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THE INDEPENDENT MAGAZINE FOR THE UBUNTU LINUX COMMUNITY

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PROGRAM IN PYTHON PART 1

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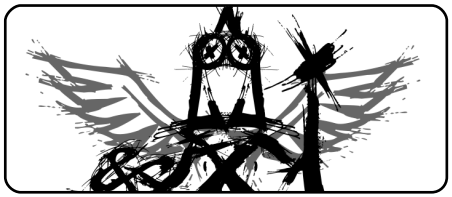

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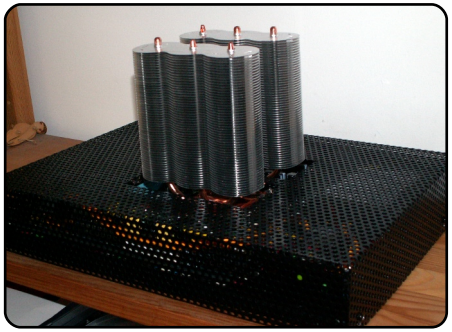

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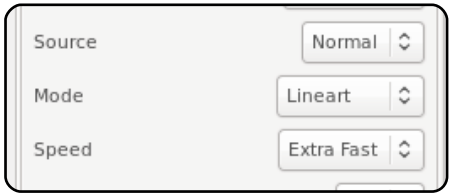

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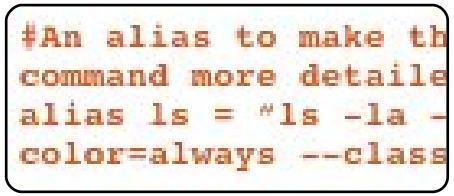

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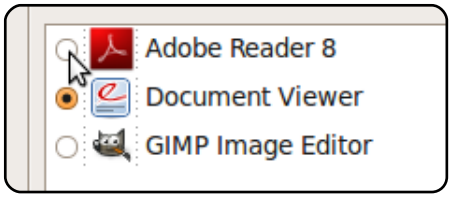

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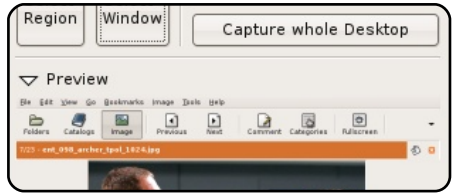

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EDITORIAL

Welcome to another issue of Full Circle magazine.

And welcome to another new series! ***Programming in Python***! Yes, last month I promised a new series on LAMP servers, but since so many people requested Python in our survey, I gave it priority. I don't like to have too many series' running at once, so maybe when the Inkscape series comes to an end, I'll start the LAMP series.

In the ***Ubuntu Games*** feature this month, Ed discusses the latest shock news that *id software* (creators of the *Doom*, and *Quake*, games) have been bought over. What does this mean for Linux? See page 26.

This months ***My Story*** is a bit unusual, it's one man's quest to create a low power, near silent, server and (to put it lightly) it looks a touch different from what you normally see in a PC/server case!

In other news this month, **Ubuntu 8.04.3** has been released. What does that mean? I'll let Steve Langasek explain: *80 updates have been integrated, and updated installation media has been provided so that fewer updates will need to be downloaded after installation. These include security updates and corrections for other high-impact bugs, with a focus on maintaining stability and compatibility with Ubuntu 8.04 LTS*.

Enjoy the issue, and keep in touch!

All the best,
Ronnie
Editor, Full Circle magazine
ronnie@fullcirclemagazine.org

This magazine was created using :

What is Ubuntu?

Ubuntu is a complete operating system that is perfect for laptops, desktops and servers. Whether at home, school or work Ubuntu contains all the applications you'll ever need including word processor, email application and web browser. Ubuntu is and always will be free of charge. You do not pay any licensing fees. You can download, use and share Ubuntu with your friends, family, school or business for absolutely nothing.

Once installed, your system is ready to use with a full set of productivity, internet, drawing and graphics applications, and games.

TIP: use the new 'contents' link to jump to the contents page from any other page!

contents ^

Kernel Vulnerabilities in Ubuntu

Canonical announced on July 28th the availability of a new Linux kernel security update for the following Ubuntu distributions: 6.06 LTS, 8.04 LTS, 8.10 and 9.04 (also applies to Kubuntu, Edubuntu and Xubuntu). The update patches 4 important security issues (see below for details) discovered in the Linux kernel packages by various hackers. Therefore, it is strongly recommended to update your system as soon as possible!

The following Linux kernel vulnerabilities were discovered:

1. The RTL8169 network driver failed to validate buffer sizes. Because of this, a remote attacker on the LAN (Local Area Network) could crash the affected system or gain elevated privileges. The issue was discovered by Michael Tokarev and affects all the aforementioned Ubuntu systems.

2. The kernel failed to clear various personality flags when setuid processes were executed. Because of this, other vulnerabilities could become exploitable if a local attacker mapped the NULL memory page. The issue was discovered by Julien Tinnes and Tavis Ormandy and affects only Ubuntu 8.04 LTS, 8.10 and 9.04 users.

3. KVM failed to validate the page table root. This could lead to a DoS attack and crash the affected system. The issue was discovered by Matt T. Yourst and affects only Ubuntu 8.04 LTS, 8.10 and 9.04 users.

4. eCryptfs failed to validate various buffer sizes. Because of this, a local attacker could crash the affected system or gain elevated privileges. The issue was discovered by Ramon de Carvalho Valle and affects only Ubuntu 8.04 LTS, 8.10 and 9.04 users.

The above Linux kernel vulnerabilities can be fixed if you update your system now.

Don't forget to reboot your computer after this update!

Source: softpedia.com

Launchpad Now Open Source

Released as GPL3, Launchpad's code is now open source. Note that although it had been previously announced that two components (*codehosting* and *soyuz*) would be held back, a last minute change now includes both.

• Launchpad-users mailing list: https://lists.launchpad.net/launchpad-users/msg05118.html
• Blog post at Canonical.com: http://blog.canonical.com/?p=192
• Press release: http://www.ubuntu.com/news/canonical-open-sources-launchpad/
• The development wiki: https://dev.launchpad.net/
• Instructions for getting code: https://dev.launchpad.net/Getting

The Canonical Launchpad developers will be on IRC in channel #launchpad-dev on irc.freenode.net. That's the place to go for real time development discussion and questions. For usage issues, #launchpad is still the place, as before.

Source: Ubuntu Weekly News

Survey: Linux expertise in demand

Market research firm Foote Partners has updated its survey of the most sought-after IT skills (non-certified) and ranked Linux experience and skills as the second most sought after by US and Canadian employers. The top position is held by Java Enterprise Edition, Standard Edition and Micro Edition. Other open source skills included in the list include; Apache web server, MySQL and PHP. Windows didn't make the list, but demand for .NET skills ranked 4th.

Red Hat Certified Engineer and Linux Professional Institute Certification failed to make the "Hot List" for IT certifications. The information obtained by the market researchers comes from almost 2,000 public and private sector organizations and over 85,000 IT workers in the US and Canada.

Source: h-online.com

COMMAND & CONQUER

Written by Lucas Westermann

For this month's Command & Conquer article, I'll cover a few things that are sometimes mentioned online with instructions, or things that aren't enough for an entire article on their own, but should still be mentioned. I hope that this information is useful for those readers who want to do more with their shell, or who want to customize it, yet occasionally run across a term that they don't know.

