Oppih and the beta testers for making them a reality.

FC Notifier Update

The **Full Circle Notifier** is still at 1.0.2, but the PPA has been updated for Oneiric. FCN is a small application that sits in your system tray and will announce issue/podcast releases, and can be set to download them too! **For more info, see the FCN Google Group:** http://goo.gl/4Ob4

Written by Lucas Westermann

Two months ago I wrote about using SSH and Rsync. This month, I'd like to introduce you all to a trick I've recently started using for wirelessly syncing my android tablet, as well as outline a few other useful tricks I use, which others might find useful. Specifically, how to display a custom date in a foreign language (in Conky), how to spruce up your Vim interface (and PS1 prompt), and a script to randomly select an image for your background every 15 minutes. I realize that GNOME can probably take care of your backgrounds for you, but someone may still find a use for it. For anyone who wants an idea of the date and PS1 adjustments, check out this month's screenshot on my deviantart page (http://lswest.deviantart.com/#/d4se2tv)

Android

The things you'll need for this are as follows:

On the Android device:
QuickSSHd (as far as I remember, it's free). Once it's installed, simply check the IP address of the device, and give it a password/port. To start the server, hit the button that says "off" (so that it reads "on").

On your PC:
sshfs, and a mount-point (preferably in your home folder) for the device.

A brief explanation of the process:

I simply mount the sdcard folder using sshfs, and then copy files over as I would using USB (which never worked very well for me and my Asus TF101 Transformer eeePad for media files). As for how to do this, see below.

Mounting can be done with:

```
sshfs root@127.0.0.1:/sdcard/ ~/tf101 -p 2222
```

Just like with rsync, you need to specify the path after a colon, and

to avoid input/output errors on the mounted folder, you must have a closing slash at the end of the path. The second path is the mountpoint, and the -p 2222 is simply the port that QuickSSHd is listening on.

After this, copy the files to the folder with whichever method you prefer.

As an optional final step, I find that my Music app does not refresh after these files are added. The only way I've found to fix this is to go to the File Manager, and rename the copied file/folder, forcing the tablet to re-load the information.

Custom date

I've been learning Japanese for a while now, and decided to display the date in Japanese (both for practice, and to save space). However, it was not so easily done, as I use Conky for my status bar in XMonad. My solution to this is to write the following code-segment, which I call every few seconds from my conkyrc. You may need to run the following command to get the

right formatting (this applies to any locale you may decide to use).

```
locale-gen ja_JP.UTF-8
```

Code-segment:

```
#!/bin/sh

LC_ALL="" LC_TIME=ja_JP.UTF-8
date +'%A, %-d %B%Y  %H:%M'
```

You'll of course need to change the date format into the string you'd like (thoroughly documented in the man page).

Vim & PS1 (Powerline)
Powerline homepage:
https://github.com/Lokaltog/vim-powerline

The easiest way to install Powerline is to use vundle. Instructions for installing Vundle are on the github page, here: http://github.com/gmarik/vundle. Once you've installed it, you'll need to add the following three lines to your .vimrc:

```
set
rtp+=~/.vim/bundle/vundle/
```

```
call vundle#rc()

Bundle 'Lokaltog/vim-
powerline'
```

After which you'll need to open vim and type :InstallBundle (requires git to install)

Once you've installed it, you'll need to patch the font you're using with the script found under the folder fontpatcher (full path will be something like ~/.vim/bundle/vim-powerline/fontpatcher). The readme file there will guide you through the patching.

Once your font is patched (and your font-cache reloaded with the command fc-cache), you can add the final line to your .vimrc to get arrow shapes.

```
let
g:Powerline_symbols='fancy'
```

If you find this to be something you want for your prompt as well, you simply need to make sure you're using the patched font, and copy the arrow from the vim line into your .bashrc prompt line, which I sadly can't supply, as it would require a patched font. Make sure you set the background

behind the arrow glyph to the next color, and the foreground to the previous, to achieve the arrow appearance.

Wallpaper

This script, as I have it written, requires fluxbox to be installed (for the fbsetbg program). However, if you know of a command-line wallpaper setter that offers a random option, feel free to replace it.

The script:

```
#!/bin/bash

while true

do

    fbsetbg -R
~/Pictures/Hyperion/Wallpaper
s/Guitars

    sleep 15m

done
```

The script runs in an infinite loop, calling the random command on my guitar wallpaper folder every 15 minutes. If anyone has any adjustments (or improvements upon the script), feel free to send me an email about it!

Hopefully some of you will find some of these tips useful (and hopefully I've interested one or two readers into using Vim a bit more). If anyone has any questions, comments, or suggestions, I can be reached at lswest34@gmail.com. Any emails should include "C&C" or "FCM" in the subject line, so that I don't overlook it. Happy customizing!

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.

After our last meeting you should have a fairly good idea of how to use Page. If not, please read last month's article. We'll continue this time by creating a file list application with a GUI. The goal here is to create a GUI application that will recursively walk through a directory, looking for files with a defined set of extensions, and display the output in a treeview. For this example we will look for media files with the extensions of ".avi", ".mkv", ".mv4", ".mp3" and ".ogg".
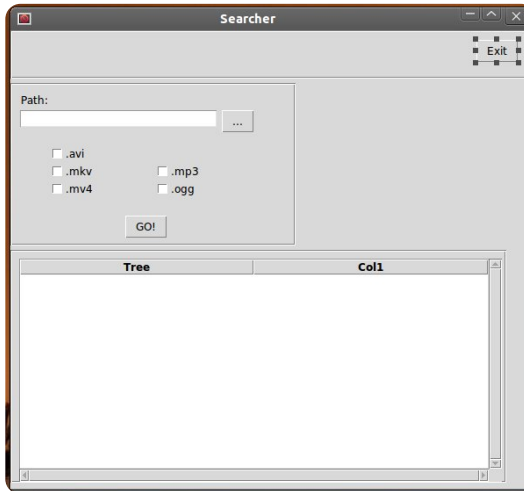
This time, the text might seem a bit terse in the design portion. All I'm going to do is give you directions for placement of widgets and the required attributes and values like this...

Widget

Attribute: Value

I will only quote text string when it is needed. For example for one of the buttons, the text should be set to "...".

Here's what the GUI of our application will look like...

As you can see, we have our main form, an exit button, a text entry box with a button that will call up an ask for directory dialog box, 5 check boxes for extension selecting extension types, a "GO!" button to actually start the processing and a treeview to display our output.

So, let's get started. Fire up Page and create a new top level widget. Using the Attribute Editor set the following attributes.

Alias: Searcher
Title: Searcher

Be sure to save often. When you save the file, save it as "Searcher". Remember, Page puts the .tcl extension for you and when you finally generate the python code, it will be saved in the same folder.

Next add a frame. It should go at the very top of the main frame. Set the attributes as follows.

Width: 595
Height: 55
x position: 0
y position: 0

In this frame, add a button. This will be our Exit button.

Alias: btnExit
Text: Exit

Move this close to the center of the frame or close to the frame's right side. I set mine to X 530 and Y 10.

Create another frame.

Width: 325
Height: 185
y position: 60

Here is what this frame will look

like, to give you a guide going forward through this section.
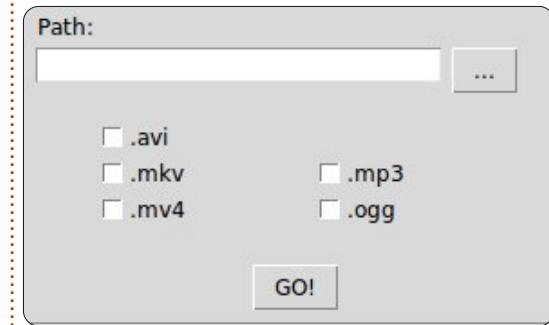
In this frame, add a label. Set the text attribute to "Path:". Move it close to the top left of the frame.

In the same frame, add an entry widget.

Alias: txtPath
Text: FilePath
Width: 266
Height: 21

Add a button to the right of the entry widget.

Alias: btnSearchPath
Text: "..." (no quotes)

Add five (5) check buttons. Put them in the following order...

```
x
x   x
x   x
```

The three check buttons on the left are for video files and the two on the right are for audio files. We will deal with the three on the left first, then the two on the right.

```
Alias: chkAVI
Text: ".avi" (no quotes)
Variable: VchkAVI

Alias: chkMKV
Text: ".mkv" (no quotes)
Variable: VchkMKV

Alias: chkMV4
Text: ".mv4" (no quotes)
Variable: VchkMV4

Alias: chkMP3
Text: ".mp3" (no quotes)
Variable: VchkMP3

Alias: chkOGG
Text: ".ogg" (no quotes)
Variable: VchkOGG
```

Finally, in this frame add a button somewhere below the five check boxes and somewhat centered within the frame.

```
Alias: btnGo
Text: GO!
```

Now add one more frame below our last frame.

```
Width: 565
Height: 265
```

I placed mine around X 0 Y 250. You might have to resize your main form to have the entire frame show. Within this frame, add a Scrolledtreeview widget.

```
Width: 550
Height: 254
X Position: 10
Y Position: 10
```

There. We've designed our GUI. Now all that is left to do is create our function list and bind the functions to our buttons.

In the Function list window, click the New button (the far left button). This brings up the new function editor. Change the text in the Function entry box from "py: xxx" to "py:btnExitClick()". In the arguments entry box type "p1". In the bottom multiline entry box, change the text to:

```
def btnExitClick(p1):

    sys.exit()
```

Notice that this is not indented. Page will do that for us when it creates the python file.

Next create another function called btnGoClick. Remember to add a passed parameter of "p1". Leave the "pass" statement. We'll change that later.

Finally, add another function called "btnSearchPath". Again, leave the pass statement.

Lastly, we need to bind the buttons to the functions we just created.

Right-click on the exit button we created, select Bind. A large box will pop up. Click on the New binding button, Click on Button-1 and change the word "TODO" in the right text entry box to "btnExitClick". Do NOT include the parens () here.

Bind the GO button to btnGoClick and the "..." button to btnSearchPathClick.

Save your GUI and generate the python code.

Now all we have left is to create the code that "glues" the GUI together.

Open up the code we just generated in your favorite editor. Let's start off by examining what Page created for us.

At the top of the file is our standard python header and a single import statement to import the sys library. Next is some rather confusing (at first glance) code. This basically looks at the version of python you are trying to run the application in and then to import the correct versions of the tkinter libraries. Unless you are using python 3.x, you can basically ignore the last two.

We'll be modifying the 2.x code portion to import other tkinter modules in a few moments.

Next is the "vp_start_gui()" routine. This is the program's main routine. This sets up our gui, sets the variables we need, and then calls the tkinter main loop. You might notice the line "w = None" below this. It is not indented and it isn't supposed to be.

Next are two routines (create_Searcher and destroy_Searcher) that are used to replace the main loop routine if we are calling this application as a

library. We don't need to worry about these.

Next is the "set_Tk_var" routine. We define the tkinter variables used that need to be set up before we create the widgets. You might recognize these as the text variable for the FilePath entry widget and the variables for our check boxes. The next three routines here are the functions we created using the function editor and an "init()" function.

Run the program now. Notice that the check buttons have grayed out checks in them. We don't want that in our "release" app, so we'll create some code to clear them before the form is displayed to the user. The only functioning thing other than the check boxes is the Exit button.

Go ahead and end the program.

Now, we'll take a look at the class that actually holds the GUI definition. That would be "class Searcher". Here is where all the widgets are defined and placed in our form. You should be familiar with this by now.

Two more classes are created for us that hold the code to support the scrolled tree view. We don't have to change any of this. It was all created by Page for us.

Now let's go back to the top of the code and start modifying.

We need to import a few more library modules, so under the "import sys" statement, add...

```
import os

from os.path import join,
getsize, exists
```

Now find the section that has the line "py2 = True". As we said before, this is the section that deals with the tkinter imports for Python version 2.x. Below the "import ttk", we need to add the following to support the FileDialog library. We also need to import the tkFont module.

```
import tkFileDialog

import tkFont
```

Next we need to add some variables to the "set_Tk_var()" routine. At the bottom of the routine, add the following lines...

```
global exts, FileList

exts = []

FileList=[]
```

Here we create two global variables (exts and FileList) that will be accessed later on in our code. Both are lists. "exts" is a list of the extensions that the user selects from the GUI. "FileList" holds a list of lists of the matching files found when we do our search. We'll use that to populate the treeview widget.

Since our "btnExitClick" is already done for us by Page, we'll deal with the "btnGoClick" routine. Comment out the pass statement and add the code so it looks like this...

```
def btnGoClick(p1) :

#pass

BuildExts()

fp = FilePath.get()

e1 = tuple(exts)

Walkit(fp,e1)
```

```
LoadDataGrid()
```

This is the routine that will be called when the user clicks the "GO!" button. We call a routine called "BuildExts" which creates the list of the extensions that the user has selected. Then we get the path that the user has selected from the AskDirectory dialog and assign that to the fp variable. We then create a tuple from the extension list, which is needed when we check for files. We then call a routine called "Walkit", passing the target directory and the extension tuple.

Finally we call a routine called "LoadDataGrid".

Next we need to flesh out the "btnSearchPathClick" routine. Comment out the pass statement and change the code to look like this...

```
def btnSearchPathClick(p1) :

    #pass

    path =
tkFileDialog.askdirectory()
#**self.file_opt)

    FilePath.set(path)
```

The init routine is next. Again, make the code look like this...

```python
def init():

    #pass

    # Fires AFTER Widgets
and Window are created...

    global treeview

    BlankChecks()

    treeview =
w.Scrolledtreeview1

    SetupTreeview()
```

Here we create a global called "treeview". We then call a routine that will clear the gray checks from the check boxes, assign the "treeview" variable to point to the Scrolled treeview in our form and call "SetupTreeview" to set the headers for the columns.

Here's the code for the BlankChecks routine which needs to be next.

```python
def BlankChecks():

    VchkAVI.set('0')

    VchkMKV.set('0')

    VchkMP3.set('0')

    VchkMV4.set('0')

    VchkOGG.set('0')
```

Here, all we are doing is setting the variables (which automatically sets the check state in our check boxes) to "0". If you remember, whenever the check box is clicked, this variable is automatically updated. If the variable is changed by our code, the check box responds as well. Now (above right) we'll deal with the routine that builds the list of extensions from what the user has clicked.

Cast your memory back to my ninth article in FCM#35. We wrote some code to create a catalog of MP3 files. We'll use a shortened version of that routine (middle right). Refer back to FCM#35 if you have questions about this routine.

Next (bottom right) we call the SetupTreeview routine. It's fairly straightforward. We define a variable "ColHeads" with the headings we want in each column of the treeview. We do this as a list. We then set the heading attribute for each column. We also set the column width to the size of this header.

Finally we have to create the "LoadDataGrid" routine (next page, top right) which is where we load our data into the treeview. Each row of the treeview is one entry in the FileList list variable. We also adjust the width of each column (again) to match the size of the column data.

That's it for the first blush of

```python
def BuildExts():
    if VchkAVI.get() == '1':
        exts.append(".avi")
    if VchkMKV.get() == '1':
        exts.append(".mkv")
    if VchkMP3.get() == '1':
        exts.append(".mp3")
    if VchkMV4.get() == '1':
        exts.append(".mv4")
    if VchkOGG.get() == '1':
        exts.append(".ogg")
```

the application. Give it a run and see how we did. Notice that if you have a large number of files to go through, the program looks like it's not responding. This is something

```python
def Walkit(musicpath,extensions):
    rcntr = 0
    fl = []
    for root, dirs, files in os.walk(musicpath):
        rcntr += 1 # This is the number of folders we have walked
        for file in [f for f in files if f.endswith(extensions)]:
            fl.append(file)
            fl.append(root)
            FileList.append(fl)
            fl=[]
```

```python
def SetupTreeview():
    global ColHeads
    ColHeads = ['Filename','Path']
    treeview.configure(columns=ColHeads,show="headings")
    for col in ColHeads:
        treeview.heading(col, text = col.title(),
            command = lambda c = col: sortby(treeview, c, 0))
    ## adjust the column's width to the header string
    treeview.column(col, width =
tkFont.Font().measure(col.title()))
```

that needs to be fixed. We'll create routines to change our cursor from the default to a "watch" style cursor and back so when we do something that takes a long time, the user will notice.

In the "set_Tk_var" routine, add the following code at the bottom.

```
global
busyCursor,preBusyCursors,bus
yWidgets

busyCursor = 'watch'

preBusyCursors = None

busyWidgets = (root, )
```

What we do here is set up global variables, assign them and then we set the widget(s) (in busyWidgets) we wish to respond to the cursor change. In this case we set it to root which is our full window. Notice that this is a tuple.

Next we create two routines to set and unset the cursor. First the set routine, which we will call "busyStart". After our "LoadDataGrid" routine, insert the code shown middle right.

We first check to see if a value was passed to "newcursor". If not, we default to the busyCursor. Then

we walk through the busyWidgets tuple and set the cursor to whatever we want.

Now put the code shown bottom right below it.

In this routine, we basically reset the cursor for the widgets in our busyWidget tuple back to our default cursor.

Save and run your program. You should find that the cursor changes whenever you have a long list of files to go through.

While this application doesn't really do much but show you how to use Page to create really fast code development. From today's article, you can see how having a good design of your GUI ahead of time can make the development process easy and

```python
def LoadDataGrid():
    global ColHeads
    for c in FileList:
        treeview.insert('','end',values=c)
        # adjust column's width if necessary to fit each value
        for ix, val in enumerate(c):
            col_w = tkFont.Font().measure(val)
            if treeview.column(ColHeads[ix],width=None)<col_w:
                treeview.column(ColHeads[ix], width=col_w)
```

```python
def busyStart(newcursor=None):
    global preBusyCursors
    if not newcursor:
        newcursor = busyCursor
    newPreBusyCursors = {}
    for component in busyWidgets:
        newPreBusyCursors[component] = component['cursor']
        component.configure(cursor=newcursor)
        component.update_idletasks()
    preBusyCursors = (newPreBusyCursors, preBusyCursors)
```

```python
def busyEnd():
    global preBusyCursors
    if not preBusyCursors:
        return
    oldPreBusyCursors = preBusyCursors[0]
    preBusyCursors = preBusyCursors[1]
    for component in busyWidgets:
        try:
            component.configure(cursor=oldPreBusyCursors[component])
        except KeyError:
            pass
        component.update_idletasks()
```

fairly painless.

The tcl file is saved in pastebin at http://pastebin.com/AA1kE4Dy and the python code is saved at

http://pastebin.com/VZm5un3e.

See you next time.

So far, we have covered many topics for using LibreOffice's Calc, but Calc has many minor operations that are worth knowing. In this article, I will give you my top-10 quick tips for using Calc. Most of them have to do with manipulating the current sheet. You can use these tips in most any sheet you are working with.

1. Naming Sheets
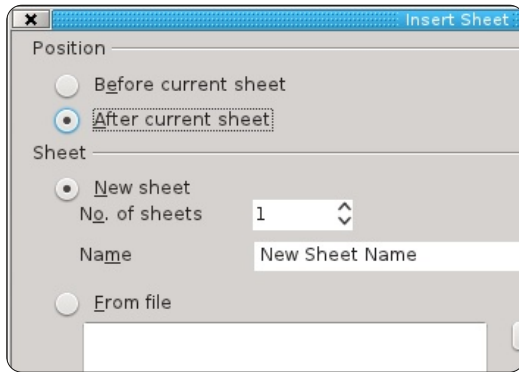
The default name for sheets is SheetX, where X is a number. You have 3 ways to name a sheet. The first is when you create a new sheet, using Insert > Sheet. In the dialog, you have a choice of how you want to name the sheet. You can also choose to insert multiple sheets. When inserting multiple sheets, you have no control over the sheets' names. They will get the default SheetX naming convention.