I'll begin with prompt customization. Say you've spent a long time finding a prompt for your terminal that's to your liking, and you've finally gotten all the escape characters set and you're ready to try it out. This is my .zshrc PS1:

```
export PS1="%{$fg[blue]%}&#9484;&#9472;[%{$fg[green]%}%n%{$fg[cyan]%}@%{$fg[green]%}%m%{$fg[blue]%}:%{$fg[magenta]%}%~%{$fg[blue]%}]-%{$fg[red]%}[%{$fg[cyan]%}%*
```

```
on %D%{$fg[red]%}]%{$reset_color%}%{$reset_color%}"$'\n'"%{$fg[blue]%}&#9492;&#9472;>%{$reset_color%} "
```

which looks like the image below.

You have two ways to do this:
1) you can open a new terminal and view the shell (which, if you're running in a tty session, or are doing too much at once, or hate changing shells before you're finished, isn't a great option) or
2) you can “source” it. I prefer option #2 since it takes immediate effect in the original terminal, and is fairly simple to do. It is done by using the command “source” followed by the path (or name, if it's in your current working directory) to the configuration file (.bashrc in this case).

```
source .bashrc
```

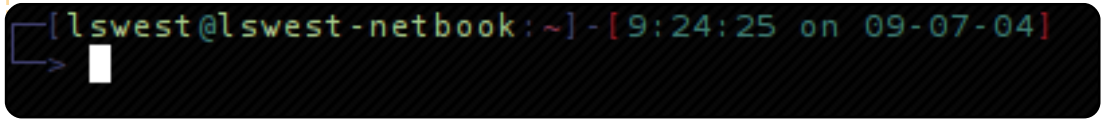
This command works with most configuration files that you could edit, but there are some cases where it won't do anything at all (I can't say I know all possible uses of it, so you will have to try for yourself).

Another useful thing to know is that you can use while loops and the like in the actual shell too. For example, if you wanted to list all the files in a directory and insert it into a different line of code, you could do this:

```
ls|while read line; do `cat ${line}`; done
```

Of course, you will get an error message if you run into a directory, but that can be solved with a simple check (using an if statement). This, however, I will leave to you.

A couple of other useful commands that I find myself using a lot are:




```
df
```

which displays filesystem usage (I usually use it with the “-h” argument, so that it displays in Gigabytes).

```
watch
```

which runs a command once ever 2 seconds (by default, but can also be changed with “-n <num>” argument).

```
scrot
```

which is essentially a command-line based screenshot tool, but with a lot of options and possibilities (see the manpage for more info, there are too many options to cover here).

And, of course, the other commands I've covered in the past months are also frequently used, but the 3 above haven't been mentioned

before, and are useful. One last thing I want to cover in this article is what a tiling window manager is, since quite a few coders I know prefer them over normal window managers. A tiling window manager is a window manager that arranges all windows in “tiles” (re-sizing so that all windows fit into the space, and so that windows don't overlap). Some (not all) tiling window managers offer a “floating” mode, where windows act like they usually do (set size, overlapping, etc.). The reason why coders (myself included) prefer this behaviour is because it lets you view all your code at once, or to have multiple scripts open at the same time so that you can switch easily, or so you can have one terminal open to test commands and another to write the script. Not only that, but you can control the window manager using only the keyboard, allowing for faster working, since you never take your hands off the keyboard. A few such window managers are AwesomeWM, DWM, Xmonad, ratpoison, and ion. I use Awesome, since it offers a floating mode that isn't always on top or always below, but can be both (Xmonad seems to offer only one or the other out of the box, and I couldn't find a work around). However, there are lots of options, and most are well documented, in case any reader feels like giving one a go.

Further Reading:

Awesome - http://awesome.naquadah.org/
Xmonad - http://www.xmonad.org/
Ratpoison - http://www.nongnu.org/ratpoison/
Ion - http://modeemi.fi/~tuomov/ion/
DWM - http://dwm.suckless.org/

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.

Live-Office is an open-source, Web-based, professional, groupware application that facilitates the organization of all your personal information. There is no need to install additional applications on your computer, for all the required components are installed on the Web server. One needs only an Internet connection and a Web browser with JavaScript enabled. Live-Office can be accessed on our server, or easily installed on your server. All your personal data will be centralized and securely stored in our, or your, online database, which will offer various modules and widgets that provide you with the ability to save all your personal data in one place. Events, ToDos, Contacts, Favorites, Documents, and Notes are a few examples of these. These modules and widgets can be accessed easily via a high-end, intuitive, user interface. This unique key feature helps you to gather and visualize all your information at the same time. For example, you can open your organizer and address book side by side, add a personal contact in your address-book window, and add a meeting in your organizer window.

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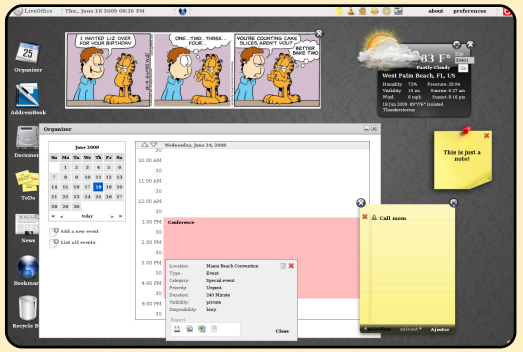
We will soon be adding new modules and widgets, such as Budget and Billing, and Password reminder, as well as new languages. In addition, we are currently working on Live-Office Desktop Edition - an off-line version built in Java. This version will let you manage all your personal data off-line and synchronize it when needed.



Contact us or visit our website to know more about how you can contribute to Live-Office: info@live-office.net or: http://www.live-office.net

Program In Python - Part 1

Written by Greg Walters

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Among the many programming languages currently available, Python is one of the easiest to learn. Python was created in the late 1980's, and has matured greatly since then. It comes pre-installed with most Linux distributions, and is often one of the most overlooked when picking a language to learn. We'll deal with command-line programming in this article. In a future one, we'll play with GUI (Graphical User Interface) programming. Let's jump right in, creating a simple application.

Our First Program

Using a text editor such as gedit, let's type some code. Then we'll see what each line does and go from there.

Type the following 4 lines.

```
#!/usr/bin/env python

print 'Hello.  I am a python program.'

name = raw_input("What is your name? ")

print "Hello there, " + name + "!"
```

That's all there is to it. Save the file as hello.py wherever you would like. I'd suggest putting it in your home directory in a folder named python_examples. This simple example shows how easy it is to code in Python. Before we can run the program, we need to set it to be executable. Do this by typing

```
chmod +x hello.py
```

in the folder where you saved your python file. Now let's run the program.

```
greg@earth:~/python_examples$
 ./hello.py

Hello.  I am a python program.

What is your name? Ferd Burphel

Hello there, Ferd Burphel!

greg@earth:~/python_examples$
```

That was simple. Now, let's look at what each line of the program does.

```
#!/usr/bin/env python
```

This line tells the system that this is a python program, and to use the default python interpreter to run the program.

```
print 'Hello. I am a python program.'
```

Simply put, this prints the first line "Hello. I am a python program." on the terminal.

```
name = raw_input("What is your name? ")
```

This one is a bit more complex. There are two parts to this line. The first is name =, and the second is raw_input("What is your name? "). We'll look at the second part first. The command raw_input will print out the prompt in the terminal ("What is your name? "), and then will wait for the user (you) to type something (followed by {Enter}). Now let's look at the first part: name =. This part of the command assigns a variable named "name". What's a variable? Think of a variable as a shoe-box. You can use a shoe-box to store things -- shoes, computer parts, papers, whatever. To the shoe-box, it doesn't really matter what's in there -- it's just stored there. In this case, it stores whatever you type. In the case of my entry, I typed Ferd Burphel. Python, in this

instance, simply takes the input and stores it in the "name" shoe-box for use later in the program.

```
print "Hello there, " + name
+ "!"
```

Once again, we are using the print command to display something on the screen -- in this case, "Hello there, ", plus whatever is in the variable "name", and an exclamation point at the end. Here we are concatenating or putting together three pieces of information: "Hello there", information in the variable "name", and the exclamation point.

Now, let's take a moment to discuss things a bit more deeply before we work on our next example. Open a terminal window and type:

```
python
```

You should get something like this:

```
greg@earth:~/python_examples$
 python

Python 2.5.2 (r252:60911,
Oct  5 2008, 19:24:49)

[GCC 4.3.2] on linux2

Type "help", "copyright",
"credits" or "license" for
more information.

>>>
```

You are now in the python shell. From here, you can do a number of things, but let's see what we got before we go on. The first thing you should notice is the python version -- mine is 2.5.2. Next, you should notice a statement indicating that, for help, you should type "help" at the prompt. I'll let you do that on your own. Now type:

```
print 2+2
```

and press enter. You'll get back

```
>>> print 2+2
4
>>>
```

Notice that we typed the word "print" in lower case. What would happen if we typed "Print 2+2"? The response from the interpreter is this:

```
>>> Print 2+2
  File "<stdin>", line 1
    Print 2+2
          ^
SyntaxError: invalid syntax
>>>
```

That's because the word "print" is a known command, while "Print" is not. Case is very important in Python.

Now let's play with variables a bit more. Type:

```
var = 2+2
```

You'll see that nothing much happens except Python returns the ">>>" prompt. Nothing is wrong. What we told Python to do is create a variable (shoe-box) called var, and to stick into it the sum of "2+2". To see what var now holds, type:

```
print var
```

and press enter.

```
>>> print var
4
>>>
```

Now we can use var over and over again as the number 4, like this:

```
>>> print var * 2
8
>>>
```

If we type "print var" again we'll get this:

```
>>> print var
4
>>>
```

var hasn't changed. It's still the sum of 2+2, or 4.

This is, of course, simple programming for this beginner's tutorial. Complexity will increase in subsequent tutorials. But now let's look at some more examples of variables.

In the interpreter type:

```
>>> strng = 'The time has
come for all good men to
come to the aid of the
party!'

>>> print strng

The time has come for all
good men to come to the aid
of the party!

>>>
```

You've created a variable named "strng" (short for string) containing the value 'The time has come for all good men to come to the aid of the party!'. From now on (as long as we are

in this instance of the interpreter), our strng variable will be the same unless we change it. What happens if we try to multiply this variable by 4?

```
>>> print strng * 4

The time has come for all good men to come to the aid of the party!The time has come for all good men to come to the aid of the party!The time has come for all good men to come to the aid of the party!The time has come for all good men to come to the aid of the party!

>>>
```

Well, that is not exactly what you would expect, is it? It printed the value of strng 4 times. Why? Well, the interpreter knew that strng was a string of characters, not a value. You can't perform math on a string.

What if we had a variable called s that contained '4', as in the following:

```
>>> s = '4'
>>> print s
4
```

It looks as though s contains the integer 4, but it doesn't. Instead it contains a string representation of 4. So, if we type 'print s * 4' we get...

```
>>> print s*4
4444
>>>
```

Once again, the interpreter knows that s is a string, not a numerical value. It knows this because we enclosed the number 4 with single quotes, making it a string.

We can prove this by typing print type(s) to see what the system thinks that variable type is.

```
>>> print type(s)
<type 'str'>
>>>
```

Confirmation. It's a string type. If we want to use this as a numerical value, we could do the following:

```
>>> print int(s) * 4
16
>>>
```

The string (s), which is '4', has now been converted to an integer and then multiplied by 4 to give 16.

You have now been introduced to the print command, the raw_input command, assigning variables, and the difference between strings and integers.

Let's go a bit further. In the Python Interpreter, type quit() to exit back to the command prompt.

Simple For Loop

Now, let's explore a simple programming loop. Go back to the text editor and type the following program.

```
#! /usr/bin/env python

for cntr in range(0,10):

    print cntr
```

Be sure to tab the "print cntr" line. This is important. Python doesn't use parentheses "(" or curly braces "{" as do other programming languages to show code blocks. It uses indentations instead.

Save the program as "for_loop.py". Before we try to run this, let's talk about what a for loop is.

A loop is some code that does a specified instruction, or set of instructions, a number of times. In the case of our program, we loop 10 times, printing the value of the variable cntr (short for counter). So the command in plain English is "assign the variable cntr 0, loop 10 times printing the variable cntr contents, add one to cntr and do it all over again. Seems simple enough. The part of the code "range(0,10)" says start with 0, loop until the value of cntr is 10, and quit.

Now, as before, do a

```
chmod +x for_loop.py
```

and run the program with

```
./for_loop.py
```

in a terminal.

```
greg@earth:~/python_examples$
 ./for_loop.py
0
1
```

```
2
3
4
5
6
7
8
9
greg@earth:~/python_examples$
```

Well, that seems to have worked, but why does it count up to only 9 and then stop. Look at the output again. There are 10 numbers printed, starting with 0 and ending with 9. That's what we asked it to do -- print the value of cntr 10 times, adding one to the variable each time, and quit as soon as the value is 10.

Now you can see that, while programming can be simple, it can also be complex, and you have to be sure of what you ask the system to do. If you changed the range statement to be "range(1,10)", it would start counting at 1, but end at 9, since as soon as cntr is 10, the loop quits. So to get it to print "1,2,3,4,5,6,7,8,9,10", we should use range(1,11) - since the for loop quits as soon as the upper range number is reached.

Also notice the syntax of the statement. It is "for variable in range(start value,end value):" The ":" says, we are starting a block of code below that should be indented. It is very important that you remember the colon ":", and to indent the code until the block is finished.

If we modified our program to be like this:

```
#! /usr/bin/env python

for cntr in range(1,11):

      print cntr

print 'All Done'
```

We would get an output of...

```
greg@earth:~/python_examples$
 ./for_loop.py
1
2
3
4
5
6
7
8
9
10
All Done
greg@earth:~/python_examples$
```

Make sure your indentation is correct. Remember, indentation shows the block formatting. We will get into more block indentation thoughts in our next tutorial.

That's about all for this time. Next time we'll recap and move forward with more python programming instructions. In the meantime, you might want to consider installing a python specific editor like Dr. Python, or SPE (Stani's Python Editor), both of which are available through Synaptic.