However, you may need to rename a sheet after it has been created. This is where the second and third methods apply. The second way to name a sheet is by right-clicking the sheet's tab and selecting Rename Sheet from the menu. The Rename Sheet dialog will come up, and you can change the name of the sheet. The third method is simply to double-click the sheets tab. This brings up the rename Sheet dialog, where you can change the sheet's name.

NOTE: The sheet name must start with a letter or digit. Then, sheet names can include spaces, letters, digits, underscore, and some special characters, i.e. -, &. When saving in the Microsoft Excel format, sheet names cannot contain the :, \, /, ?, *, [, and] characters. If you have an invalid character in the name, Calc will give you an error message.

2. Deleting Sheets

Sometimes, you will want to delete a sheet, or multiple sheets, from the workbook. To delete a sheet, right-click on the sheet's tab and select Delete from the menu, or select Edit > Sheet > Delete from the menu bar. Calc will verify that you do want to delete the sheet. To delete multiple sheets hold down the Ctrl key while clicking on the tabs for the sheets you want to delete. Use either the right-click or the menu method to delete the sheets. Once again, Calc will verify that you want to delete the sheets.

3. Move/Copy Sheets

Sometimes, you need to rearrange or copy sheets. For example, you might want to order a multiple sheet workbook in order of predominate use, or by date. Copying a sheet comes in handy when you need to create an exact duplicate of the current sheet, thereby creating a history. When you copy a sheet, you get an exact duplicate of the sheet you copied; however when you make changes to the new sheet, those changes are not translated to the old sheet. For example, you can create a copy of a budget spreadsheet for each pay period of the year and keep them all in one workbook.

Moving sheets is accomplished in one of two ways. The first method is to drag the tab of the sheet to the position you want it. Double arrows will show the location the sheet will occupy when you release it. The other method is through the Move/Copy Sheet dialog. You can access the Move/Copy dialog by right-clicking the tab you want to copy or move and selecting Move/Copy Sheet, or through the menu bar, Edit > Sheet
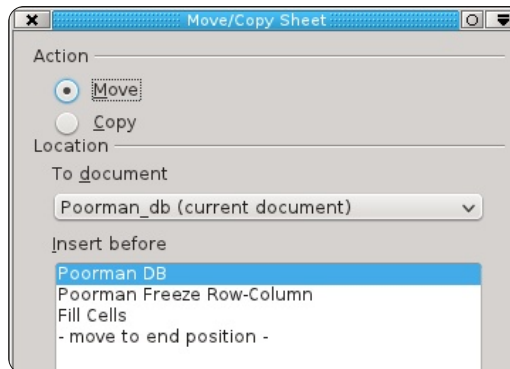
> Move/Copy Sheet. Under the Action section, you can select to copy or move the current sheet. NOTE: If you have only one sheet in the workbook, move and copy are grayed out, and copy is selected. In the Location section, you can select to move/copy the sheet to the current document, to another open document, or to a new document. The Insert Before section controls the placement of the move/copy. The sheet will move/copy to a position before the selected sheet. A special choice here is the "- move to end position -". Selecting this last choice will move/copy the sheet to the end of the sheet list. The Name section allows you to give the sheet a new name. Renaming your sheet is a good idea when copying. If you do not give it a new name, it will keep the existing name and append an underscore and a number, i.e. MySheet_2.

4. Color Tabs
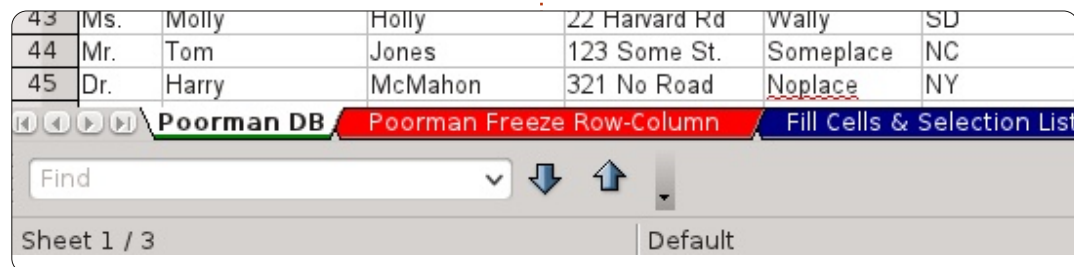
Visual aids can often help get things done quickly while working with a large workbook with multiple sheets. Color is an easy to deploy visual aid. Giving each sheet tab a different color can help you find it and go to it quickly. The tab of the current sheet is always white, but you can still give it a color for when it is not selected. To set the tab color of a sheet, right-click the tab and select Tab Color from the menu. A color dialog will pop up. Simple select the color you want for the tab and click OK.

5. Freeze Row(s)/Column(s)

Long and wide sheets often require scrolling to view some of the content in the sheet. However, in many cases the first columns or rows contain information you need in order to make sense of the information. Luckily, Calc provides you with a way to freeze rows and columns in place.
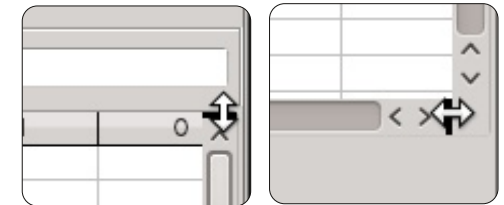
To freeze a row or rows, select the row below the row(s) you want frozen by clicking on the row number, then Window > Freeze. To unfreeze the rows, select Window > Freeze again. The same is done with the columns by selecting the column letter to the right of the columns you want frozen, then Window > Freeze.

To freeze both rows and columns, select the cell below the rows you want frozen and to the right of the columns you want frozen, then select Window > Freeze.

6. Split Screen

Another way to view large sheets is using the split screen. To split the screen horizontally, grab the thick bar just above the vertical scrollbar. The mouse cursor will

become a double arrow. Drag the thick bar down to the position where you want it. To split the screen vertically, do the same with the thick bar to the right of the horizontal scrollbar. To get a quick horizontal and vertical split, just select Window > Split. The spits are shown by a thick heavy line. Each area of the split screen is manipulated by the various new scrollbars that appear.
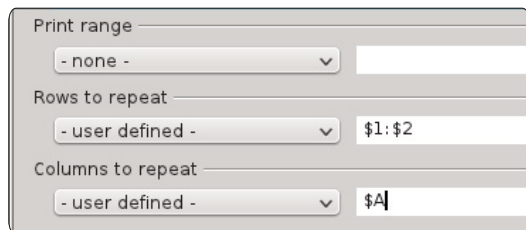
To undo a split screen, grab the thick heavy line and drag it up to the top for a horizontal split or to the right for a vertical split. To cancel all spits, use Window > Split.

7. Print Rows or Columns on Every Page

Printing a sheet which will span multiple pages may require key information in certain rows or columns in order to help make sense of the data. To control how the pages print, you can define whether certain rows or columns repeat on each page.

Open format > Print Ranges > Edit. Under Rows to repeat, you can define the rows that need to repeat on each page, i.e. to repeat the first two rows enter $1:$2. Under Columns to repeat, you can do the same for the columns, i.e. to repeat the first column type $A.

8. Fill Selected Cells

At its most basic use, the fill tool is a way to repeat information in a cell. To repeat the information in a cell, select the cells you want to repeat, then Edit > Fill > (the direction you want to fill: left, right, up, or down).
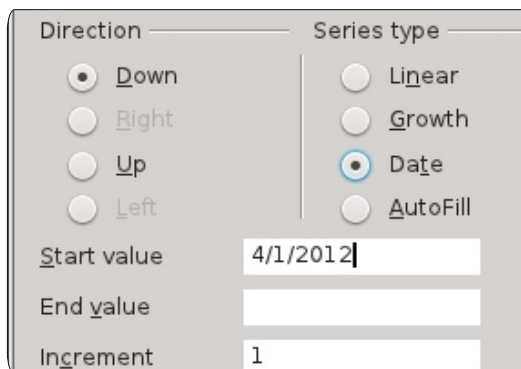
However, the real power of the fill tool come through using the Fill Series. Edit > Fill > Series. The Fill Series tool allows you to create many different types of serial information, from numbers to dates. There is also AutoFill, which uses a series of text predefined in the program. Examples of the AutoFill are Days of the week and months. You can define your own AutoFill ranges in Tools > Options > LibreOffice Calc > Short Lists.

9. Selection List

The selection list is a text function. The selection list works only for text, and will contain only text from the current column your selected cell is in. To activate the list, select an empty cell and press Alt + Down Arrow on your keyboard.

10. Remove Data from Cells
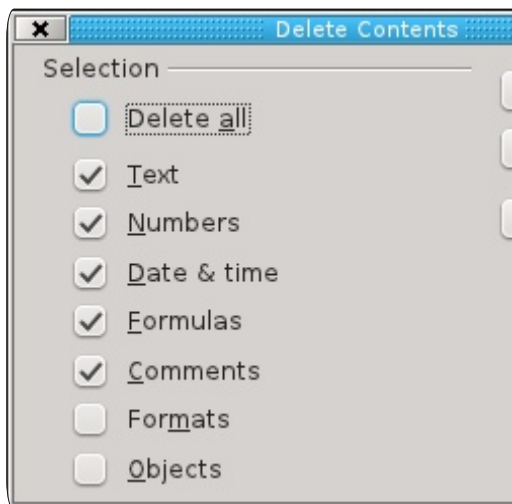
Sometime, you need to not just change the data in a cell but completely remove it. Removing data can be done in one fell swoop, and you can select the type of information that is removed. For example, you can select a group of cells and choose to remove only the formating, or only the text. There is also a remove all to remove all the information from the cell(s). You activate the Remove Content dialog by selecting a cell or cells and pressing the Backspace key on the keyboard. You can also do this through the menus: Edit > Delete Content.

So, there you have it; my top-10 quick tips for LibreOffice Calc.

In my next article, we will continue our journey in Calc by learning how to create charts and graphs.

Elmer Perry's history of working, and programming, computers involves an Apple IIE, adding some Amiga, a generous helping of DOS and Windows, a dash of Unix, and blend well with Linux and Ubuntu.

Surely you use Linux on your PC, why else read a Linux magazine like this one. Although we love our own machines and have tweaked them to our liking, sometimes we have to -inevitably- use another computer. Either at the office or at a friend's house, we have to use what they have... something non-Linux. But wait, what if you could carry your own Linux distro with you! I don't mean a live CD. How about a USB! Well this article will tell you how to solve this problem.

There are two ways to create a Linux distro on a USB flash drive. Before we start, make sure you have at least a 4GB USB stick. Let's start with the easy way, for Debian/Ubuntu based distros only:

Download and install Gparted. Run Gparted and select your USB.

Right-click the partition and select "format to" then click on Fat32, and Apply, then wait until it finishes. (You may have to unmount it, to do this right-click the partition and select unmount.)
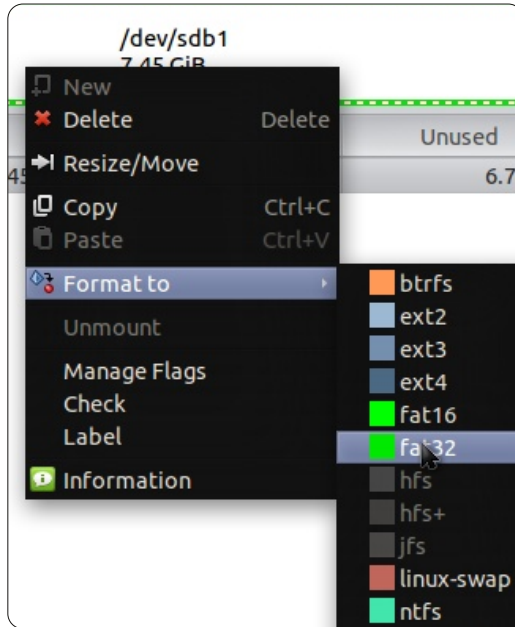
Run Startup disk creator. (It usually comes pre-installed with Linux.)

Select your ISO and set your Reserved space to maximum. (Reserved space means you will be able to save files to your USB Stick. On a 4GB USB it will give you 2GB of Reserved space. On an 8GB USB it will give you 4GB of Reserved space).

Click on Make Startup Disk, and go fetch yourself some coffee, it may take as long as 30 minutes to complete the process.
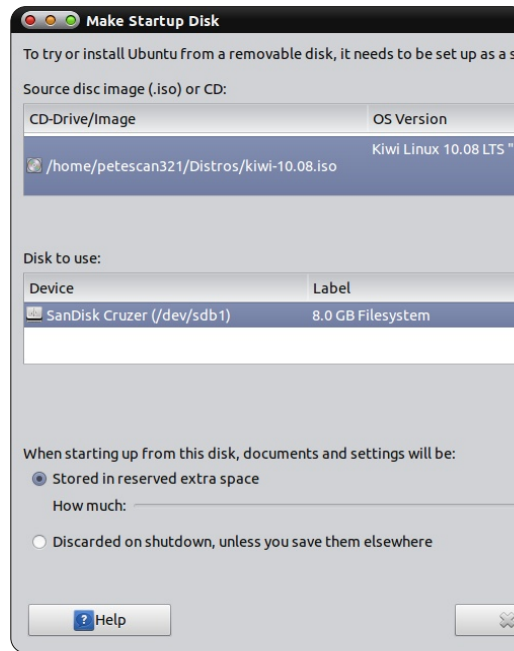
If you want to be more technical about your USB follow these steps. This is the hard way (Most distros will work, including RedHat/Fedora based distros).

Download and install Gparted.

Run Gparted and select your USB. (Make sure your USB is formatted Fat32).
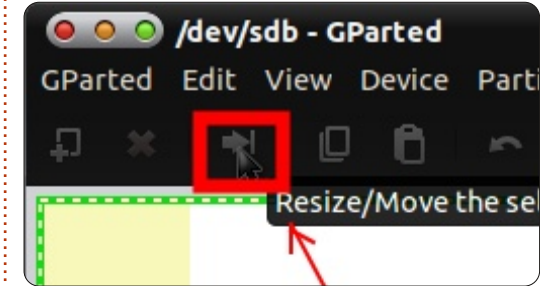
Left click the partition, and select Resize/Move (You may have to unmount it, to do this right-click the partition and select unmount).
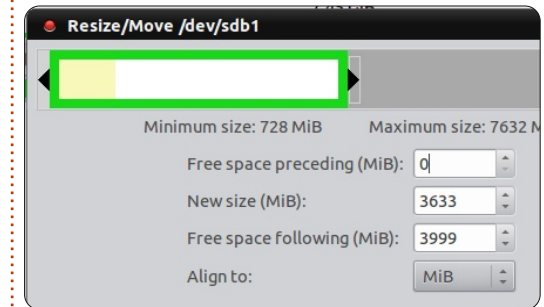
Select how much space you want for saving files. Make sure the distro at least has 4GB for your Linux OS.
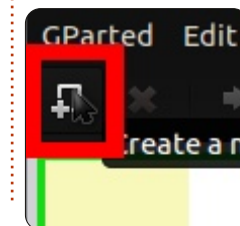
Left click on the Unallocated Partition, and on the new partition button.
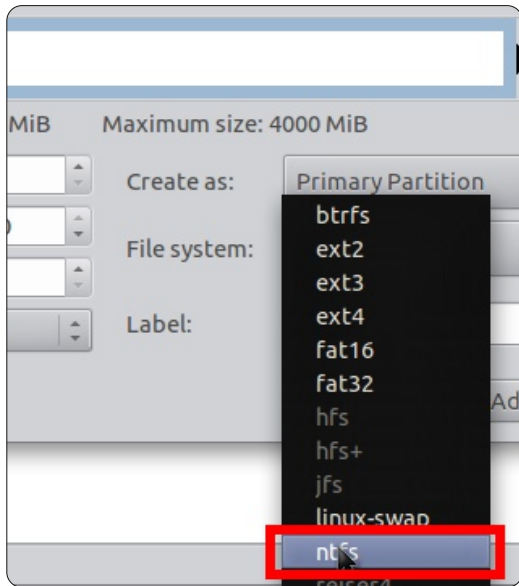
Select the formatting to ntfs, then click add. (If you want, you can rename your partition).
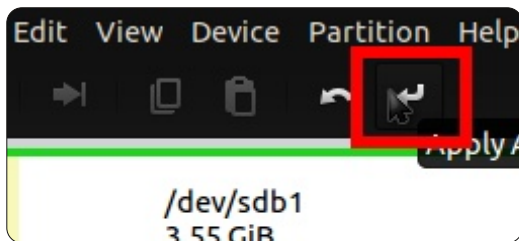
Click apply, and wait until it finishes. Then remove your USB, then reinsert the USB.

Run UNetbootin, and select your ISO or choose one from the list of Linux distros.

Click OK to proceed.
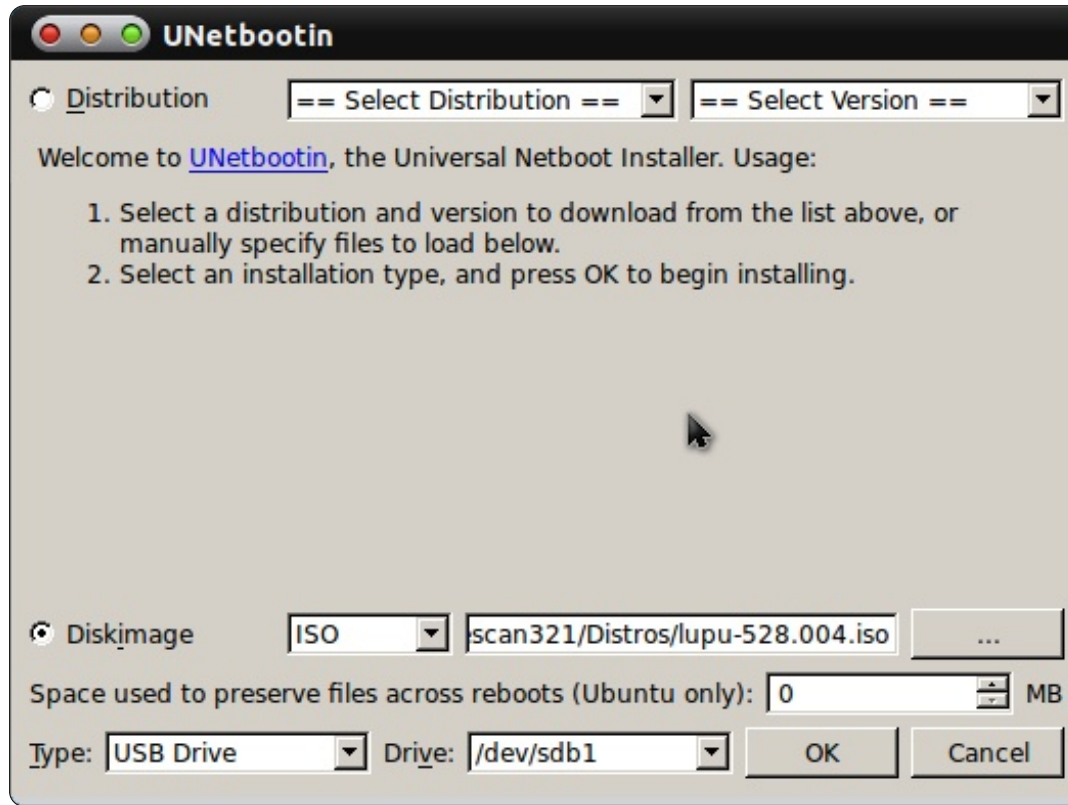
If you don't have Unetbootin, you can download it from http://unetbootin.sourceforge.net/#install.