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

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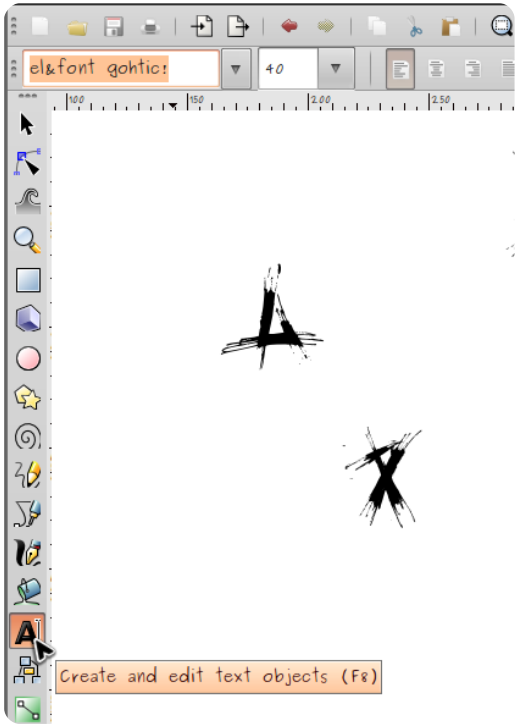
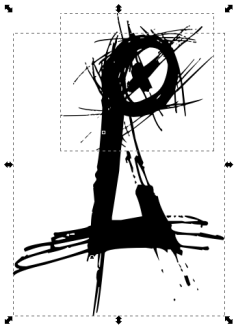
In this - the fourth tutorial on Inkscape - we will make an image that does not require any drawing skill. All we need is a nice font, and the creativity to put things in the right place.

First, you must download the font called “EL&FONT GOTHIC”. You can download it from most font sites, such as dafont.com or www.atkinson.tk/download/gothic.rar.

Next, open Inkscape, then type the characters L, O, V, X, !, &, (,), separately, using the text tool (F8) in the left toolbar. Select all the characters (Ctrl + A), and then select our new font, el&font gothic, from the font list (upper left). Press ENTER. The special characters are now on your workspace.



Select “L” and ”O” and then position them as shown above right.



Duplicate this image (ctrl+D), and flip one horizontally (object > flip horizontal), as shown below. Then select “V” and rotate it vertically 180 degrees (click it twice, then drag the arrow on its edge). Place the inverted V as shown below.

Then move the 3 separate images close together to form the image shown above right. It represents the head of our bird.

Next, select “L”, “X”, and “!”. Duplicate the L and the !, rotate one of the former horizontally and one of the latter vertically, and position the images as shown below.

Join these separate images to form the following image representing the bird's body.

Now select the two wing images (shown in my first illustration), and the head image, and position these on the body, as shown below.

Then add 2 weapons by using “!” and ”&”, as shown above right.

Now we have our completed image. This example shows that artistic images can be created in Inkscape by manipulating fonts creatively.

Yoga Sukma is a 19 year old Indonesian who is currently studying Computer Science and loves graphic design and programming. Please send feedback to: juzt_atkinson@yahoo.com

no starch press

SUPPORTERS OF FULL CIRCLE

Fully updated for Blender 2.48, **The Blender GameKit, 2nd Edition** starts with an introduction to the basics of Blender and then quickly delves into more complex concepts, like creating models, animating them, and turning them into simple games. Also included are game demos, character animation tutorials, an introduction to Python, and an advanced reference section.

REVIEW COMING SOON!

http://nostarch.com/

HOW-TO

Written by Dez

Scan Documents To PDF/DJVU

SEE ALSO:
N/A

APPLICABLE TO:
ubuntu kubuntu xubuntu

CATEGORIES:
Dev Graphics Internet M/media System

DEVICES:
CD/DVD HDD USB Drive Laptop Wireless

Preserve your magazines and documents by scanning them and converting them to PDF/DjVu format before they turn yellow, fall to pieces, and are lost forever.

With your scanner plugged in you're ready for business. First, you need to install *gscan2pdf*. Its homepage is http://gscan2pdf.sourceforge.net . It's also in the repositories. To install it from the shell, type in:

```
sudo apt-get install gscan2pdf
```

While you're at it, install pdftk. It's the PDF slicer/dicer/boxer I use to manipulate all my PDF files.

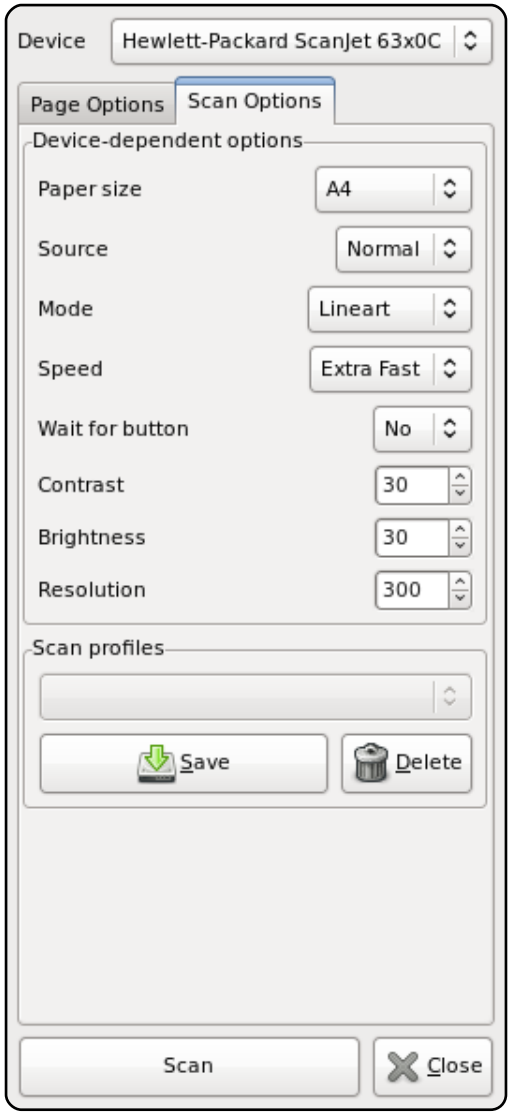
```
sudo apt-get install pdftk
```

You will also need pdf2djvu so that once you have your high quality PDF you can convert to djvu at 400 dpi and save tons of space and still have highly detailed documents. So, again, from shell type in:

```
sudo apt-get install pdf2djvu
```

That's all the tools you need. Let's go scanning!

Load gscan2pdf and click the scan button. With a bit of luck your USB scanner will be automatically selected and you will see it and some settings to change. The scanner I'm using is an HP scan-jet 6300 with 25 sheet ADF (automatic



document feeder). It's a bit like a fax machine, for those of you who don't know what an ADF is. I can also select the speed I want to scan at. I always select the fastest. Next, choose the resolution - I always select 300 DPI. Now, select the scan mode.

```
line-art
half-tone
grey-scale
colour
```

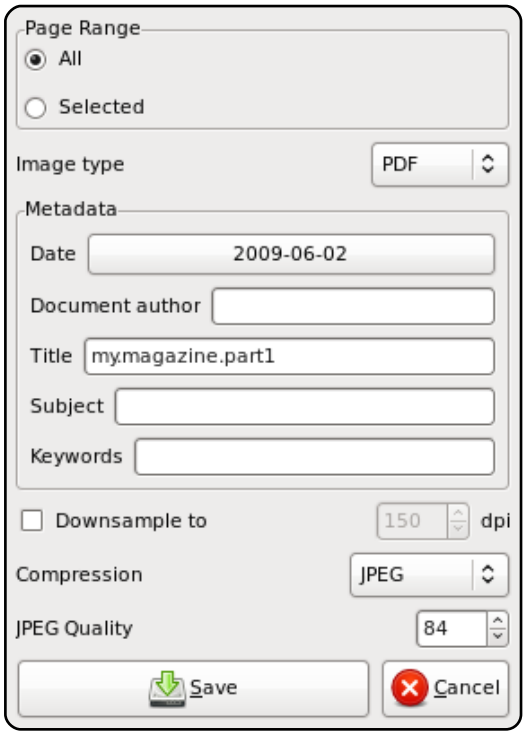
Line-Art is essentially a black and white scan with very little difference in the color of black/grey. It's great to use on pages that are essentially just plain black. DONT USE THIS MODE IF PHOTOS ARE ON THE PAGE. They look horrid in this mode. This mode takes up only a little space.

Half-Tone will take a very dark black original piece of paper and turn it into a very dull-looking grey picture on your pc. I never use this mode.

Grey-Scale - Use this mode if you have a black/white magazine or newspaper with photos on the page. This mode will give you quite good looking b/w reproduction. It takes up a fair-bit of space, but not as

much as full color.

Full Color - This is self explanatory



To output a magazine, scan about 10 to 20 pages, and save your work in PDF format. There are a number of options for saving your scanned pages. You can save individual pages or save all the pages as a single PDF. You also have the choice as to whether or not to use jpeg, and a few other formats as well.

From my experiments, I have learned to use the jpeg compression method when saving to PDF. Jpeg is a "lossy format," so to combat the loss of quality I save at 84% quality. If I save at 85% quality the file size jumps to amazing proportions. Repeat this scanning process for your book and you will wind up with your data saved in a directory with file names that look like this:

```
my.magazine.part1.pdf
my.magazine.part2.pdf
my.magazine.part3.pdf
my.magazine.part4.pdf
my.magazine.part5.pdf
```

For arguments sake, assume that each file has 20 pages in it and is 20MB long. So, when joined together you'll have a single PDF of 100MB with all pages in numerical order.

To achieve this, head to the shell again, go into the directory where you saved your files, and load up pdftk. This lets you do all sorts of groovy stuff to PDF files. You are going to use it to join your individual files together to make one large book. It will do this standing on its head. It has numerous features, but I won't go in to them here. At the shell, type in:

```
pdftk my.ma
```

Now press the Tab key, and like magic you will now have in front of your very eyes:

```
pdftk my.magazine.part
```

I told you the shell was powerful. It scanned the directory and magically added in the "magazine.part" for you. Now press 1 so you'll have:

```
pdftk my.magazine.part1
```

Press Tab again and you'll now have:

```
pdftk my.magazine.part1.pdf
```

Smart, isn't it? So now repeat the process of hitting Tab and pressing 2, 3, 4, and 5, when needed, and in a matter of seconds you'll have this command:

```
pdftk my.magazine.part1.pdf
my.magazine.part2.pdf
my.magazine.part3.pdf
my.magazine.part4.pdf
my.magazine.part5.pdf
```

Next, you need to tell pdftk that you are going to join all those files together into one giant file. So, add this:

```
cat output my.magazine.pdf
verbose
```

Add that to the end of what you typed thus far, so your entire command will read like this:

```
pdftk my.magazine.part1.pdf
my.magazine.part2.pdf
my.magazine.part3.pdf
my.magazine.part4.pdf
my.magazine.part5.pdf cat
output my.magazine.pdf
```

The verbose command at the end tells the shell to echo to the screen what the program is doing. This saves you from guessing what is going on. If you don't do this, when you press enter you'll get no feedback from the program. So press enter and watch the pages fly by. In a matter of seconds you will be back at your command prompt with a flashing cursor.

Now look in the directory and you will see the final document called

my.magazine.pdf. Open it up (with your document/PDF viewer) and scroll down to admire the 100 page document you've pieced together. Now have a look at the file size. I guess it will be around 110MB or perhaps a little more.

To convert this to djvu format and keep the high-quality pages but lessen the file size, fire-up your shell and type:

```
pdf2djvu -o my.magazine.djvu
-d400 -v my.magazine.pdf
```

To explain this a little, you have told the program that the output file will be called my.magazine.djvu, that you want it to compress using 400 DPI (with -d400), that you want to see some output to the screen to know what is going on (with -v), and that the name of original file is my.magazine.pdf. Now press enter. You will see something like this:

```
my.magazine.pdf:
- page #1 -> #1:
- image size: 3199x4332
- 353010 bytes out
- page #2 -> #2:
- image size: 3199x4332
(AUTHORS NOTE: I have
deleted many pages out of
this bit)
- 341857 bytes out
- page #76 -> #76:
- image size: 3167x4332
- 450144 bytes out
0.210 bits/pixel; 3.858:1,
74.08% saved, 105702515
bytes in, 27394816 bytes out
```

You get the idea.

Now look in the directory and you will see your .djvu file, your original PDF pieces, and your final PDF.

Delete the .part1.pdf files, but keep the final PDF and DjVu files. This can be done easily by navigating to the directory you're working in, highlighting the files, and pressing the delete key.

Don't destroy the big PDF files. PDF file originals are easier to work with than DjVu files, so do any editing to the large PDF file and then remake the DjVu file.

When scanning pages, make sure you adjust the contrast/brightness controls on the gscan2pdf software. You may need to ramp the brightness/contrast up to 30 or 40 when doing full color to reduce bleed-through of the pages behind and give a crisp sharp background. I have also found that this needs to be done when using line-art. This also helps to reduce the yellowness of old-magazine pages, and to reduce file size. You will need to experiment with this setting. Spend a little time tinkering it before you go crazy and scan a few hundred books.

GetDeb extends the existing software options for Ubuntu Linux (and derivitives) by providing major updates and software not yet available on the official Ubuntu repositories.

http://www.getdeb.net

Associating A File-Type

SEE ALSO:
N/A

APPLICABLE TO:
ubuntu kubuntu xubuntu

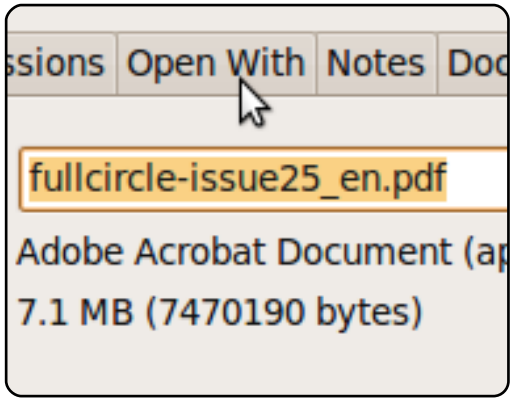
CATEGORIES:
Games Graphics Internet M/media System