What now? Well, now you can show off your USB at the office, at school, or at your friend's house. You can also then customize your Linux distro of your choice from your USB... making your USB your PC.

Here is a list of my favorite USB

Linux distros:

Kiwi 10.08
Puppy Linux
Vector Linux
Bodhi Linux
DSL

Petescan321 is a freelance software technician, who enjoys fixing computers running Windows or Debian-based Linux. He is also a Linux and open-source supporter.

I t's a common problem: you run VirtualBox, create a virtual machine, probably with a dynamic disk, at your best guess at an adequate disk size, run it for a while, then find you're running out of space.

You can easily expand the hard disk size in VirtualBox using the command:

```
VBoxManage modifyhd --resize
```

The --resize option allows you to change the capacity of an existing image; this adjusts the logical size of a virtual disk without affecting the physical size. It works only for expanding the capacity of VDI and VHD virtual disk formats, and only dynamically allocated, not fixed size disks. But this is a way to add more space to a virtual disk without needing to create a new image, attach and copy all the data across within a virtual machine.

This is a command-line application, so you need to open a Terminal session in order to run the command, and change directory to the path where your virtual disk is stored.

Two important notes:
• Shutdown the running virtual machine before you mess with the disk!
• Backup the existing disk image, or at least any volatile data, before you alter it!

The command you need follows this pattern:

```
VBoxManage modifyhd
XP_newdisk.vdi --resize 10240
```

• **VBoxManage** is the utility suite that comes with VirtualBox:
• **modifyhd** is the command to resize the virtualdisk
• **XP_new.vdi** is my example disk name; you'll need to change it to match your disk name, and don't forget the .vdi suffix. Under Linux it's also case sensitive.
• **--resize 10240** Next is the desired new size for the virtual disk. That's two dashes before the word "resize" followed by a number in megabytes; 10240 being equivalent to 10GB.

Also remember that you'll need to increase the size of your guest partition on the disk, or create an additional partition in the new space. In this respect, you'll need to do the work with disk utilities appropriate to your guest operating system just as if it were a real PC with real spinning rust (magnetic disks).

Note:.vmdk disks cannot be expanded by modifyhd commands. Try this command line and you'll get the error: *VBoxManage: error: Resize hard disk operation for this format is not implemented yet!*

You can find the manual for Oracle VirtualBox, indexed by each topic, on the website. VBoxManage is in Chapter 8:
http://www.virtualbox.org/manual/ch08.html#vboxmanage-modifyvdi where the full syntax of the command looks like this:
```
VBoxManage modifyhd
<uuid>|<filename>

[--type
normal|writethrough|immutable
|shareable|

readonly|multiattach]
```

```
[--autoreset on|off]

[--compact]

[--resize <megabytes>|--
resizebyte <bytes>]
```

The --compact option can be used to shrink disk images, that is, remove blocks of empty space (containing zeroes). This will shrink a dynamically allocated image by reducing the physical size of the image without affecting the logical size of the virtual disk.

However, free space in the guest system must first be zeroed. For Windows guests, you can use the sdelete tool provided by Microsoft; running sdelete -c in the guest will zero the free disk space. Under Linux, the zerofree utility supports ext2/ext3 filesystems to do the same. You can then compact (compress) the virtual disk image.

Note: instructions and links relate to the Oracle VirtualBox version and not to the VirtualBox OSE package contained in the official Ubuntu repositories.

The template files for this tutorial can be downloaded from:
http://goo.gl/6mhQ7
http://goo.gl/uehRw

Several years ago, I created two templates for creating cards and posted them on the Open Office website. While they weren't perfect, they could be used to make a relatively nice looking birthday or general purpose card. The main portion of the card was made in Microsoft Paint, then moved over to Open Office Writer. Recently, I decided to revisit the greeting card, and attempted to make an entirely new card in LibreOffice Draw. The results are a better, more usable card.

Using the Card

Load the card by double clicking on it. The card will load LibreOffice Draw. Go to the front page section (lower right side), and place the cursor at either the top or bottom of the text. Then drag across the text. (If you prefer, you can triple-click on any word in this section to highlight all the text.) Type in your message, then format the words. There are a number of ways to format the words. Start by highlighting the text. I suggest that you use either the Format Menu, then select Character, Fonts.... or just right click on the highlighted text box, then select Character, Fonts. Pick a Font, a Style, and a Size. Clicking on the Font Effects tab, then Automatic, will allow you to change the color of the text. The checkoff boxes below allow you to add outlines and shadows. Be sure to click OK to apply the changes.

Changing the color of the box is relatively easy. Be sure that you have your Drawing toolbox open.

Under View, Toolbars, make sure that Drawing is check-marked. It should be the default when you load the template. Next, you must look for the tab marked Layer 4. There are several tabs located along the bottom of the template. Layer 4 is hidden, but is next to Layout, Controls, Dimension Lines, Layer 5. Use the arrow to the left of the word Layout to move the tabs to the right. Then click on Layer 4. After clicking on Layer 4, select the blue rectangle from the drawing tools. Move to the front section of the card and start at the bottom right corner. Drag the mouse across the entire Front section. Right click and select the word, Area. In this section choose the color that you would like for the Front of the card.

Click OK to apply the color. (Select white for your area color if you have a black-and-white laser printer.) Lines are made in a similar manner. Right click on the Front box. Choose Line. Then pick the Color, Style, and Width of the lines. Keep the line width to .06 or less for best results. Click OK upon making your selections. After adding color to the text area and lines for the Front section, you will notice that your text has disappeared. It is actually in the layer below. The easy fix is to right-click on the highlighted Front section, then select Arrange. Send Backward will move your text above the color and lines. Click OK to set this section.

Completing the Inside of the Card is done in a similar manner. There are a couple of things to keep in mind, however. Triple-clicking will not highlight the text area. Click on the area around the words in the inside text box. You will have to start at the very top or very bottom of the text, then drag across to highlight the text. Type your message over the highlighted
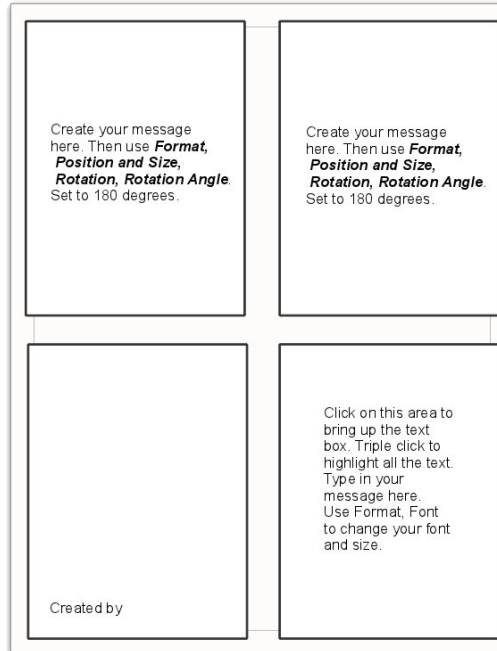
text. Format the text using Format, Character as you did before. Also, after you format the text, you will have to rotate the text in both sections of the Inside of the Card. To do this, highlight the text box by clicking on it once. Make sure that you are on the outside of the text box and not on the text itself. This is the area right around the text. A little box will surround your text. Right click, then select Position and Size. Go down to Angle and type the number 180 for the number of degrees. That will flip the text box vertically. When printed out, the text boxes on the inside will appear in the correct position. Always click OK to apply the changes.

To complete the card, just highlight the created-by section in the lower left hand corner of the card. Click to the right of the words, Created by. Next enter your name. At this point you should save your card. The card is very basic at this point. It contains only text boxes and some colored backgrounds and lines. You can add symbols from the Drawing tools section like stars and symbol shapes if you desire. If you are using a black-and-white printer, you may want to print off your card. After you print the card, fold the card in half horizontally, then vertically, to complete your card.

ClipArt

If you would like to spice up your card even more, you can add clip art from the Internet. I have found that the easiest way to add clipart to the cards is first create a separate page in LibreOffice Writer. On that page you can paste your clipart. That gives you a place to store clipart for later use.

First, Open LibreOffice Writer. Keep it open. Then open your web browser and do a search for free web art. I located a site called All Free Clipart at: http://www.allfree-clipart.com/. There are a number of websites that allow an individual to download free artwork and use it free-of-charge. Select a piece of artwork, then right-click and copy the image. Then click on the LibreOffice Writer tab in the taskbar (bottom of the screen). That will bring LibreOffice Writer up in front of your browser. Paste the selected artwork onto the Writer page. I like to give the Writer page a name right away, so that it is easily identified after saving it. Notice the Writer tab at the bottom will be renamed. Click on the browser tab in the taskbar. That will bring your browser back to the Internet artwork. Make another selection and paste it onto your Writer artwork page. Continue doing this until you have built up a small artwork collection. I choose clipart that can be used for birthdays, holidays, and other special occasions. Be sure to save your art collection.

Using the clipart is simple. Close the browser and launch LibreOffice Draw. Keep the Writer page with the clipart open. Once a greeting card is created, just click on the artwork page. Click on a piece of clipart and copy it. Then click on the Draw tab in the Taskbar, and paste the artwork onto your greeting card. Be sure that you are working on Layer 4 before doing this. Move the clipart into place and resize it. If you are using the clipart on the inside of the card, be sure to invert the artwork. That means it has to be highlighted. Clicking on it once will allow you to highlight the clipart. Then right-click and select Flip, Vertically. Click outside the clipart to set it in place. This will complete the inverting process.

After you have inserted various pieces of clipart, your card is ready to print.

ClipArt Sites:

http://www.openclipart.org
http://www.clker.com

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 LibreOffice, but **PLEASE SPELL AND GRAMMAR CHECK IT!**

Writing

There is no word limit for articles, but be advised that long articles may be split across several issues. In your article, please place where you would like a particular image to be. Please do <u>not</u> use any formatting in your document.

Images

Images should be no wider than 800 pixels, in JPG format, and use low compression.

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 proof-readers will read it for you and correct any grammatical or spelling errors. Not only are you helping the magazine and the community, but we'll help you with your English!

REVIEWS

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

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

Hardware
When reviewing hardware please state clearly:

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

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

You know that sinking feeling that happens when you realize you just deleted a bunch of important files you really needed. It's a terrible feeling - and often followed by worry, panic and repeated "why did I just do that?" Stealing a cue from Douglas Adams; "don't panic." There is hope for deleted files even if the media has been reformatted. Foremost can also recover corrupted files, but it doesn't fix corruption.

Foremost is a data recovery tool originally written by Kris Kendall and Jesse Kornblum, special agents for the United States Air Force Office of Special Investigations. It was picked up and modified by Nick Mikus as part of his master's thesis and is now available in the Ubuntu universe repositories. With the universe repositories enabled, installing Foremost is a simple matter:

```
sudo apt-get install foremost
```

A word of caution before proceeding any further - **do not mount or boot the drive you're recovering from**. The more the medium is accessed the greater the chance of data loss. Before diving in to recovering data, we make a backup of the original medium. One of the main principles of data recovery is to work with a copy of the original medium rather than the medium itself.

Another important principle is to back up to a medium that isn't the original medium (obviously you don't want to corrupt the drive while trying to recover data from it!). The drive you back up to should have enough free space to hold an image of the entire drive (with the lost files). In this example, we'll recover data from a 1GB flash drive to a system with an 80GB hard drive. We begin by making that working image of the flash drive:

```
sudo dd if=/dev/sdb1
of=mypendrive.img
```

Next, we need to give the user ownership of the image file we just created. In this case the username and group are called charm:

```
sudo chown charm.charm
mypendrive.img
```

Foremost recovers a lot of different types of data ranging from AOL .art files to audio .wav files. Another tool photorec (part of the testdisk package), actually recognizes many more, but Foremost can work with unmounted drives and with image files. Foremost needs a path to save data to. This path should not be on the original medium (or you would overwrite data).

```
mkdir ~/recovery
```

Now let's recover some pdf and png files:

```
foremost -vqQ -o recovery/ -t
pdf,png -i mypendrive.img
```

The -v switch enables Foremost's verbose mode. Without the -v switch, Foremost displays asterisks as it processes. The -v switch gives us nice formatted output showing information about what is being recovered. Foremost can take a long time to recover data, particularly if you're trying to recover from a large hard drive full of data. Verbose mode (shown below) is nice since it gives an idea of what's being recovered.

The -q switch sets Foremost to run considerably faster by searching only the start of each sector. The large -Q switch suppresses most error messages. The -o switch specifies the directory to recover to. Within this recovery folder, Foremost creates a folder for each type of file being recovered. In this instance pdf/ and png/ folders are created along with an audit.txt file showing the same verbose output we saw earlier.

The -t switch specifies the types of files to recover. To specify multiple file types separate each file type with a comma. Lastly the -i switch indicates which image or

```
441:    00702752.png      233 KB      359809024      (800 x 480)
442:    00703392.png      177 KB      360136704      (1024 x 640)
443:    00703776.png      239 KB      360333312      (640 x 360)
```

LINUX LAB - FOREMOST FOR DATA RECOVERY

device to recover from (again, it's best to use an image file rather than working with the original device).

Foremost can recover erased files, files from formatted drives, even files that have been lost over multiple formats. In one case we were able to recover dozens of files from a hard drive formatted for ext3 which were clearly graphic files from a previous Windows installation.

Foremost can also recover partial files using the -a switch which writes all headers, skipping error detection of corrupted files. Corrupted files, images in particular, are files where part of the data has already been overwritten. In the case of images, the corruption is obvious - often only part of the image is recovered - followed by banding.

Another handy Foremost switch is -T. It creates a timestamped directory name. If you plan on running Foremost multiple times the -T switch will create a directory name with the timestamp. For example:

```
foremost -vqQT -o recovery/
-t pdf,png -i mypendrive.img
```

In the above example, Foremost creates a directory with a name starting with recovery and ending with the datetimestamp (3:29pm here):

```
recovery_Sun_Mar_11_15_29_42_
2012
```

Foremost is a great tool for recovering images, documents, movies, and other types of files. Because it can work with unmounted file systems, it comes in handy where other tools require a mounted partition. Of course the usual "back up your data" lecture applies to any conversation about data recovery, particularly since there have been a number of great backup articles in past issues of Full Circle Magazine.

Now, at least there's one more option when you get that sinking feeling that you've just deleted something you really meant to keep.

Charles is a step-father, husband, and Linux fan who runs a not-for-profit computer refurbishing project. When not breaking hardware/servers he maintains a blog at http://www.charlesmccolm.com/.

CODEWORD

Every number in the codewords grid is 'code' for a letter of the alphabet. At the end you should have a different letter in each numbered box, and a word in English in each of the horizontal and vertical runs on the codeword grid.

Written by:
Ronnie Tucker (KDE)
Jan Mussche (Gnome)
Elizabeth Krumbach (XFCE)
Mark Boyajian (LXDE)
David Tigue (Unity)

same is true with Linux task managers, but thankfully Linux has a more reliable way of closing down troublesome applications, so if you're careful you can easily close down an application without freezing your entire system. The task manager can also give you performance information such as graphs which come in handy.
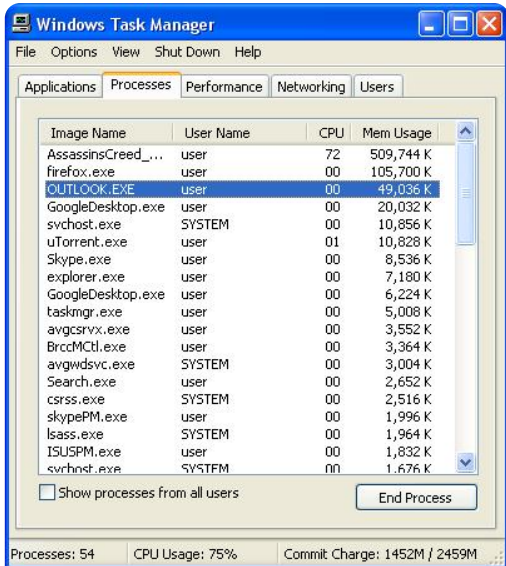
The Windows task manager can be quickly accessed by right clicking the task bar and choosing 'Task Manager' and a process can then be closed by clicking the name in the list of processes and clicking the 'End Process' button at the bottom of the window.

DISCLAIMER: Be _very_ careful of what you kill in your task manager as it could potentially shut down your system, losing your unsaved information. I doubt you'll be able to do any permanent physical damage to your system, but beware!

Windows task manager can be both a blessing and a curse. On one side it can quickly and conveniently let you close down problem applications, but on the other, it can bring your entire system to its knees. The
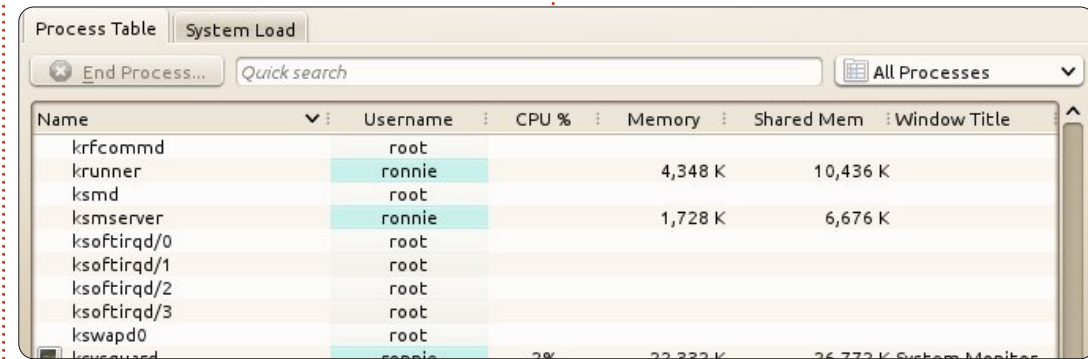
Kubuntu

The Kubuntu task manager equivalent is the KDE System Monitor and can be found in K > Applications > System > System Monitor.
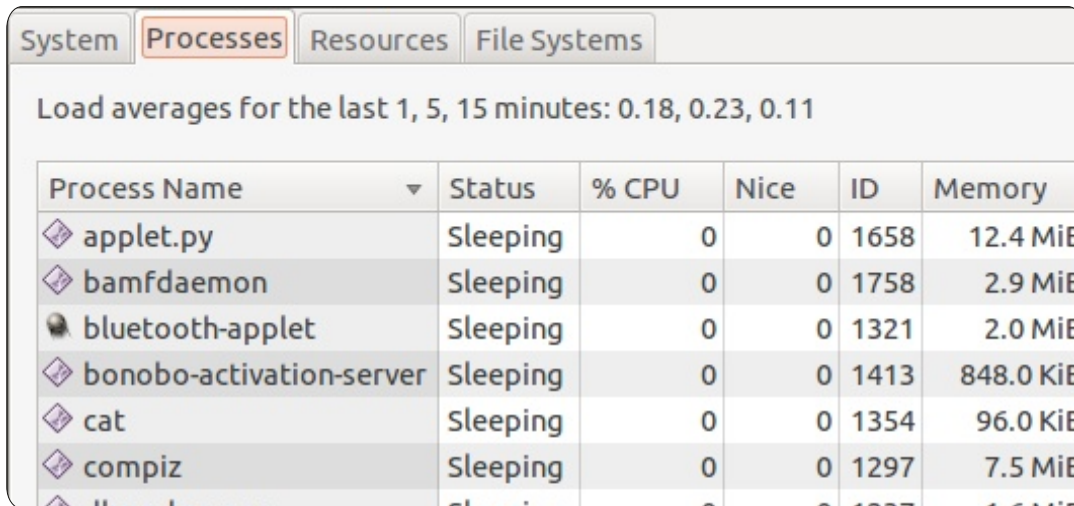
In the Process Table tab it lists all the processes running on your system. You can sort the list by clicking Name, CPU %, Memory, etc. Stopping an application can be done by clicking its name then clicking the 'End Process' button at the top of the window. Again, be careful of what you're ending. You'll notice that some processes will have the username 'root' or your username. This is who started that process. In short, if root started it, leave it alone!

CLOSING WINDOWS

Process Name ▼	Status	% CPU	Nice	ID	Memory
applet.py	Sleeping	0	0	1658	12.4 MiB
bamfdaemon	Sleeping	0	0	1758	2.9 MiB
bluetooth-applet	Sleeping	0	0	1321	2.0 MiB
bonobo-activation-server	Sleeping	0	0	1413	848.0 KiB
cat	Sleeping	0	0	1354	96.0 KiB
compiz	Sleeping	0	0	1297	7.5 MiB
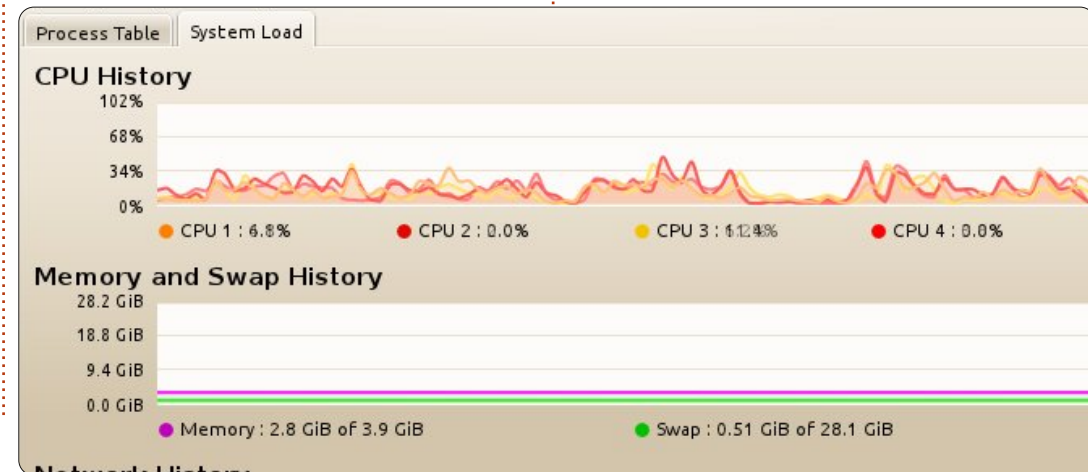
System / Processes / Resources / File Systems

Load averages for the last 1, 5, 15 minutes: 0.18, 0.23, 0.11

The System Load tab will show you a real-time graph of how your system is coping with all the processes currently loaded.

It is possible to add more information to the KDE System Monitor, but I like to keep my monitor like me, simple.

Gnome-Shell

In Gnome-Shell the System Monitor can be found in menu System > Administration > System Monitor. It's a program with 4 tabs. Each tab shows different information about your computer.

The first tab shows general info about your systems software and hardware: which OS do you use (obviously Ubuntu, in my case 11.04), which hardware (amount of memory and what type of processors) and the system status.

The second shows running processes. Which processes are shown (yours, active or all) depends on a setting in menu View. The processes can be sorted in various ways. Just click on the column head to choose on which column the processes have to be sorted. I often use CPU, after clicking this column twice you see the processes which use the CPU most, on top of the list. For each column you can choose if you want the sorting order to be ascending or descending by just clicking the same column head again.

On this tab you can End processes which are not doing what they are supposed to do. Just click the name of the process and click the "End Process" button. If this does not work you can also right-click the process and choose Kill Process. This is, however, a way which should be avoided as much as possible, since strange things could happen, depending on the process you try to kill.

System / Processes / Resources / File Systems

CPU History

100 %
0 %
60 seconds   50   40   30   20   10

CPU1 7.9%   CPU2 11.7%

Memory and Swap History

100 %
0 %
60 seconds   50   40   30   20   10

In the system monitor you see the actual CPU usage, used amount of memory and the network history in a graph. This can be useful when you experience a slow system. Just have a look to see how much CPU is used, how much of your memory and also the swap memory is in use, which could be an indication that you are trying to do too much with your system. If so, then switch back to the processes list to find out which process eats all CPU power.
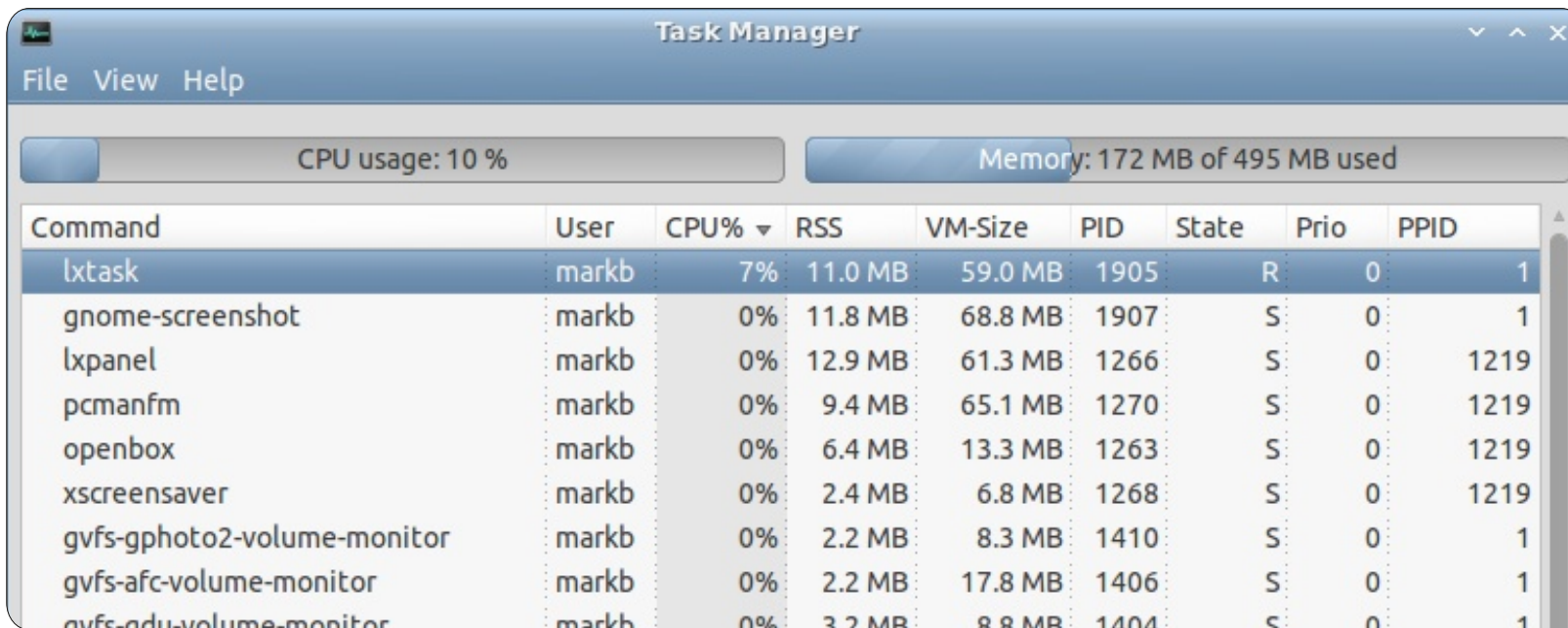
The last tab shows you the size of your disk(s) and partitions, the amount you use and what is still free and it tells you which file-system you use (in my case ext4).

Lubuntu (LXDE)

Lubuntu keeps to its "less is more" philosophy by providing a simple but effective task manager application called LXTask. As with most things in Lubuntu, you open the Task Manager from the main menu; select System Tools > Task Manager.

By default, you will get a "detailed" view displaying only

CLOSING WINDOWS

you can always install it in Lubuntu using the package manager. And, of course, you always have immediate access to the terminal which puts the full power of the Linux command line at your fingertips. "Top" is the command-line task manager which uses few resources.

Xubuntu (XFCE)

You can find the XFCE Task Manager (xfce4-taskmanager) by going to the Mouse menu > System > Task Manager.

By default you will get a basic view of services running, but you can list all processes by clicking on Preferences and selecting "Show all processes." Through this Preferences menu you can also toggle the precision with which it tracks CPU (rather than full percentages, it can go to the 2nd decimal place), full command line view and adjust the refresh rate in several increments from 500ms to 10s (default is 750ms).

You can sort processes by any of the columns in descending or ascending order by clicking on the title of the column. The

"user" tasks (services). The view can be altered by clicking on View in the main menu; you can choose to display: "user" tasks, "root" tasks, and "other" tasks, in any combination. Also note the "more details" button in the lower left corner of the Task Manager window. This button is "on" by default, displaying 9 columns of data (as shown). Deselecting this button will limit the number of columns to 4: Command, CPU%, RSS (Resident Set Size), and PID.

The only "graphs" displayed in Lubuntu's Task Manager are the two bar graphs shown at the top of

the window: CPU Usage (on the left) and Memory usage (on the right). The latter is displayed without showing cache, but this can be changed in the View menu if you wish.

To take control of a process listed in the Task Manager, right-click the desired task to get an actions menu. Using this menu you can Stop, Continue, Terminate, or Kill the task (you can also change its priority). These options appear in order of severity: If you Stop a process, then you can start it again by selecting Continue. If you want to "end" the process completely, then select Terminate. If selecting Terminate fails to "end" the

process, then you can select Kill; however, as mentioned above, this is the "method of last resort" because it could have unintended side-effects on other running processes.

When you are finished monitoring and/or manipulating your tasks, clicking the "Quit" button in the lower right-hand corner of the Task Manager window will close the Task Manager.

NOTE: If you have the system resources and you want the additional functionality provided by the Gnome System Monitor (as described for Gnome Shell), then

CLOSING WINDOWS

Task		PID	RSS	CPU
applet.py		17450	22 MiB	0%
bash		17586	4 MiB	0%
blueman-applet		17418	31 MiB	0%
bluetooth-applet		17426	12 MiB	0%
cat		17521	324 KiB	0%
chrome/chrome		17922	6 MiB	0%
chrome/chrome --type=plugin --plugin-path=/usr/li...		18069	36 MiB	1%
dbus-daemon --fork --print-pid 8 --print-address 10 -...		17364	2488 KiB	0%

Preferences also allows you to adjust the columns you wish to see, allowing you to add the PPID (Parent Process ID), State, Virtual Bytes, UID and Priority, all of which are sortable.

At the top of the Task Manager, next to the Preferences button, you also have a built-in CPU and RAM monitor, which will give you the percentage as a number if you hover over them.

In order to manipulate a task, you right click to get a menu which offers options to: Stop, Kill, Terminate or "Priority" which will show a sub menu of priorities you

can change the process to from "Very low" through "Very high."

When you are finished with Task Manager you'll want to click on the "Quit" button, if you simply close it by pressing on the "x" at the top of the window it will simply minimize to your panel.

Unity

In Unity, just like with Gnome-Shell you will use the "System Monitor" application. The easiest way to open the application is by clicking the "Dash" button and typing in "system monitor", an icon

will appear with a "System Monitor" label underneath it. Click the icon and the app will open. Now you can click on the processes tab to see all processes running on your system. Be very careful when using this to close applications. Another way to close applications that I would like to mention is "xkill". If you have an app that is frozen or unresponsive then use xkill to get rid of it. All you have to do is hit the Alt+F2 key combination and it will pop open a dash-like window where you can type in applications you would like to run. When it does open simply type in "xkill" and an icon resembling a gear with the label of "xkill" below it will show up. Click the icon and your mouse pointer will turn in to an 'X'. Now that the mouse pointer is an 'X' all you need to do is click on the application that is frozen. The application will be killed immediately and you can continue working. Another application that some like to use (including myself) is called htop. It is an ncurses based command line tool. Don't get scared, it's easy to use. First you'll have to install it. Open the command line by clicking 'Ctrl+Alt+T' then type 'sudo apt-get install htop', once it is done installing you can run the

application by typing 'htop' at the command prompt. The application will open showing you all the processes running on the system. You can use the arrow keys to navigate to certain processes. What I like to do first is hit the 'U' key and then use the arrows to select my user. With my user name highlighted I then hit enter and htop will only show the processes being run by my user. Then you can hit the 'k' key which stands for kill and then use the arrow keys to highlight the process you want to kill. Once the process is highlighted just hit the 'Enter' key and it will kill the application. Please be careful, even when only showing your user's processes you can still risk losing unsaved data by killing certain applications. If you are unsure about an application, a general rule of thumb is DO NOT KILL IT.

Next month we'll look at selecting/changing sound devices, sound volume/mute, and recording inputs.

Recently, the adoption of Unity (a new desktop management system) by Canonical has led many users to complain about the inability to customize it. In fact, you can manipulate Unity via: CCSM, Ubuntu Tweak, gconf-editor, editor-dconf.

Some months ago up popped another program: **MyUnity**. In little time it has become appreciated by users due to two ingredients: simplicity and aesthetics.

We talked to the two main developers of the tool to see the idea behind MyUnity and what plans they have for the future.

Thursday, October 27, 2011

UIELinux, a LUG in Italy, usually takes place on Thursday evenings over a beer and bowls full of popcorn at the pub Mapaleo Savignano:

Davide: .. *finished installing Ubuntu,*

the first thing I do is reduce the font. On 11 I do not like it, it's too large. I try but can not find the font manager. Did they move it somewhere I'm saying. But it's not there. Natty in there!

Fabio: *You can do it. From gconf you can do everything: font, launcher, themes, icons, everything.*

Davide: *Sure I can do it, but that's not the point: I expect to find a system tool that allows me to do it with ease. Gconf is not exactly the most user-friendly, do not you think?*

Fabio: *Mah. I do not know, in my opinion is not necessary but sooner or later, Canonical will do anything.*

Davide: *But in the meantime there is nothing. Put yourself in the shoes of someone who has never seen Ubuntu.*

Fabio: *Ok, I will think.*

The Birth Of MyUnity

During the following Saturday and Sunday Fabio writes the code that will be version 1, Davide designed the aesthetic part of the GUI and Sergio creates the logo and icon.
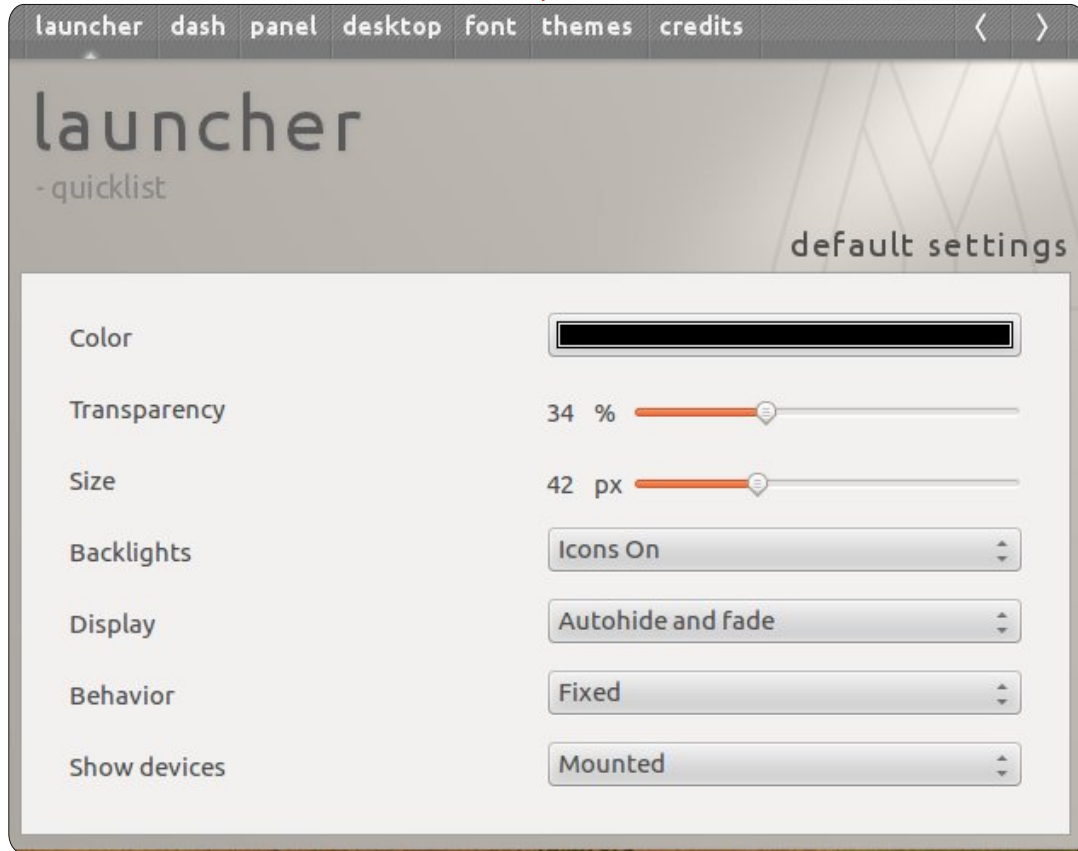
After uploading to the network, a word of mouth among users and with hundreds of link hits every hour, everyone wants to configure Unity.

In the beginning we got advice and suggestions from individuals, and various articles that appeared in journals and blogs that encouraged us to improve the characteristics of this simple configurator.

On the recommendation of Paolo Sammicheli (Ubuntu), and bringing Andrea Colangelo (Ubuntu MOTU) into the team, the LaunchPad project begins and

starts to take shape in a much more structured and uniform way.

The structure of the source is modified to meet the strict criteria of the packages.

Meanwhile, Davide and Sergio continue to modify the GUI and bake in version 2.0 on December 10: In the blogosphere you multiply the positive comments.

With the arrival of Precise (12.04) and the new version of Unity, the code undergoes a significant modification enriched with additional setting possibilities. With the help of Stefano "Teo" Teodorani and his precious script, we can also manage themes and icons.

Davide certainly can not think of using the GUI of 2.0 and 3.0, so MyUnity is forked while Andrea asked Canonical for a chance to put the tool in the official records.

With the release of version 3, Davide also created the official website of the project which includes pictures and comments, while Marco "Markuz" Sgarzi deals with translation into English.

Why has it succeeded?
Davide was right, users wanted the freedom to manipulate Unity. We like to think that the simplicity, immediacy and visual impact have in part contributed to the success.

Why have you written in Gambas?
The reason is fundamental and unavoidable, as Davide and I both know this language very well .

The speed with which you can create applications, however, is considerable and this choice has no influence on the success.

MyUnity compared to Ubuntu Tweak, what do you think?
MyUnity is a tool designed to configure the Unity environment and nothing else, with the utmost simplicity. Any modification occurs in a user space, thus avoiding disrupting the system. Restoring the default settings to run any test is easy and safe.