DEVICES:
CD/DVD HDD USB Drive Laptop Wireless

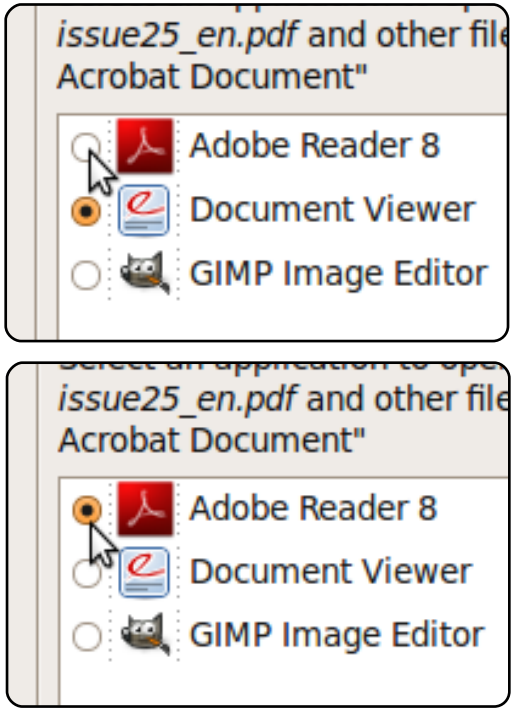
You probably enjoy the fact that when you double click on a file it opens up with the proper application. Almost every operating system associates file types with specific applications. For instance, Ubuntu associates PDF files with the Evince application by default. But you may want to change this or other default applications. When I had problems viewing some PDF files with various open-source PDF applications, I installed the Linux version of Adobe Reader. Yet every time I opened PDF files, they were still displayed in Evince. If I remembered to right click on the file, I could then choose to open it with Adobe Reader, but what I desired was for Adobe Reader to be my default PDF application. Here are the steps for changing from a current default application to another one.

Find a file of the desired file type and right click on it. Click on the “Properties” link. The currently associated application is listed at the top. The other applications that can open the file type are listed below the application.

Click on the “Open With” tab.

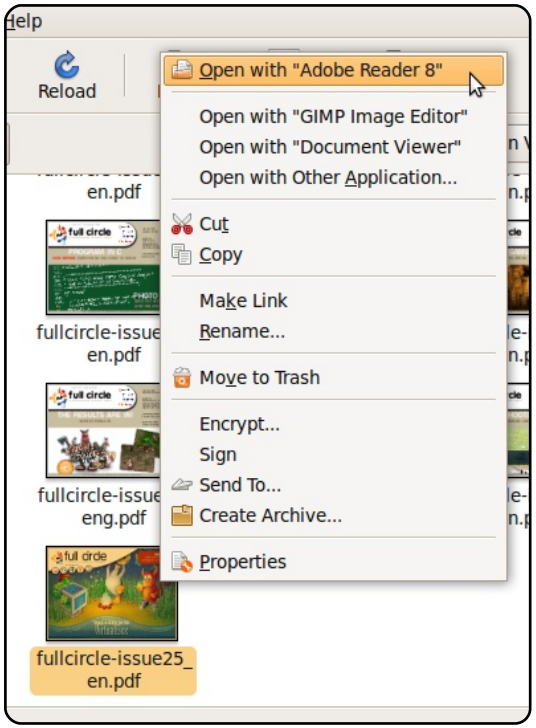


Double click on the circle in front of the desired application



Click on the “Close” button in the lower left corner.

Now, if you click on the “Properties” link again you'll see the newly associated application is now listed at the top.



My Ubuntu Home Server

Written by Daniele Del Priore

Motherboard – Gigabyte GA-M61PME-S2 L / SATA II / R 430 –GeForce 6100 / mATX / Socket AM2 (on board Video card, Lan, Sound card)

CPU – AMD Athlon 64 X2 4450e 2x2.30 GHz

Passive CPU Heatsink – Thermaltake SonicTower Rev. 2

Power – PicoPSU 120w Power Supply & 80w external PSU

Hard Disk – Western Digital 160 Gb / 2,5”

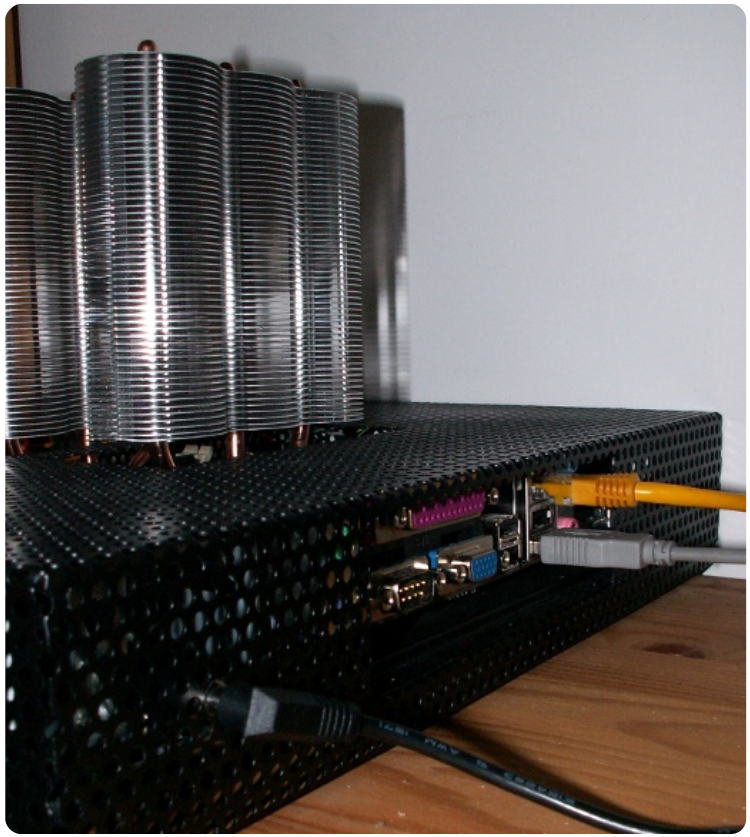
RAM – Kingston 1Gb DDR2 800 MHz

I have been a Linux user since 1999. I tried Red Hat first, then SUSE, and then Mandrake. I always tried out the Linux distributions on old computers without really intending to use them.

Finally, I discovered Ubuntu (Dapper Drake, 6.06), and it became my first daily-use Linux installation. I dual-boot it with Windows, because I don't have the option of working without the latter. I've recently built from scratch my own home server, including the case, and I run Ubuntu on it.

I started this work because I needed a file server and a print server. I have 3 different computers at home, and I wanted each to have access to the same data and printer. Then I realized that I would like a torrent and amule client. This led to a computer switched on 24 hours a day. I decided I wanted a low-power-consumption, low-noise server. I fabricated one that has no fan and has a power consumption of only 25 Watts. With it, each PC can access my data and my printer.

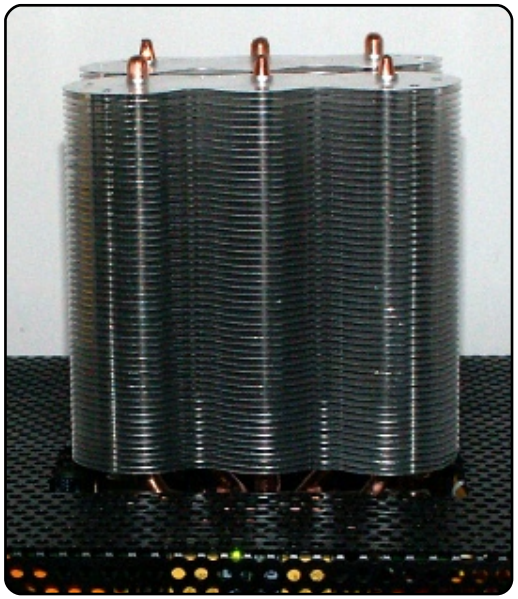
To improve my set-up further, I removed the monitor, keyboard, and mouse, and I achieved remote administration through SSH for CLI (Command Line Interface), and VNC for GUI (Graphical User Interface). Now I could administer my home server from any computer in the house.