Ubuntu Tweak is a very powerful tool. It offers many settings and manipulations at a low level, but not all users understand or know what to do. When you drive a car you know how powerful the accelerator can be and must be used correctly, otherwise there is
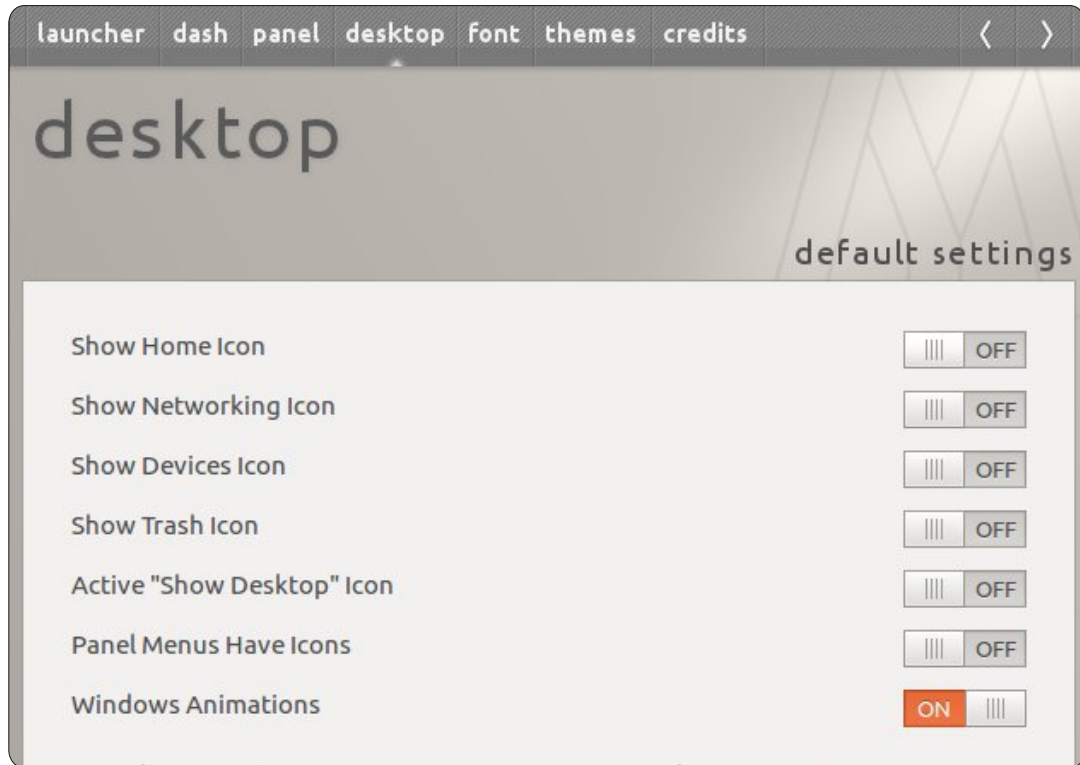
serious trouble.

MyUnity and Ubuntu Tweak are two very different applications.

These days more configutation tools are appearing, are you afraid that they might exceed the popularity of MyUnity?

MyUnity is an exchange of opinions that was born at the bar in front of a good beer. All'nizio was more of a challenge, because there was no such thing. If Canonical chooses to

fill this gap by creating a tool for Ubuntu ad-hoc so be it. I do not see the problem, and that's the beauty of free software: everyone can do something better (or worse) for the community.

What can we expect from future versions?
In 3.1, which will be released soon, we have solved a number of bugs including the recognition of Unity2d. We believe there is still considerable room for maneuvering the various settings

MY STORY

launcher   dash   panel   desktop   font   themes   credits   ‹ ›

font

default settings

Window Title	Ubuntu Bold 11
Document	Sans 11
Desktop	Ubuntu 11
System	Ubuntu 11
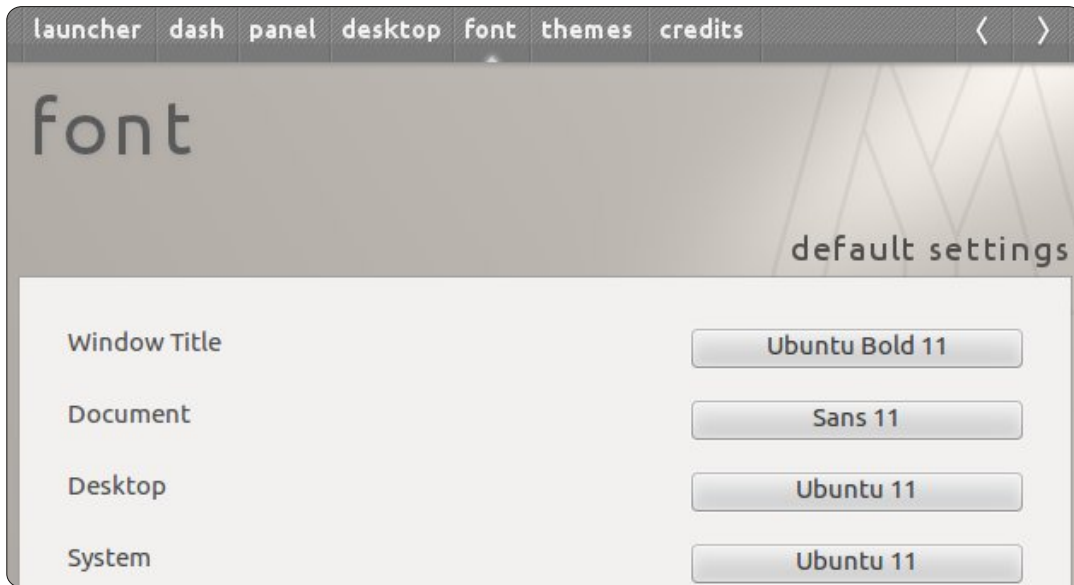
that can be added. But it is essential to balance the ability of making changes with the ease of use. You should not feel displaced or distressed, but understand immediately what to do to get the desired result. The simpler the GUI, the less need there is for instruction manuals.

Current version: 3.1
http://www.uielinux.org/myunity
https://launchpad.net/~myunity

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16x16 SUDOKU

Numbers 0 to 9 and letters A to F are to be filled into the 16x16 grid so that every row, every column, and every 4x4 box contains 0 to 9 and A - F.

	4	3				6	9	8					E		5
9	B		7			4				3	5			D	F
			7		F	A	9	0					4		8
F		8	A				7		4	B				2	9
				8	0	C		3			A	1	6		7
8		A		9		1			B	6			2		
	2				3	B			F	9	1				5
3		1	B			5				2		0		8	
	3		0		7			9				5	1		4
5			4	C	D			6	B			3			
	B			1	A			3		2			F		E
6			2	F	9		B		4	5	A				
B	9			3	4		C					2	5		6
1		0			E	6	B	5		8					
2	D			1	A			C			F			0	B
	5		3				0	6	2				D	9	

Solutions are on the second last page.

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I n 2008, I was still using a 20 year old DOS computer (!) - when it became obvious I couldn't go on without connecting to the web. I bought one of the very first netbooks because it was funny and cheap. Linux was one of the reasons for the low price, and I knew nothing about this strange thing. But I discovered that it was possible to buy a computer without paying what I call the "Microsoft tax", so to speak. I added an external CD/DVD rewriter.

The original distro was Xandros... not a very good one in fact. The possibilities were very limited, and I rapidly looked for something else. The problem was to find a distro working out-of-the box on an EeePC, and it was not easy in those days. I started with ubuntu-eee (an Ubuntu 8.04 fork which became easypeasy). The main problem was the kernel: ubuntu-eee was using a specific kernel and it was not possible to easily upgrade it when a new Ubuntu version was available. I tried livesessions of eeedora,
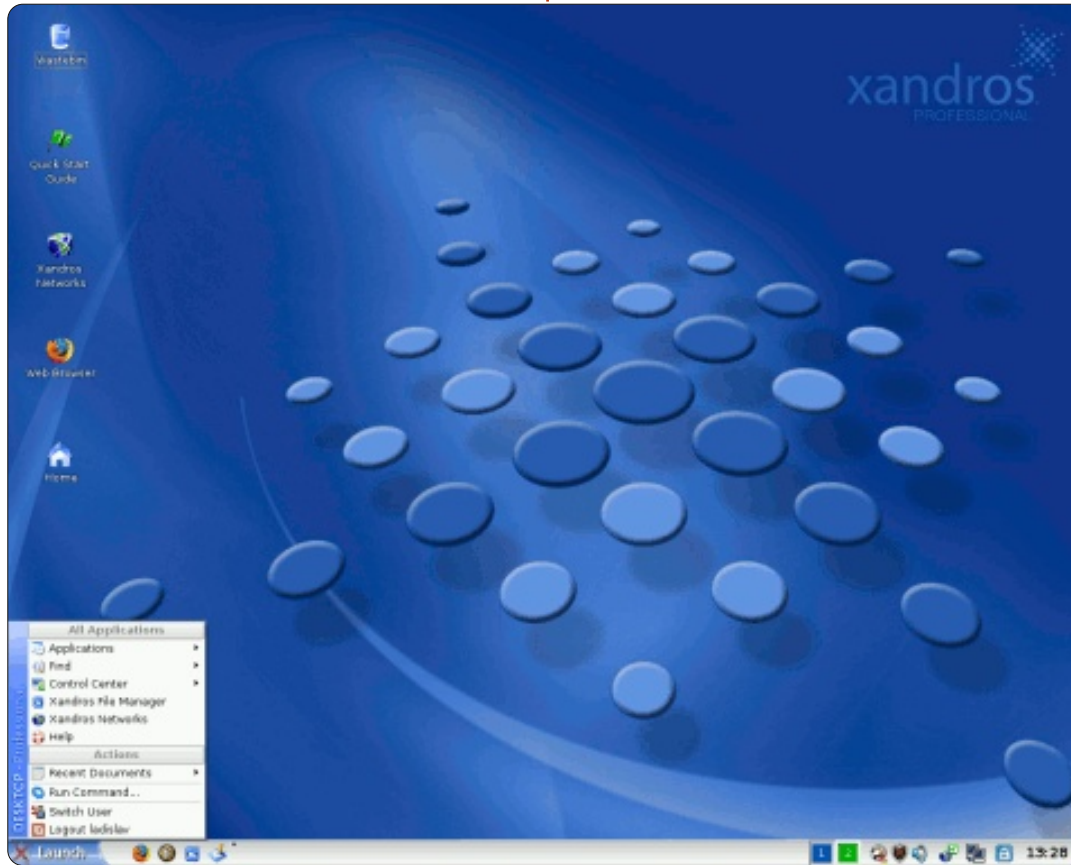
eeedebian, and Linux Mint, and I finally switched to Ubuntu 8.10 on my netbook - and on my new desktop computer too (I bought a "naked" Nyos 50 not to pay the "tax").

In the meantime, I was gradually discovering Linux - thanks to forums, magazines, and on-line-documentation. Everything was not yet working out-of-the box : e.g. the WiFi LED or the volume control on the netbook, but I succeeded in fixing those little problems. Within a year and a half, I definitely dropped out everything that was coming from Microsoft, and my configuration was OK regarding what I wanted to do with it.

Then, Unity arrived! I'll just say two things about that. To me, Unity is a real nightmare. It is also a solution for which there was no problem. So, I switched to Xubuntu. It is very simple, very intuitive, faster, and very easy to configure. Since it uses gtk libraries, gnome applications are welcome. Xubuntu is now the only distro I use.

Oh, by the way, what do I use? Very simple but powerful things: Firefox and Thunderbird, Abiword, and Gnumeric. On a second level, eog as an image-viewer, epdf as a pdf-viewer, Xsane as a scanner, GIMP, MPlayer, devede, brasero (if you want to know more about these programs, please refer to the ubuntu-on-line-documentation). I also use products such as gparted, baobab, mousepad, gnome-disk-utility, hardinfo, ntp, wipe, clonezilla...

And now, what is important to me? First of all, I do not have to adapt myself to the distro. The distro must be able to adapt to me.

MY OPINION

I must be able to control precisely what I need, and to remove all that is not necessary to me. That is why I don't use Ubuntu Software Center, which is just a pleasant catalogue to look at. It's not precise enough. It does not allow me to completely remove unused packages, that is to say to also remove configuration files. I added deborphan in synaptic, which allows me to remove orphan packages. I also removed about forty or fifty non-useful things. For example, dummy packages or things like splx - since my printer is not a Samsung printer. This is important because my netbook has only a 4GB SSD.

I must be able to completely personalise the desktop so that everything is located where it has to be, and behaves the way I want. Fortunately, Linux allows any user to modify little things in configuration files. For example, I changed the 3600 seconds random sleep time to 10 seconds in /etc/cron.daily/apt. Otherwise, when I start my computer, it may take more than half an hour before I am told about available updates.

Upgrading to new versions is a real problem which bothers me.

First, upgrading should be as simple as updating. And it's not. During the very long upgrading process, I generally am asked to choose either the new version of an unknown configuration file or to keep the old one. I don't know everything about Ubuntu, so I know nothing about the consequences of the choice and I don't know what to do. I generally choose at random. After the process, I discover applications have been added. For example, I chose mousepad and eog. Why install leafpad, pidgin (which I don't use) and ristretto, that I had previously removed ?

Second, all that was working before should work after. And all my personal choices in the different preferences and configuration files should stay unchanged. After upgrading, things have disappeared, such as certain icons. Other things simply don't work any more. For example, ADSL connection, from Jaunty to Karmic. I had to add sun-java-plugin after upgrading to Lucid because icedtea-plugin was unable to display websites which it did before.

Third, depending on how I do it, I don't exactly get the same thing. I use a single ext4 partition, and no swap, and I have tried four different ways to switch to a new version.

1 - I use the very long upgrading process. It generally takes at least four hours time to upgrade, fix what no more works and remove the unusefull things which have been added. There is also another problem in this process. Some new features are not available. For example, I had to manually switch from grub-legacy to grub-pc in karmic.

2 - I make a fresh install, which is the best way to get the real new version. But I have to re-personalise everything. And it takes a very very long time.

3 - I make a fresh install WITHOUT formatting the old ext4 partition, which keeps my /home directory. But the result is not exactly the same as the one I get with the previous possibility. Pieces of the old version are not completely removed.

4 - I use two partitions : / and a separate /home partition and I then make a complete fresh install which keeps my home directory. But I have to remove what is not necessary to me. That's what I'll do with Xubuntu 12.04 LTS.

So, the ideal upgrading process doesn't exist. Anyway, the good new is that facing problems is an opportunity to learn something and to grow up. And of course, I go on with Xubuntu, the best distro for me.

I THINK...

What turns you away from a distro?
And what turns you to a distro?

A desktop environment which is ugly and does not match the way I work.
Boot speed, configurability.

Repositories with not much that I want in them, and no repo for that distro (e.g OpenSUSE)
Everything working out of the box

No or poor drivers for my hardware; changing default app content; over-ambitious desktop GUI
Quick boot; non-alignment to a particular problem (e.g., to music production); constant improvement, particularly in the kernel

Lack of application updates and delayed security fixes.
Strong leadership team and enthusiastic community support.

Many default apps for the same purpose being installed and having strange settings

Room for customization and not many required reboots

Unwanted and silly changes like Unity
Good language support, possibility to work fast and effective, easy to use

Easy to install and no futzing with drivers - audio, video, printer, wacom. It should fully work together. Recent upgrade went through three distros to find one that just worked.
It works perfectly after install. No wandering through forums to get audio to work; no tracing obscure issues in video, no desktop GUI issues. IT JUST WORKS. Am I there yet? Nope. Closer than on some other distros.

When the upgrade changes, or removes all the things I liked in the first place
When it has all the apps that I want - without forcing anything I don't want, on me

Hardware drivers, I tried to install Debian on my laptop and was

unable to use it because of lacking wifi driver, Kubuntu worked fine
User friendly, configurable, good community, it just works

Gnome 2 was fine and I think Gnome 3 should be OK. Everything on my screen is much too big. I don't like launching/switching buttons like in Windows 7 and Unity. I don't like having to type in the name of an application in a search field. I don't like configuring compiz-fusion, which is totally incomprehensible. I don't like the big icons all over my desktop. Matureness and features are lacking.
I like thin tool bars with small buttons. I like distinctive buttons that tell me which applications are

open. I like to be able to chose easily what will be on my toolbar. I like the menu of applications to be organized by category. I like to be able to drag-and-drop between posts in Thunderbird – not possible in Unity. I like my iPod to be recognized by GTKpod when I plug it in. I like the weather to be in French at the top of the control panel, even though I live in Quebec. I like to be able to erase the history of recently opened applications. I'm a pretty knowledgeable user and I don't mind getting my hands dirty, but there's a minimum that a distribution should allow you to do easily. I'm using Mint LMDE while waiting for Gnome 3 and Gnome shell.

This month I'd like to pose the question:

Ubuntu 12.04 will be released on the 26th of April. Will you be upgrading?

To give your tuppence worth go to: http://goo.gl/Ms7jI

Closing date for this question is **Sunday 08th April 2012.**
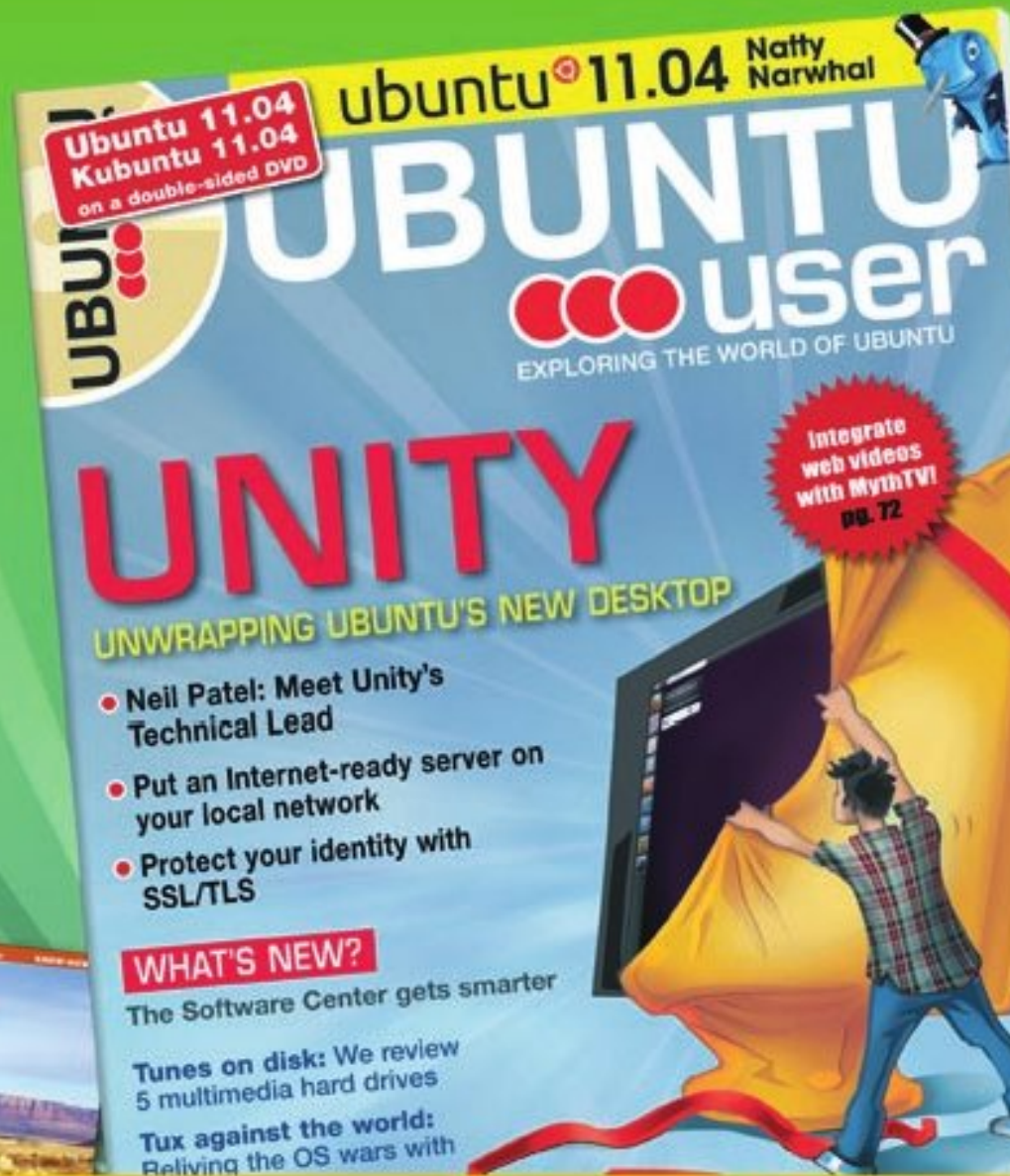
Those watching the Distrowatch page hit listings have probably noticed an oddly named entry that stayed in the top 25 for a good chunk of 2011. Called *Bodhi* (current version is 1.3.0) it not only made this level in just over a year of release (for all versions) but managed to do so using Enlightenment 17 (e17) as a desktop shell.

What is e17?

Enlightenment is a desktop shell, much like Gnome and KDE, that has been in development for nearly 15 years. I've worked with just two versions, 16 and the current 17, the latter having been in various alpha/beta stages for the past 5 or so years (if you want to be technical, e17 is really 16.999 but what's .001 among friends?).

Although initial development focused on low base spec computers, current testing is geared to multi-core processors with higher RAM counts, although

e17 is at home in either setting. Base code is somewhere around 25MB (Gnome and KDE are 10 times that amount) with Bodhi's version undoubtedly being more due to eye candy and tweaking.

As options go, Enlightenment never really caught on, and was overshadowed by others in the "light"category such as Xfce or LXDE . Anybody care to remember

the ill-fated gOS venture of 2007-08 or OpenGEU from 2009, both of which took a powder after relatively short runs? Even moonOS defected to Gnome after version 3, thereby abandoning e17.

This is unfortunate, since e17 holds promise as a highly customizable shell, but an early, unreliable e16 version left a bad taste with many users, and the

stigma still lingers. Of note, Synaptic still lists e16 although it's not advisable to consider using it.

Although there may be others, I know of just one OS other than Bodhi that is Ubuntu and e17 based, and that's ExLight from Sweden (don't bother looking, it doesn't rate mention at Distrowatch).

The Basics

Bodhi is not quite as foreign as the name may indicate. Properly pronounced Bo-Dee (not Bod-Hi or Bod-He as I thought) it hails from the States, and the lead developer is Jeff Hoogland. The name is Sanskrit for enlightenment, appropriate given the shell.

Unlike other distributions that change base code as Canonical does, Bodhi has always used 32-bit Lucid Lynx (10.04 LTS) and has a downloaded image of roughly 375MB.

No other way to say it, but Bodhi is minimalistic and included
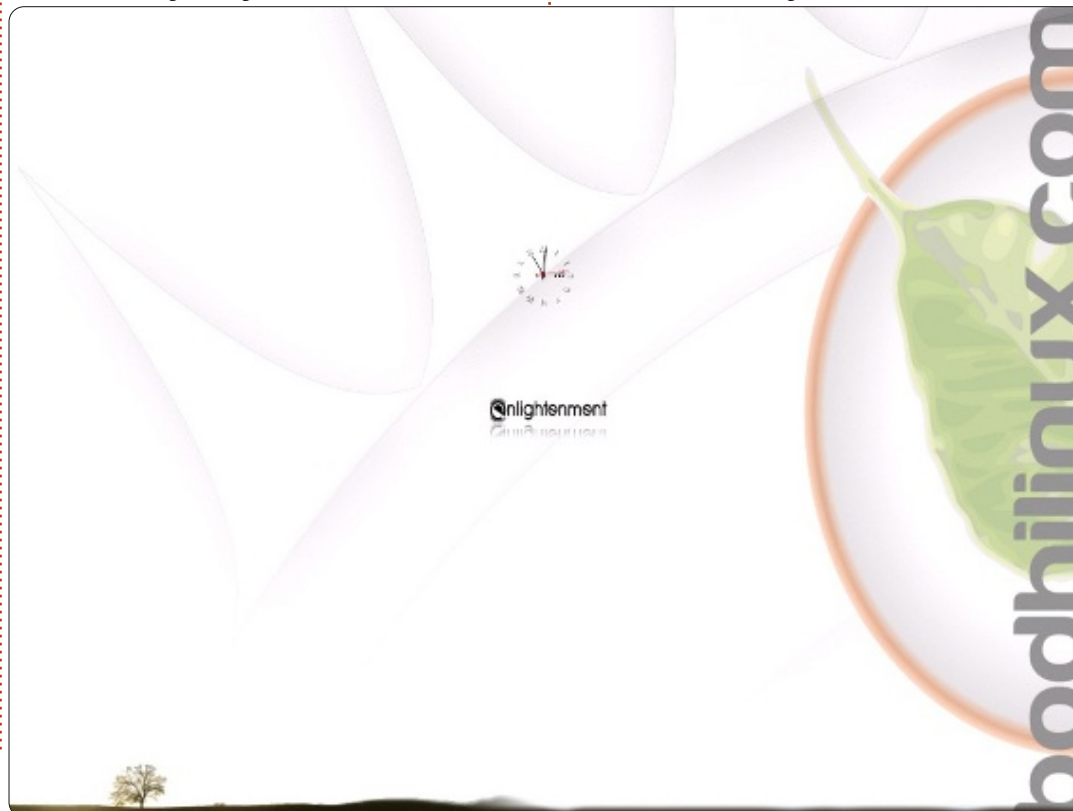
programs are limited to the Midori browser (with private browsing), LXTerminal, PCManFM (file manager), Leafpad (akin to MS Notepad) and Synaptic Package Manager. The original Bodhi release, 0.1.6, came with Firefox 4 beta but that was discontinued, possibly to save space although the extra 40MB or so would still leave plenty of leftover room on a CD.

Website

After years of reviewing OS websites I've pretty much got the pattern down. Usually a home page, another to highlight the developers and sell paraphernalia and, finally, one that offers the actual download. Occasionally a forum or FAQ page is thrown in but most information is often stale and it has become obvious developers are phoning it in (the thrill is gone, baby).

But www.bodhilinux.com is the rarity in the bunch, with comprehensive and relevant information, additional program offerings that rival many repositories, tutorials aplenty and well staffed forums with questions often answered in minutes. In

addition, it's well designed and visually appealing.

Whether or not they meant to, Bodhi developers have better Enlightenment tutorials on their website than the Enlightenment website itself (check it out at www.enlightenment.org).

Installation

Normally I don't elaborate on live mode since it's the usual CD/DVD spin and grind, but Bodhi has a couple of additions to the

routine that merit attention.

Two choices must be made prior to a complete boot, with the first being a profile, what you might call a desktop layout. These range from Bare (wallpaper and nothing else) to Compositing (a modified Compiz code for e17). In between, you'll see offerings for laptops, desktops, netbooks and tablets, with each showing specific engineering and design traits. There isn't a bad choice in the group, although Bare dispenses with everything but a background and may be too light for most.

Then you have to pick a scheme from a palette of several, all of which are artistically pleasant, so just click on one since any choice from these two areas can easily be changed later.

The last stumbling block involves default backlight settings that are pegged to dark, for lack of a better description. This requires a trip to the settings menu, kind of hard when the screen resembles NYC during a blackout (have a light nearby). My previous e17 tests didn't exhibit this characteristic so I can only assume it's a Bodhi tweak.

Even with all this, live mode boot times averaged 2 minutes; however, continued use of this mode is a bear since any changes made will disappear when the power does. Those desiring portability are advised to visit www.pendrivelinux.com for info on creating persistent USB drives (i.e. drives that retain changes).

So it was full installation, but there is a pleasant surprise in this option. Care to guess how long it takes – 30, 45 or 60 minutes?
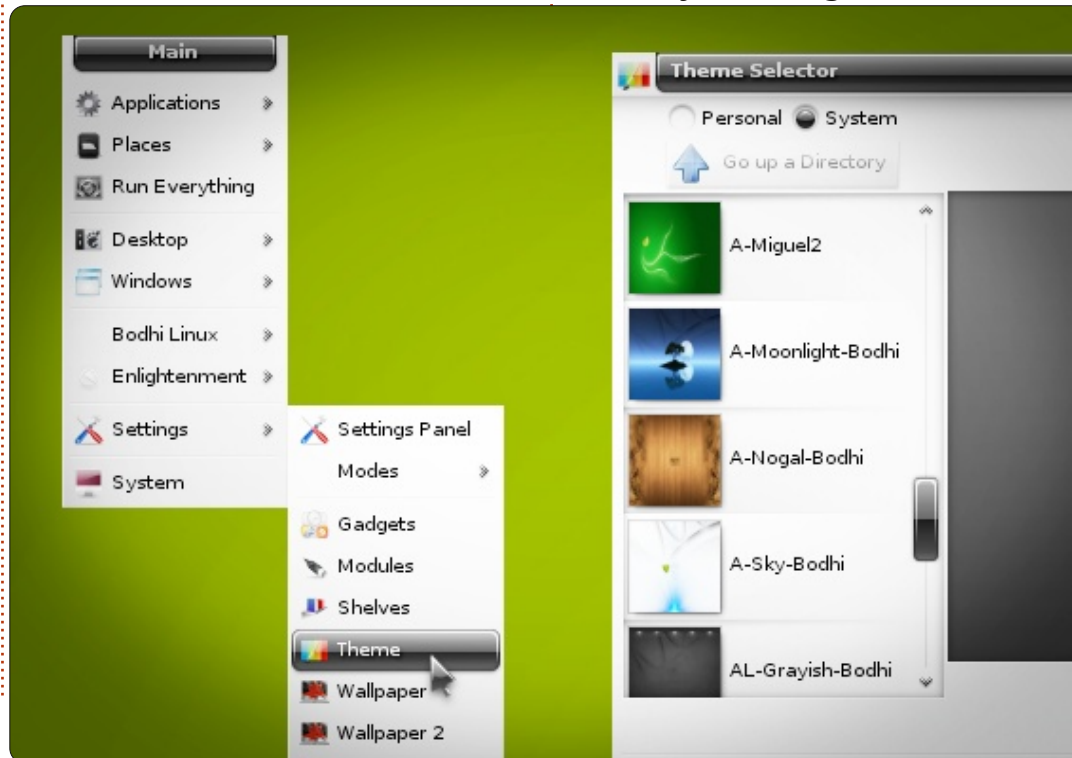
How about 8? You read right, 8 minutes. Resetting backlight settings and 50MB updates took a couple more, so I was out all of 15 minutes, tops. Quite impressive given that previous tests with e17 based distros never produced such stellar times.

The only other issue is a final screen hang. When all is said and done, the CD ejects but the final splash screen (nicely designed with small green leaves cascading left to right) refuses to close. Let it do the leaf dance for a couple minutes and then hit enter. It never hangs again.

If you're wondering, Bodhi takes roughly 2GB off your hard drive post-install.

Desktop Design

Even with entering user ID and password, cold boot times are a respectable 30 seconds or less. Those familiar with Fedora 12 will recognize the blue bar that creeps from left to right on the screen to indicate boot progress (no boot music, though).

As much as I'd like to describe the first desktop, that's sort of difficult since so many choices are offered; however, some attributes are the same no matter what, and those I'll discuss.

You can quit looking for desktop icons. There are none, nor does e17 allow for them. No trashcan or home folder icons, nor is there anything for attached external drives or cards. You'll have to access these via the home folder off the main menu.

Instead, e17 uses shelves (a.k.a. docks), modules and gadgets. Shelves can be placed anywhere along the borders, and you can install several. Modules and gadgets can then be inserted into these shelves (such as iBar, a module that allows for program icons to be dragged and dropped).

An unfortunate aspect of e17, and possibly one of the reasons it never became as popular as Gnome or KDE, is that the protocol for adding, deleting or modifying any of these areas can be overwhelming for the uninitiated. Settings under the main menu have roughly 14 categories, that open to expose nearly 80 subcategories. Hardly intuitive, and most will have

to spend time just to get the menu map memorized. Once deciphered it becomes second nature.

For example, changing backlight settings requires 7 to 8 clicks or mouse movements and is hardly intuitive. Most newbies will undoubtedly be overwhelmed the first time.

As for main menu access, you have two choices, the first of which is to click the Enlightenment or Bodhi button found in the left corner of most shelves (except for the Bare design – it has no shelves). This opens a Gnome-like menu.

The second option is to left-click an empty desktop area, but make sure you're not too close to the right side of your screen. E17 menus are limited to right-hand cascading and being too close to the edge will cause it to disappear into cyberspace. Move to the left to alleviate that issue.

One other peculiarity of the e17 menu design is that the main menu is not static in left-click mode, that is, both the main and secondary menus cascade up and down when scrolling through program listings, so it's possible to have the main

menu disappear off the screen when scrolling.

As for the right mouse button, it's active only when used on shelves, modules or gadgets and then only to reset or choose options for those areas; however, if programs are added to favorites, right-clicking an empty desktop area will produce a menu of those.

In essence, plan on taking some time to learn these procedures.

Operational Efficiency

E17 is fast. Amazingly, blazingly, blindingly fast. Without a doubt the fastest desktop shell I've ever used. Programs snap to attention within a few seconds. LibreOffice Writer opens within 5 seconds and Gimp is ready to use within 10. Either of these programs in Gnome or KDE would take 3 to 5 times longer to open on my system.

Even more surprising is that resource usage rarely peaked above 20% and settings could dip as low as 2% at idle.

Hardware acceptance was

exemplary, with no downloads necessary, an oddity given that usually 1 or 2 are necessary with Gnome or KDE. Wireless, video and audio were operational from first boot, and I was happy to not see that aggravating "AMD Unsupported Hardware" pop-up. About the only thing missing is a printer driver set, but that can be added (read below for that).

Wish I could give kudos for battery consumption and generated heat but Bodhi is no better than Gnome or KDE counterparts in this category, rather odd given that resource usage is so low.

Adding Programs

Bodhi is purposely light, so users can make their own program additions, and believe me when I state you probably will. Midori is a mediocre browser and LeafPad is equally dismal as a text editor.

Since e17 is neutral it will accept both Gnome and KDE programs, but there is a protocol that must be followed and is stressed at the Bodhi website.

There are four ways of adding

programs – apt-get, modified apt-get, the website or Synaptic.

Of these, the website is my recommended first stop.

Midori defaults to the Bodhi website. Go to AppCenter under the Resources heading and you'll see a boatload of program choices including the Nikhila and Pratibha packages.

Nikhila (Sanskrit for "whole, entire, all, complete) is 530MB and includes Mirage, Adobe PDF

Reader, Cheese, Firefox, gEdit, Handbrake, k3b, LibreOffice, Okular, Openshot, Qalculate, Pidgin, Printing, Rhythmbox, Shotwell, Simple Scan, Thunderbird, Transmission, VLC, Xchat and Filelight.

Pratibha ("light, splendour, intelligence) is 157MB and packs Claws, DeadBeef, ePDFView, ePhoto, Geany, Light Office (Abiword plus a couple others), Pinta, Qalculate, VLC, Xchat and Xfburn.

Specific packages for Audio, Image, Scientific Publishing,

Educational, Web Development, Online Media, Icon Sets and GTK Themes are also highlighted along with service packs, Internet specifics, graphics, kernel upgrades, multimedia, Enlightenment modules and assorted extras.

Although some apps are repeated in various categories, this all adds up to a whopping 2.5GB +/- larger than the initial Bodhi installation uses on the hard drive.

Not only do your have programs galore but you'll see options to install or download them. "Install" downloads and installs chosen programs, with little user intervention, but is designed to be used by Midori or Firefox browsers (the files have .bod extensions).

"Download" is not browser specific since it merely parks files in the Home folder for retrieval later.

While this is simple enough, using Synaptic and/or apt-get can present difficulties. E17 has no problem accepting Gnome and KDE programs but it does find related dependencies and "recommended" files hard to digest, and both

REVIEW: BODHI LINUX

techniques load them by the bushel.

This is where the modified apt-get comes into play. The usual command line would be "sudo apt-get install" along with the program name, but developers recommend you use a different approach with "sudo apt-get install –no-install-recommends" with the program name. This effectively halts those extra, unnecessary dependencies (this technique is also mentioned on the Ubuntu website).

Does it work? Both Synaptic and apt-get attempted to retrieve 660MB of files when I downloaded Kile, a LaTeX processor, but using the modified apt-get command reduced that figure to just 80MB and it works perfectly. So, yes, it does work.

While you can add Ailurus, Ubuntu Software Center or Ubuntu Tweak as package managers, they can be used only as root (which means the added menu entries are for show only) necessitating a terminal sudo command (ailurus, software-center or ubuntu-tweak preceded by sudo), but the risk of including yet unnecessary files will still be there.

I learned to use these package managers as a means of spotting programs of interest and then using the modified terminal command to actually install them.

What happens if you don't follow this protocol? As I discovered, you may notice programs start to slow down, e17 may occasionally crash and login options may change to include Gnome and KDE desktops (they are bare-bones Openbox versions with wallpaper and zero else).

While slow programs are a problem, an e17 crash is a perverse blessing of sorts and is the polar opposite of a Windows BSOD. Shelves, modules and gadgets all disappear along with the capability of shutting down except by pushing the power button, but programs still work and open documents can be saved without any loss. In fact, I once went over an hour with a crashed desktop and lost nothing (the only oddity is that the left click menu still works to open programs but it can't be used to shut down or log out – that part of the menu vanishes).

Final Analysis

E17 is an odd choice for a desktop shell but not a bad one in the long run. It's fast and, for the most part, reliable. Play by the rules, add programs properly and you'll have no problems.

I did have the usual snafus with disappearing shelves and the odd gadget or two that failed to always work, but that's life. I've had the same issues with Gnome, KDE and Windows. Nothing is perfect, even the much-vaunted OS X has its issues.

As a comparison I installed Xfce as a login option, and was somewhat surprised to see it used double the resources, and programs were noticeably slower to respond. While I didn't have to watch for Gnome or KDE dependency snafus, continued usage became laborious compared to e17.

Truthfully, I went into this review biased concerning Enlightenment's past issues and knew they would get in the way; however, I must admit Bodhi is really impressive. It's fast and well

designed, and the website is second to none.

All things considered, Bodhi is a stellar choice for those looking to start with a minimal system, and build it up with what they like. There is nothing to indicate it can't be a daily user.

I'd give Bodhi 4 out of 5 stars with a drop of one only because it has a learning curve that may confuse some, and a desktop shell with a few quirks that necessitates caution when performing some actions, such as adding programs.

Full Circle

I must admit that, when Unity and gnome 3 came out, I wasn't really enthused about either OS. I "cut my teeth" on Ubuntu (circa 2005) and had used it until about 1 1/2 years ago - when I switched to Mint. Just liked their presentation and ease-of-use.

When Unity came out, I just couldn't like it. I tried the new Mint, which was nice, but didn't give me the control or visual confirmation, I.E. when just glancing down at the menu bar I knew what apps were running even if I was running 4 desktops.

In December with all the changes, I have come back almost "Full Circle" (pardon the pun) to Kubuntu.

It is fast, I can customise it as I am used to, and it is reliable. Can't wait for the LTS version to come out. Then I am set once again with the *buntu family.

I have been reading FCM since its inception, and like the way it is presented. I have DVD's with almost all FCM editions. Just the last few haven't been burned yet.

Don't get discouraged. We're still out here, some may wander once in a while, but will probably come back to one of the many *buntus.