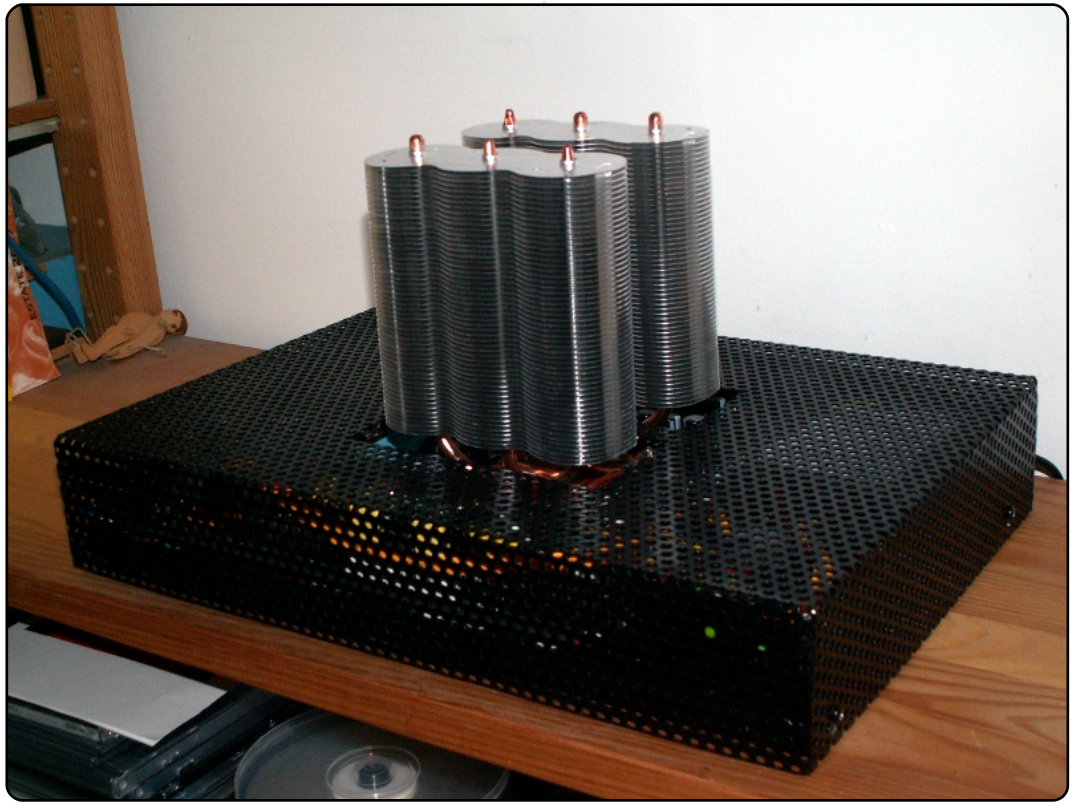


I thought that I would like access to my home server from anywhere in the world! For this, I signed up with a (free) Dynamic DNS Service. I created an sFTP server, installed torrentflux to schedule my torrent downloads, and amuleweb to do the same with aMule. Now I can manage my server from any location where I have an Internet connection. I also installed a Web Server so that I can have my own site (I use Joomla CMS) running on my home server. Despite the extra services, my server uses only 30 Watts!

Well, I'm proud of my tiny, silent, economical, powerful, home server.

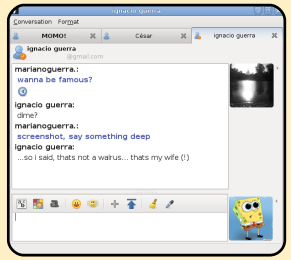
My next step? I will transform it into a low-power, quiet, HTPC (Home Theatre PC) server to connect also to our TV and Hi-Fi, and use it as a TV Recorder and a DVD Player, probably using Mythbuntu.





Quick Review : emesene

http://www.emesene.org

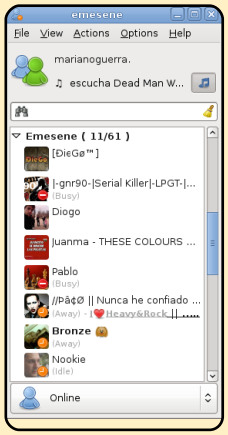


While alpha testing Ubuntu 9.04 I encountered a bug in Pidgin which caused it to crash when I signed in to MSN. That led me to search for another client and the one I liked most is emesene.

emesene (pronounced as M-S-N) is by Luis Mariano Guerra and aims to provide similar features to the official MSN client, with a cleaner and an easier to use interface. It supports a large variety of features from the official client including offline messaging, personal messages, 'Now Playing' messages, nudges and file transfer. Webcam support is currently under development. emesene adds a number of features such as auto-reply, spell check, and a Gmail checker.

Installing emesene is done using the repositories. Being an MSN user for a number of years I immediately felt right at home with the interface. It felt snappier and more responsive than other clients, but work could be done about the slight delay that sometimes occurs when opening a new conversation window.

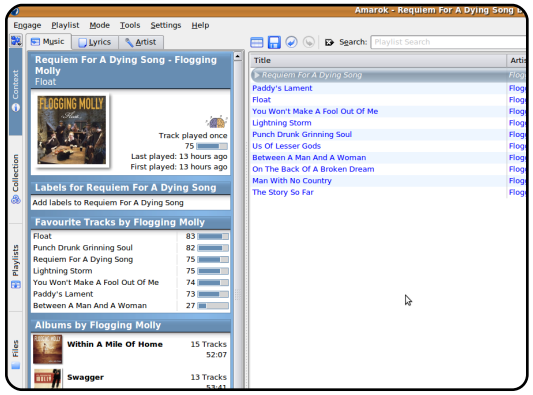
My experience with emesene wasn't without a hiccup or two. My first problem occurred when trying to use the spell check plug-in. When I enabled it I got an error saying "Error applying Spell to input (enchant error for language:) Plugin disabled". Five minutes of Googling provided me with the solution that I had to install *python-gnome2-extras*. After that, spell check worked perfectly.



The bug in Pidgin has long been solved but I continue to use emesene. I would like to see a plug-in for OTR (Off the Record) developed and I'm looking forward to seeing a stable version with webcam support.

D'Angelo Reid

Amarok 1.4



Version 2.2 of Amarok is now out, but I shall be reviewing version 1.4.10. I shall explain the reason for this later.

There are so many features in Amarok that it would be almost impossible to cover them all, so I shall cover the main features which most people would be likely to use.