Tom L

Windows 7

I have been using Ubuntu as my main computer's OS for some years now, but still find it necessary to run Windows 7 in a virtual machine, which I hate doing. Admittedly, I use Windows for far fewer things as time goes by, but I can't just get rid of the final few! All the big stuff is now covered more than adequately by Linux - it's now the small items which are used alongside hardware peripherals which cause the problem. For instance, I have a Garmin satnav which I use extensively for travelling. I have a lifetime map upgrade subscription, but - guess what - I can update the Garmin device only through Windows (or a Mac).

I use Evernote extensively - I have it on my phone and tablet (both Android), but I have to use Nixnote on my main PC - the Nixnote team are doing a great job, but the program just isn't as slick or nice looking as the Windows version. I have used it with Wine, and it works, but is so slow that it's relatively unusable. Evernote responded to my queries by saying that they weren't a big enough company to make versions for all the minor OSs.

I have an excellent Android tablet - the Asus Transformer. But I can't get it to talk to my PC. Why? Because Asus supplies connection software only for Windows PCs or Macs. I can, of course, get around that, but it's still annoying.

I have a DLNA TV and Bluray player. I don't actually know how easily they will interface with Windows, but I do know that it's not easy to get them to do it consistently and with much functionality with Ubuntu. The DLNA servers I have tried with Ubuntu are flaky and difficult to use at best, and just don't work at all at worst. Perhaps a good article about successfully setting this up would be good?

I remain solidly committed to using Linux - I do prefer it for many things, and each version is better than the previous one. I have a Home Server also with music and photos on it which also runs Ubuntu, having originally run

LETTERS

Windows Home Server, and I would never go back to that.

Mike Anderson

An Old Hand

I am an old hand at operating systems, over 50 years in the field. But forget the past! A new year and some very worthwhile work has been given to you. Core Linux, Ubuntu, Linux Mint, and so many other distros of Linux.

Of all those that I have tried or worked with, Ubuntu and Linux Mint stand out. I have tried to convince many other computer users to get off the Microsoft bandwagon and enjoy a far superior system.

I have 7 systems loaded with different Linux distros (many multiple boot and some Virtualbox). Now we hit a bump in the road. The versions from Ubuntu 10.04 and the similar Mint Linux have ventured into new concepts that I think should only be optional.

Cloud connection and processing is a great idea, but what about the many users who need the system only for emails, some writing and spreadsheets, some games, and for pictures and videos. What about the open door to social engineering (facebook, twitter, etc) which most do not want. If they want it, install what they need. Security needs to be seriously reviewed. It is amazing what I can learn about any person by Internet sleuthing. The old bank security question of your mother's maiden name is now a joke - don't even need ancestry.com for that...

Jim Mechtel

Google Currents

I just wanted to say a big thank you for all the hard work which has gone into creating the Google Currents and Kindle versions of Full Circle Magazine.

I think this is definitely the way forward, as so many people now either have smart phones or tablets of some sort, and probably, like myself, find themselves using their actual computers less and less.

Google Currents, as far as I'm aware, isn't yet available in the UK, however, a quick Google search for 'Google Current APK' brings up how and where to download it from. Be sure to have 'Unknown Sources - Allow installation of non-Market applications' ticked. Currents will then download and happily install itself.

While the Currents version of FCM is very good, and nicely laid out, might I be so bold as to suggest that the odd picture here and there may not be such a bad thing [done! - Ed]. Totally understand why they were left out, however, the majority of readers probably have a decent broadband speed, so would be able to download the latest version over WiFi at home, and then have FCM to hand wherever they go.

Bryan

2015: Having dealt with banks and countries, rating agencies are shifting focus to the individual citizen....

Great...now you're eligible to a rescue bailout package!

Whoa!...Moody's just downgraded my rating to ,C'....

costantinos.bourboulas@oracle.com

Feb-12

Modern Times

http://orassicpark.blogspot.com/

LETTERS

Directory Opus

I currently use Directory Opus on Windows 7 to manage my daily documents such as read my pdf's, odt, doc, powerpoint, view HTML docs, display photos in Raw, Jpeg, Png, Tif, Gif. The Dolphin and Nautilus file managers leave me wanting because they are so limited in their ability to do all the file management duties needed daily. Directory Opus allows Zip/Unzip, slide shows from your photos, plays music (mp3), shows videos and Flv Flash, allows setting the number of windows to display photo images/dual data display, changes the size of Icons for your photos to your taste, converts file format for photos. Does anyone know of a more powerful file manager than either one of the Ubuntu utilities that are packaged with Ubuntu & Kubuntu. I have tried Directory Opus and Power Desk a while ago with Wine, and found some incompatibilities in the way they drew the interface so I don't really want to go that route, I would rather use a utility native to the Ubuntu/Kubuntu OS. Ubuntu needs a file management utility like this to make daily work easier since it
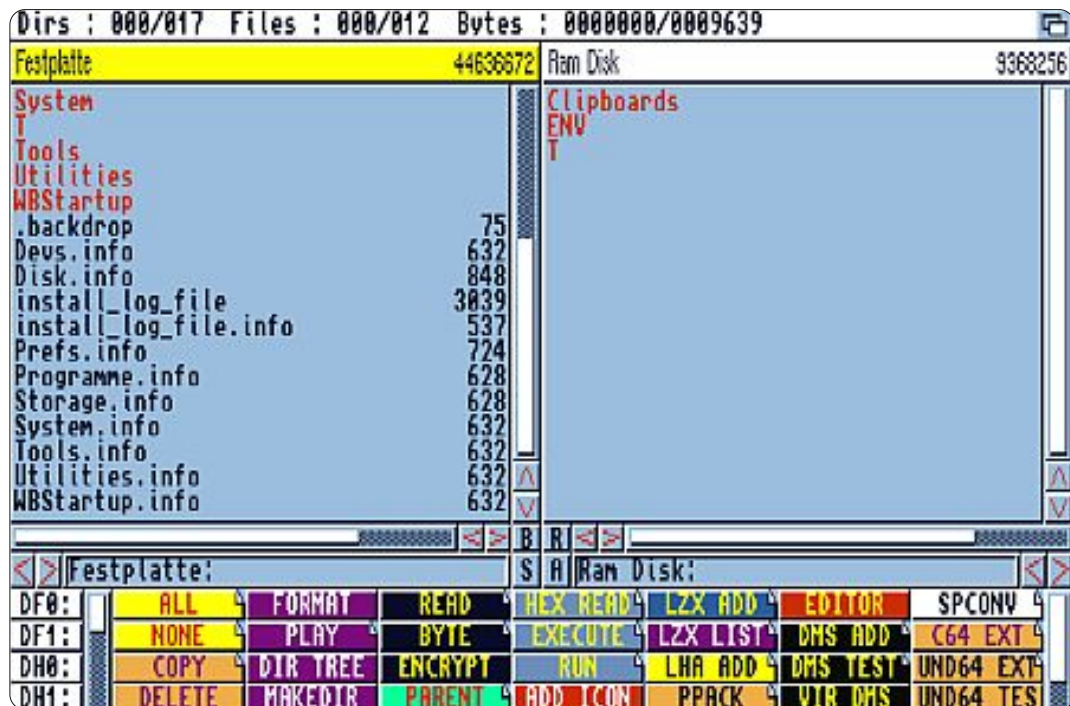
does not require a person to keep opening separate programs just to view or play something. You may just want to look rather than modify something and a utility like this is very helpful.

Brian Hartnell

Ronnie says: *I can't help you out with a file manager, but I think the last time I used Directory Opus was on my Amiga A500. Ah, the memories!*

Gord adds: *To a large extent, the whole philosophy of Linux is to have small programs which do one thing well, and can link to other programs which do something else well. So, for example, pressing Enter will get you to Eye Of Gnome, which can do full-screen slideshows of images.*

Two Cents On Unity

I am a 45-year-old career software developer, on a sabbatical for a while, with around 3 years under my belt as an Ubuntu user. Total Linux/FOSS convert and a vocal local advocate.

My experience of Linux has been one of freedom and all the possibilities it presents. We are free to use pretty much whatever device we want, any way we want to use it, with whatever distribution and/or software packages that suit, and contribute back in whatever capacity we can. After working for years in technical silos, this freedom shines very bright.

Many of the contributions to the Unity debate do not seem to appreciate one important factor: each person's own unique way of working with Ubuntu. I currently use a classic 11.04 desktop as my setup has evolved, due in no small part to the contributions in FCM, into a system that very nicely fits how I use my PC/laptop. In all my years, no other setup has come anywhere near it in terms of usability. I have tried Unity a few times, and found it doesn't suit me. That does not make me right or Unity wrong. It just does not work for me.

This is where the beauty of the freedom of Linux kicks in. Unity is just another idea in the world of

Linux, and, if it does not suit, then you are free to chose another way. So, either when push comes to shove, or I find the inclination and time, I will go looking for a distribution that performs at least as well as my current setup.

Whilst the exploration of new software and distributions can be an enjoyable aspect of Linux, when you find a setup that works for you - and, just as importantly, your hardware - you become reluctant to make big changes. After all, it is what we do with the technology that counts, not how we do it.

Gerard Nash

Software Center Sync

The latest version of the Ubuntu Software Center, found in Ubuntu 11.10, has an interesting new feature, synchronizing between computers. This can be used in many ways, but, primarily to compare two Ubuntu installations, note which software is installed or missing from the other installation, and then the ability to install the various missing packages onto the current Ubuntu installation.

Here's the problem.

Whether you're synchronizing, or just singly manually selecting and installing software from the Ubuntu Software Center, there's no "queue" to stack up desired packages to install. It starts installing the first package immediately, and, as other packages are selected for installation, they are prepared for their turn to be installed. With each package selected to install, the whole system gets slower and slower. And, if performing this using the sync feature, after every package selection, it repaints the entire screen showing the list of missing packages, but positioned at the top of the list, not where you left off. This requires the user to manually scroll all the way down to the prior position to continue reviewing other packages.

What needs to be done is to:

1.) allow the user to stop the queue, and select any/all of the packages they desire to install. That selection would get added to the stopped queue, and, when the user has finished selecting all of their desired packages to be installed, they can start the queue, and go get some coffee while the Ubuntu Software Center performs all of the installations, without delay, or further user intervention.

2.) when reviewing and selecting software to install, the list of software should return to the position that the user left it in, after selecting a package to install.

3.) the user should be able to print a list from the sync function, that displays software added/missing from one Ubuntu installation vs another.

4.) there should be a user pref that allows the Ubuntu Software Center to be the default installation device, or the original gdebi installer to be used as the default.

Al Heynneman

Well Rounded

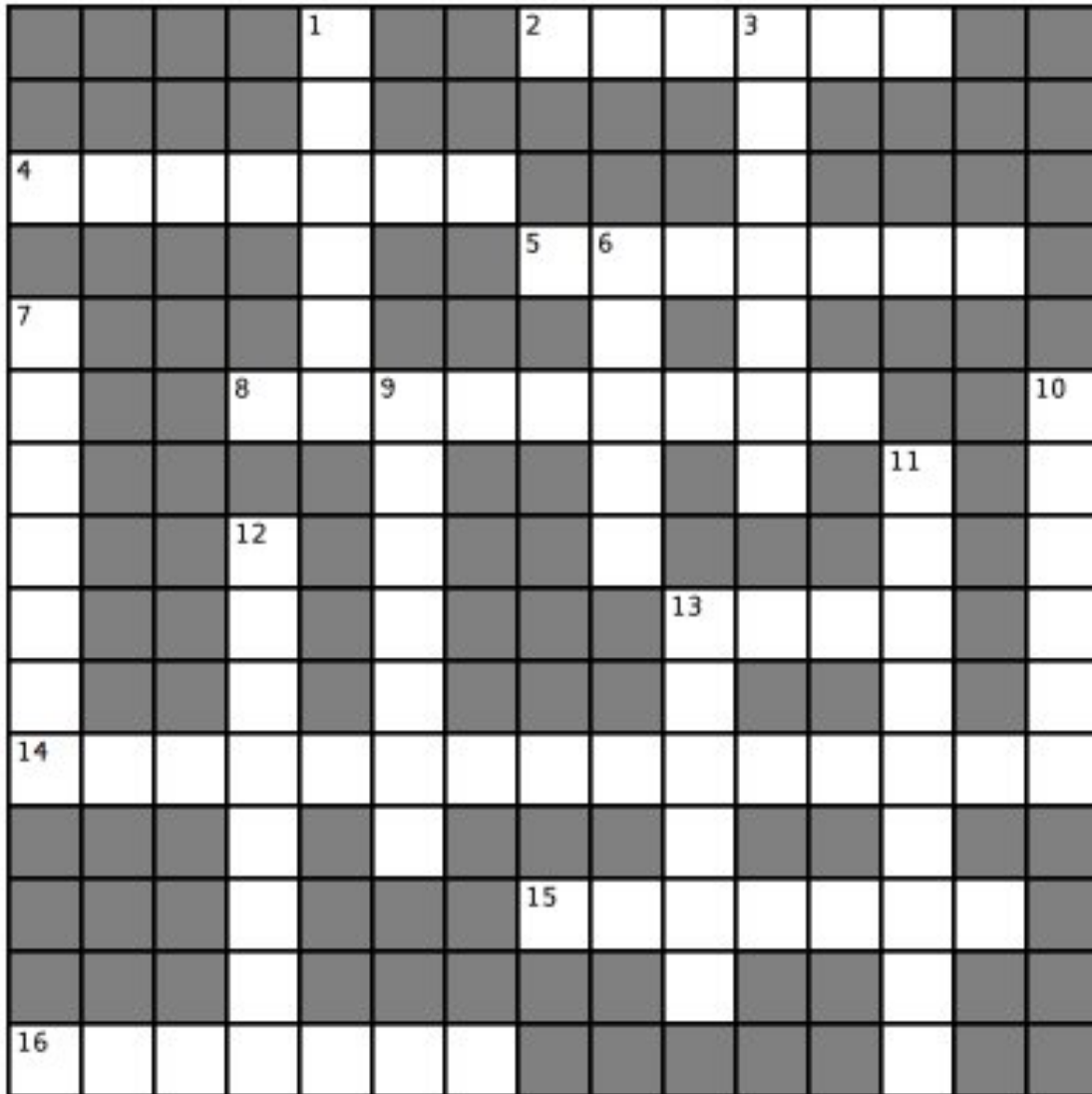While I am not a super user in the Linux world, I am well rounded. All puns intended. I have used PCs, and Macs since Macs had a handle on top. Both platforms make local folder sharing pretty darn easy, and my home has many computers in it. Why is it always a crapshoot getting a Ubuntu machine to share and/or connect with other machines in the house. I can see all the other platforms shares but cannot connect. And I manage to mess up Samba every time. Sharing a folder on a MAC is super easy. PCs and other Macs have no problem accessing the folders. My movie Linux machine (hooked up to the TV), and an old Netbook (linux) - no go. Frustrating to say the least. Can someone give me a simple file sharing option? The easiest thing would be for the Desktop Linux Movie player box to be available to Windows PCs, Macs, and the Netbook. Both Linux machines have the latest Ubuntu Installed and updated.

Mike Todd

PUZZLES

Across:

2. Very massive warehouses start off with this emulator (6)
4. Speak rapidly with word starter on a microblogging client (7)
5. Dreamy, like 11.10 (7)
8. Media center OS - is it real, or like an unicorn(9)
13. Spanish insanity for linux users in a neighbourhood, maybe?
14. A definite anteater?(7,8)
15. None confirms hides, synchronizing mechanism for Ubuntu One (7)
16. An implementation of the S.C.U.M.M. interpreter for Linux (7)

Down:

1. Sail by turbidity for an OS for Muslims (6)
3. Painter unknown gives an OS for graphics (7)
6. Say Ubuntu, speak this language (5)
7. Jaded up, unraveled for a backup tool (4,3)
9. The Debian almquist shell or short sprint (3,4)
10. To run Linux commands on a windows system, turn back New York city and put a wig in! (6)
11. Jumpy? OS for users in Quebec (9)
12. Test total for hash sum (8)
13. They may be convex, concave, or in the Unity interface (6)

The solutions to all the puzzles are on the second last page of this issue. **No peeking!**

Crossword by Ilavenil Thirumavalavan

Q When I replaced 32-bit Ubuntu with 64-bit, the amount of available RAM decreased by 100MB (went from 3.9GB in 32-bit to 3.8GB in 64-bit). Why?

A The computer's video adapter steals RAM, and the amount increased from 128 MB to 256 MB.

Q My computer has a 250 GB HDD. If I look at Disk Usage Analyser, it tells me the total filesystem capacity is 244 GB, but if I look at System Monitor it tells me the total is 227.3 GiB.

A 244 GB = 227 GiB. You can try it yourself: 227.3 x 1024 x 1024 x 1024 = 244 GB. Marketing people want the bigger number.

Q I'm using ripperx, but the only options that are offered are for mp3 and wav. How can I use this to rip into flac?

A Install the *flac* package with Synaptic, then open ripperx and hit the Config button; under the mp3 tab, change the Encoder plugin to Flac.

Q When I ran a script, it stopped at this line:

```
mdb $(echo 'hostname') return
site > __temp.out
```

A Mdb is the Mono debugger, which wants input from the keyboard. You have directed the output to a file, so you can't see what it wants.

Q How can my Dell Dimension 2350 boot from USB?

A Plop Boot Manager will fit on a floppy, and can chain to a bootable USB device.
http://www.plop.at/en/bootmanagers.html

Q Can I run Ubuntu with no hard drive at all?

A Yes, you can use a LiveCD or a LiveUSB. You could even install Ubuntu to a flash drive, and run from that.

Q I finally have TVTime working on my AMD64 machine. However, Update Manager keeps suggesting a later version, which does not work for me. How can I force the system to stay with the currently installed version?

A Install Synaptic Package Manager. Run Synaptic, and search for *TVTime*. Click on the package, and select, "Lock Version."

Q What is going on with Sun Java 6?

A Have a look at this site: http://www.ubuntugeek.com/install-sun-java-6-in-ubuntu-11-10-using-ppa.html

However, it is probably better to install OpenJDK Java 7, which includes icedtea-plugin and openjdk-7-jre. See http://www.futuredesktop.org

Q How can I get a list of computers on my network?

A If you have Samba installed, you can use the command: smbtree

Q When I try to reduce the brightness on my laptop using System Settings, it doesn't change.

A Open a Terminal, and enter this command:

```
xgamma –gamma .5
```

You can try different values than .5, to see what works for you.

Q In Kubuntu 11.10, when I try to run Software Update, I get the message that another package manager is running.

A The magic incantation:

```
sudo dpkg --configure -a
sudo apt-get install -f
```

Reboot, and run Software Update.

Q I occasionally need to build something from source (I'm sure we all do), for whatever reason. I'd like to have these programs show up in Unity's dash search, like apps installed from the Software Center.

A (Thanks to **stinkeye** in the Ubuntu Forums) If you add it to alacarte (main menu), dash will pick it up. You may need to install alacarte.

Q I have a Toshiba Satellite L645D. Whenever I hit the power button, it immediately bounces directly into loading Ubuntu; how can I boot from CD?

A (From the Original Poster) Apparently, pushing F2 needed to begin BEFORE the power button.

Gord adds: on other computers, the magic key is ESC, DEL, F1, F2, or F12.

Two Tips and Techniques
Move forward soon!

I see a lot of people who have major problems when they are using an elderly version of Ubuntu.

A lot of hardware has appeared since the last Long-Term Support release, Ubuntu 10.04. It's not realistic to expect this hardware to be supported by an operating system which predates it.

Even with hardware from before then, there may be issues. For example, Ubuntu 10.04 (and previous versions) often didn't switch between built-in speakers and earphones properly. For many sound adapters, the problem has been solved in later versions.

As this appears, we are a month away from another Long-Term Support release, Ubuntu 12.04. I'm going out on a limb here, and suggest that everyone should install the latest version, certainly by mid-summer. Some people don't want to deal with the Unity user-interface. They have options: Kubuntu 12.04, Lubuntu 12.04, Xubuntu 12.04, or Linux Mint 13.

If you don't know what to do, plunk down $6 (or equivalent) for a 4 GB flash drive, download some of those versions, and see which one tickles your fancy. The only option which is unacceptable, is sticking with an obsolete OS.

Everything you know about drivers is wrong

"My computer does not have Internet access. Can I download drivers to my stick on an Internet machine and then load them on the Linux system?

"Where would I go for drivers after I get the basic load to work?"

Most of what you know about drivers no longer applies. However, it's one area where it's a lot easier if you have an Internet connection.

Most drivers come along with the kernel. Let's talk about four kinds of drivers: video adapter, WiFi adapter, printer, and webcam.

Q & A

For the first two, people normally run a program called "Additional Drivers," which will tell them if there are video or WiFi drivers available to install.

WiFi is a special case: many adapters are supported "out of the box," no need to install a driver. Others have a driver two clicks away in Additional Drivers (assuming an Ethernet connection to the Internet,) some need the Windows driver under something called NDISWrapper, and some will never work. If the first two options don't work for you, get busy with Google.

Printers: when I install any recent version of Linux, I turn on my network printer and run a program called "printers," and click on "add." A couple of clicks later, it scurries off to the Internet and installs the appropriate driver, and the printer works. Barring that approach, you go to the manufacturer's web site and collect the Linux driver, along with other required software. PITA.

In my experience, webcams either work or they don't. My specialty is cheap webcams

purchased in China, and they have all worked for me "out of the box," except with Ubuntu 10.10, which required an unusual incantation.

Oddly, some of the nastiest driver issues are with hardware which was on the drawing board last week. Even something as simple as an Ethernet adapter might not be supported until it has been around for a few months, and all you can do is wait for it. (Or plug in an older Ethernet adapter in the short term; they're cheap.)

After a long career in the computer industry, including a stint as editor of Computing Canada and Computer Dealer News, **Gord** is now more-or-less retired.

Below Zero
Zero Downtime

Below Zero is a Co-located Server Hosting specialist in the UK.

Uniquely we only provide rack space and bandwidth. This makes our service more reliable, more flexible, more focused and more competitively priced. We concentrate solely on the hosting of Co-located Servers and their associated systems, within Scotland's Data Centres.

At the heart of our networking infrastructure is state-of-the-art BGP4 routing that offers optimal data delivery and automatic multihomed failover between our outstanding providers. Customers may rest assured that we only use the highest quality of bandwidth; our policy is to pay more for the best of breed providers and because we buy in bulk this doesn't impact our extremely competitive pricing.

At Below Zero we help you to achieve Zero Downtime.

www.zerodowntime.co.uk

contents ^

Hi all! This month starts a series of articles on **bsnes**, a cross-platform Super Nintendo emulator that aims for maximum accuracy with no hacks or cheats, focusing on clean code. According to the project homepage (http://byuu.org/bsnes), this comes with an additional computational strain. They say that Bsnes requires at least a Core 2 Duo or an AMD Phenom processor to run smoothly.

In this issue, bsnes installation (v. 0.84), ROM downloading and cleaning, and basic features of bsnes are discussed on Ubuntu Oneiric 11.10 32-bit. A certain familiarity with emulation is assumed, but you also can pick up this knowledge along the way. The goal of these articles is to get the games running well with minimal non-necessary technical overhead.

Bsnes installation: a workaround with .deb files

As I was searching the web for bsnes installation tutorials, I came up short with a single good one. Instead of compiling the source code and delving into techie stuff, I present a workaround with .deb files that is both easy to implement and works like a charm. bsnes version 0.84 is used since it will be included in Precise 12.04 LTS.

To begin with, you should have a few developer tools installed. If not, paste the following into a terminal window. Give your password when prompted.

```
sudo apt-get update

sudo apt-get install build-
essential gcc-4.6 g++-4.6
libgtk2.0-dev libqt4-dev

sudo apt-get install
libsdl1.2-dev libpulse-dev
libopenal-dev libao-dev
libxv-dev
```

Next, open Firefox and go to Ubuntu Updates for Bsnes (http://www.ubuntuupdates.org/package/core/precise/universe/base/bsnes). Select and download the 32-bit .deb package (assuming you have a 32-bit system) and navigate into your Downloads folder. Install bsnes with:

```
sudo dpkg -i bsnes_0.084-
1_i386.deb
```
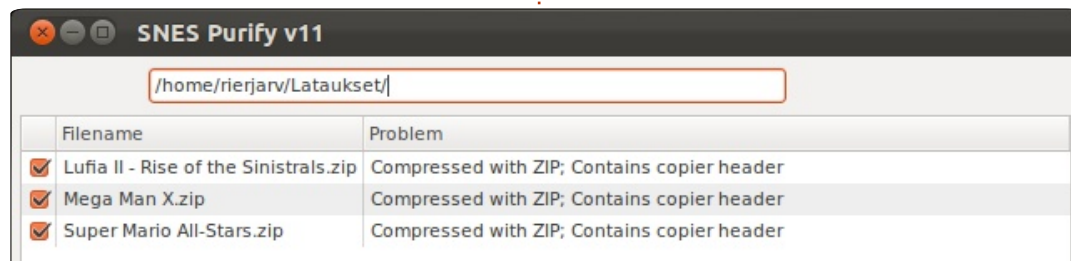
If all goes well, you should now be able to run bsnes from Unity Dash by typing "bsnes" and selecting the application. Once bsnes is running, you can select between Cartridge, Settings and Tools from the top panel. Now, let's take a look on where to download ROMs and how to "purify" them.

Downloading ROMs & ROM Cleaning

While there are plenty of sites to get ROMs, keep in mind that you must delete the files after 24 hours if you do not own the original cartridges. In case you want to keep playing, there are plenty of originals available on eBay and similar web auctions.

After downloading, the ROMs must be "cleaned" of additional copier header information (for a more accurate explanation, refer to bsnes user guide (http://byuu.org/bsnes/user-guide). Unlike some mainstream emulators, bsnes doesn't support compressed (.zip) or Super Magicom (.smc) files. Before playing games, we need to use snespurify, an utility included with bsnes installation. Open Unity Dash and type "snespurify" and select the application. Choose the folder you wish to scan for ROMs (most likely Downloads if you got the ROMs from the web) and click "Correct". It should take only a couple of seconds to reconfigure the files. Once the process is finished, you can choose a game to

Filename	Problem
Lufia II - Rise of the Sinistrals.zip	Compressed with ZIP; Contains copier header
Mega Man X.zip	Compressed with ZIP; Contains copier header
Super Mario All-Stars.zip	Compressed with ZIP; Contains copier header

play from the bsnes Cartridge menu.

Some basic settings

It is unlikely that bsnes runs perfectly "out of the box". There are many settings to be customized and we will take a closer look at them in the next issue. However, here are some tips to get the basic functionality right. Keep in mind that some settings are machine- and game-specific, so adjust the program as you see fit. All settings that are not mentioned should be left as default.

```
Settings -> Configuration ->
Audio: Frequency 44.1kHz,
Latency: 40 ms, Resamp.
Hermite

Settings -> Configuration ->
Advanced: Video OpenGL, Audio
PulseAudioSimple

Settings -> Configuration ->
Input -> Snes: Cont. port
(define your controls)
```

One of the great things is that you can modify graphics settings without restarting the ROM. This speeds up things considerably, because you see the effect right away. Experiment with different Video Filters and Shaders if you want to put your machine to the test. Filters, especially, require lots of resources.

Introducing an USB gamepad was easy from the Input settings: it worked straight out of the box. Once, my settings disappeared and I had to reconfigure the controller, but there have been no problems since.

First Impressions

I tested bsnes with: Chrono Trigger, Donkey Kong Country, Lufia 2, Super Mario All-Stars, Final Fantasy 6 and Mega Man X. As a gamer with more than 200 hours of

zsnes (http://www.zsnes.com) experience, I must confess that bsnes does a much better job when it comes to accuracy and quality of emulation. However, this comes at a hefty computational price. On my desktop (E6750 Core 2 Duo, 4 GB DDR2, GeForce 8800 GTS, 320 MB and 1 TB HDD) there is still a noticeable slow-down. I might consider upgrading the graphics card, although I'm not completely sure whether it's causing the problem.

More information

If you wish to know more, grab the next issue of FCM when it comes out next month. Meanwhile,

I encourage you to visit the bsnes homepage (http://byuu.org/bsnes). Developer Byuu has written a great deal of in-depth information on snes emulation as well as other software-related topics.

In the next issue, I focus on more advanced bsnes settings and tell how to edit the configuration files manually using a text editor.

Riku Järvinen (rierjarv) is a CS major student from Finland who delves into the Linux and Open Source gaming world once in a while.

With the recent plethora of RPGs released for the major consoles, I can't help but get a little envious and anxious for an in-depth role playing game for Linux. Luckily for us Ubuntu gamers, the developers at Kot-In-Action are working on an exciting first-person RPG called *Tomes of Mephistopheles* (ToM). The game is currently in alpha, and you can help fund the development and buy the full, DRM-free game at the official Kot website (http://tom.kot-in-action.com) or through Desura. I recently had the pleasure of chatting with Alexander Zubov, co-creator of ToM as well as the 2010 hit series, Steel Storm. Alexander was gracious enough to share some details on his new project and some thoughts on what's in store for Kot-in-Action in the near future.

When and how did you get started with Kot-in-Action Creative Artel?

Kot-in-Action Creative Artel was founded in 2008, prior to the QuakeExpo 2008 virtual event. I learned about the DarkPlaces game engine years prior to the event, and I wanted to make a standalone game using it. The role of art director and all-round artist was a natural choice as I come from an art and graphic design background. I began working on my first game titled Prophecy: Return of the Blademaster, and soon I realized I needed a coder to help me with the project. No one wanted to help me as the project was in pre-production stage at that time. Seeing that help was not coming, I rolled up my sleeves and got to coding the game myself. The project was doing great and I wanted to display it at Quake Expo. However, I really wanted for it to shine, so to speak, and I asked for help once again. This time around, one of the most prominent coders in the Quake modding community, Clay "daemon" Cameron, offered his skills to help out Prophecy. Kot-in-Action team was formed, and the prototype of the game was put together in just 3 weeks prior to Quake Expo. The reception of Prophecy by the Quake modding community was warm, and we decided to turn it into a commercial game. Although we had some experience in modding, making a full commercial game was a whole different story. Prophecy required a lot of art assets. Since we didn't really know our potential, we decided to come up with a game of smaller scale. Steel Storm was born and the rest is history.

Tell us all about Tomes of Mephistopheles.

Tomes of Mephistopheles is designed to be a first-person action-RPG dungeon crawler with randomly generated worlds and dungeons. It will have fast-paced fluid combat (inspired by such old school games as Hexen/Heretic), a multitude of medieval and magical weapons, and an in-depth custom spell system (not something you see in many RPG games). Players will be exploring vast dungeons in search of the ancient Tomes. On his (her) way, the player will fight a variety of monsters, look for items/gear/weapons, discover secrets, solve quests, improve his

(her) skills, develop new spells, and master new weapons. Players will be able to craft gear, weapons, and spells, and use dug-out cavities as a shelter / safe house. Dungeons and other structures are destructible via a multitude of means, and connect with a surface or outdoor over-world which connects to multiple other dungeons. Dungeons can also connect to each other, and if a connection does not exist, the player can dig his way through. The surface and dungeon areas will have towns and/or encampments with structures, NPCs, and various creatures to interact with. Not only that, but characters will not be limited to a single world. Players can generate new dungeons and continue building up their character, or take that character online to another player's world and partake in player vs player combat, cooperative questing, or possibly even help build some kind of structure depending on what the owner of the server allows.

What are some upcoming, post-alpha features to look out for?

We are planing to add more architectural details so the dungeon won't look so empty. Player progress saving and dungeon saving are on their way. Multiplayer. More enemies, gear, and weapons. Multifloor dungeons.

These features are due in the nearest future.

What have you learned from creating Steel Storm that you've incorporated into creating ToM?

Release early and iterate. No localization support (everyone knows English to a certain degree, and coordinating translations of constantly changing and improving text is a huge overhead). No Mac support until release (we don't have Macs, and, while the engine runs on Mac, testing without having a Mac handy has proven to be a disaster). Use social media as much as possible. Reuse the resources.

Will there be future installments/episodes (ala Steel Storm) or DLC?

Most likely we will have DLC, pre-built characters, and some unique gear and gadgets, after the game is released. It's too early to talk about future installments,

although the potential is there.

Can you tell us about your plans after ToM is released? Any new games or focusing on DLC?

We already have Steel Storm 2 in development, along with ToM, so I think we are pretty much set for the mid-range foreseeable future.

Thanks again to Alexander Zubov for participating. For more information on Tomes of Mephistopheles, you can visit http://tom.kot-in-action.com for more screen shots, videos, and game updates.

I use Kubuntu 11.10 with the KDE 4.7.2 desktop environment. I have used a couple of widgets on the desktop. You can see my home folder and my desktop folder both on top, easily reachable to do what needs to be done. Pictures from the last holiday in the USA, a clock, an RSS widget with news from a Dutch news website, information about my disks and network and, very important here in Holland, the weather. The Shutdown/Restart/Log-off button completes it.

In the panel, I have my 4 desktops, the Task manager to see which programs are open, some launchers, and the usual information you sometimes need. It's all very basic, but hey, that's me.

Jan Mussche

I'm Italian and this is my desktop with my holiday's image.... today.

I have a laptop, Fujitsu-Siemens Amilo Li3710 with 4GB ram, one CPU dual core Intel Pentium t3400 2, 1.6GHz, HD 300 GB, and ubuntu 11.04(natty).

I've also used Avant window navigator 0.41 and Gartoon icons from the Ubuntu repository.

Perfect!

Paolo Gagini

MY DESKTOP

This is my Desktop screenshot. I am running Ubuntu 10.10 Maverick Meerkat decorated by Ambiance Theme with Faenza icons, AWN, Indicator Applet Application Menu 0.4.6, and more cool customized themes. My PC is optimized for graphic design and Internet. Kernel Linux 2.6.35-31, Gnome 2.3.2.0 Desktop Manager, and Compiz Fusion 0.82 are the core of my amazing OS on this PC.

PC Specs:
Acer ASPIRE M1800 with Intel(R) Pentium(R) Dual Core CPU E5200 @2.5 GHz
2GB DDR2-RAM, nVIDIA GeForce 7100 GPU @256 MB, 2 x 320 GB SATA HDD & DVD.

Badrus Shava
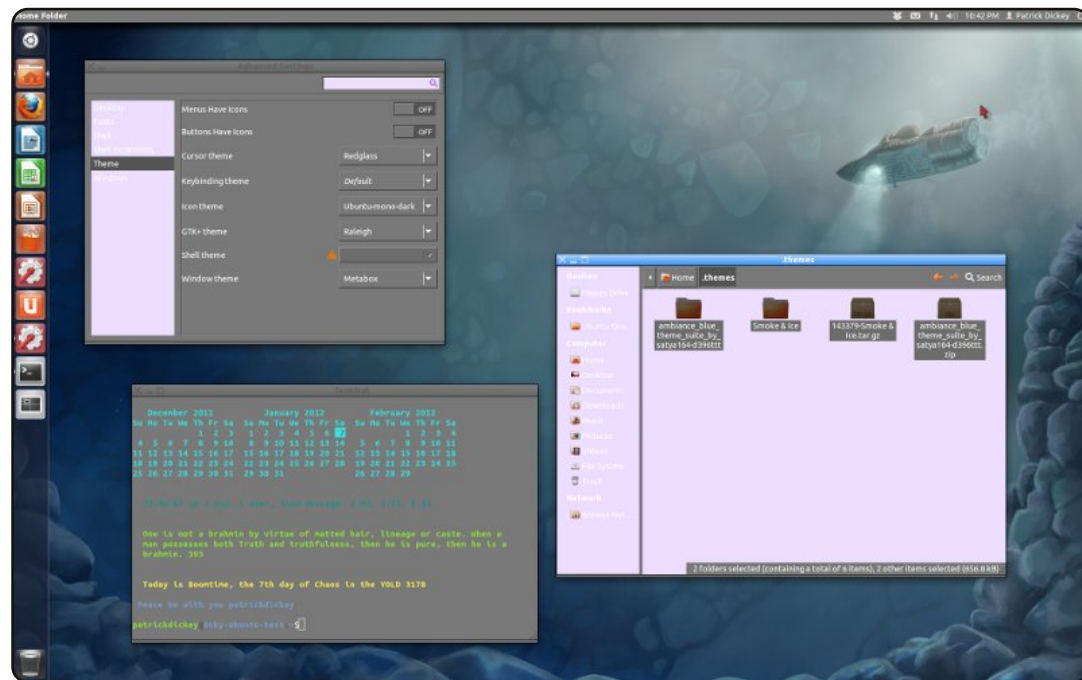
The computer is a homebuilt computer from 2003. The CPU is an AMD Athalon 1800 XP+ and it has 2GB DDR-266 RAM in it. The video card is an EVGA GeForce 6200 AGP 8x card. I'm running Ubuntu 11.10 with Unity 3D. The wallpaper is the "Verne" wallpaper from the Fedora 16 Live CD. The theme is "Smoke & Ice" from softpedia.com, I have the settings for the theme showing in the Advanced Settings app. In the terminal, I used the .bashrc and .envrc from http://bodhizazen.net (under his Tweaks), and the message is from display-dhammapada (available via apt-get).

Originally I was going to try and find a theme that matched the Verne wallpaper, but this looked interesting in their screenshots. For some reason, it shows up as Raleigh in the Advanced Settings.

Patrick Dickey

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16X16 SUDOKU

0	4	3	D	2	B	6	9	8	A	C	F	E	7	5	1
9	B	C	7	0	8	4	1	2	E	3	5	A	6	D	F
E	2	5	1	7	C	F	A	9	0	D	6	B	4	3	8
F	6	8	A	E	5	D	3	7	1	4	B	C	0	2	9
4	E	9	5	8	0	C	2	3	D	A	1	6	B	F	7
8	7	A	C	9	E	1	F	5	B	6	0	3	2	4	D
D	0	2	6	4	3	B	7	C	8	F	9	1	A	E	5
3	F	1	B	A	6	5	D	E	7	2	4	0	9	8	C
A	3	D	0	6	7	2	8	F	9	E	C	5	1	B	4
5	8	F	4	C	D	0	E	1	6	B	7	9	3	A	2
7	C	B	9	5	1	A	4	0	3	8	2	D	F	6	E
6	1	E	2	F	9	3	B	D	4	5	A	7	8	C	0
B	9	7	E	3	4	8	C	A	F	0	D	2	5	1	6
1	A	0	F	D	2	E	6	B	5	9	8	4	C	7	3
2	D	6	8	1	A	9	5	4	C	7	3	F	E	0	B
C	5	4	3	B	F	7	0	6	2	1	E	8	D	9	A

CODE WORD

1	2	3	4	5	6	7	8	9	10	11	12	13
K	O	Q	N	J	M	L	P	T	R	S	H	V

14	15	16	17	18	19	20	21	22	23	24	25	26
W	E	I	F	U	B	Y	Z	X	A	D	G	C

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

CROSSWORD

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