Setup

If you have a large collection of music, I recommend using MySQL as the collection database because it is quicker than SQLite. Initially, I thought this might be a bit tricky to do, but it is very simple and can be done in under 5 minutes – depending on internet connection speed. To set up MySQL enter the following into a terminal:

```
sudo apt-get install mysql-server mysql-client
```

Enter a password that you want to use and write it down for later.

```
mysql -p -u root
```

```
CREATE DATABASE amarok;
```

```
USE mysql;
```

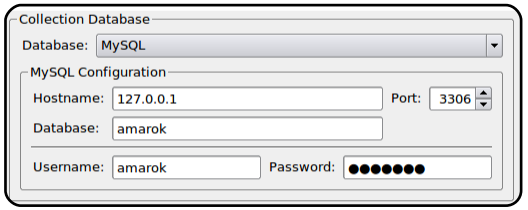
```
GRANT ALL ON amarok.* TO amarok@localhost IDENTIFIED BY 'PASSWORD';
```

Replace PASSWORD with the password you entered above, but keep it inside the quotes ('')

```
FLUSH PRIVILEGES;
```

```
quit
```

When you start Amraok for the first time it will ask you to select folder(s) for your music collection. After this, you can setup using MySQL as the collection database (or alternatively selecting Settings – Configure Amarok – Collection).



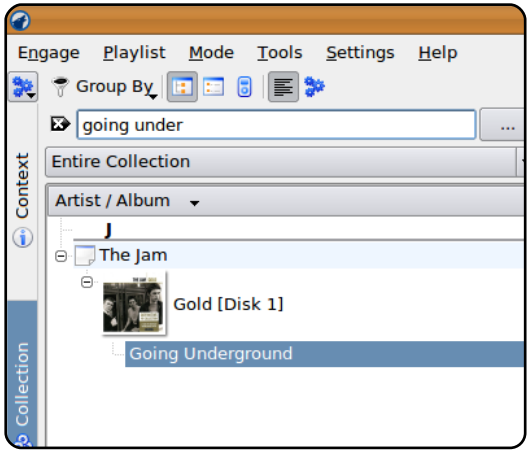
Select MySQL and enter the following details:

```
Hostname: 127.0.0.1
Database: amarok
Port: 3306
Username: amarok
Password: Your Password
```

I like simple interfaces where everything is easy to find. This is one of the main reasons why I love Amarok. Everything is exactly where you would expect to find it, and you don't need to search online for how to do anything. The music collection is handled very well and quickly.

Normal operation

Songs are listed by artist – album. You can have it list only songs added in the last day, week, month, etc. If you want to find a specific song then the search function is also implemented very well and the list of songs updates with every letter that you type. You can also search for a particular song within a playlist, and this function works in the exact same way.

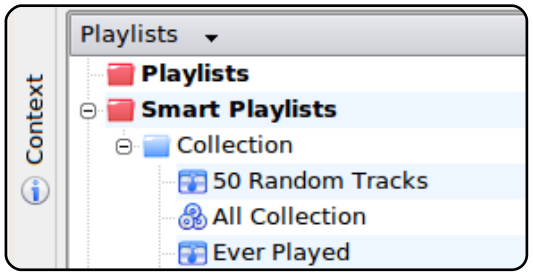


In the context tab, while playing a song, there are three options: music, lyrics and artist. The artist tab gets the information from Wikipedia. The lyrics tab displays lyrics for the song playing – I use the

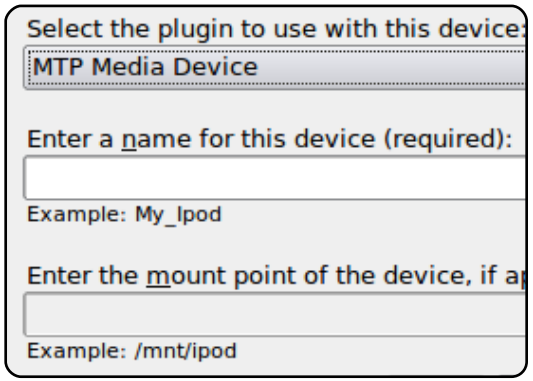
LyricWiki script for this. The music tab displays a variety of information about the artist, including all albums for the artist, and most played songs.

Cover artwork is also included and can be fetched by either amazon.com or jpegs in the album directory. If you need to, you can also edit tags of files in the playlist. I find this handy, for every now and again I see an incorrectly labelled tag which I would never find without spending several days using a program like Kid3.

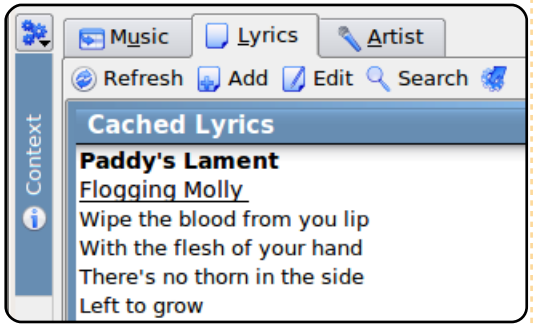
The options for playlists are good and should be more than enough for most users. You can select options such as 50 random tracks, most-played tracks by a certain artist, newest tracks, or never-played track. You can also play radio streams from the playlist tab. There are many stations to choose from, and there will be several stations whatever your taste is.



It is possible to sync your MP3 player to Amarok as well, and it supports Flash-based, iPod, and MTP devices. To set it up, all you need to do is connect the player and select which of the plugins you want to use for it.



There are many scripts available to extend some features of Amarok. I stated earlier that I use the LyricWiki script for lyrics. There is probably a script for any added functionality that you want.



Is it good?

In my opinion, not only is Amarok the best audio player for Ubuntu, it is also the best audio player there has ever been on any platform! Within a week of using it, I could never go back to any other application. It is that good!

Is there anything that I dislike about Amarok 1.4? Honestly, I can say that there isn't. It does everything that I want it to do, and it is easy to use. I do, however, have a complaint with the implementation of Amarok 2. A lot of features from 1.4 were missing. The 2.1 release fixed many of these, but it is still not perfect. Given time though, I have no doubt that it will be just as good, if not better, than 1.4.

Some people may complain about downgrading to an older version and not supporting the newest, but the average user just wants a product that works all the time. Sadly, version 2 is not quite there yet, but I am confident that in the next release or two it will be.

Depending on which version of Ubuntu you are using, it will have either 1.4 or 2 in the repositories. Hardy has 1.4 and Jaunty has 2. I'm not sure about Intrepid. I installed 1.4 in Jaunty from the information at

https://edge.launchpad.net/~bogdanb/+archive/ppa

To use this PPA you need to add two entries to your sources.list and add a repository key. All the information is in the above link. You then install 1.4 by looking for amarok14 in your package manager or by typing

```
sudo apt-get install amarok14 .
```

MOTU INTERVIEW

Taken from behindmotu.wordpress.com

Nathan Handler

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

Age: 16
Location: Chicago, Illinois, USA
IRC Nick: nhandler

How long have you used Linux and what was your first distro?

My first introduction to Linux was with a Slax live cd. That was sometime in 2005. I used the cd a couple of times, but never actually installed it to my computer. During the summer of 2006, I decided to install Linux as my primary operating system. I tried Suse and Fedora before trying Ubuntu. Ubuntu had the best support for my hardware, and a great online community.

How long have you been using Ubuntu?

I've been using Ubuntu for over two years. I started with Dapper Drake, but updated right away to Edgy Eft.

When did you get involved with the MOTU team and how?

I started to get involved with the MOTU team during the Gutsy Gibbon development cycle. I began by patching some of the bitesize bugs on Launchpad. I did not do anything MOTU-related during the Hardy Heron development cycle. However, in the Intrepid Ibex developement cycle, I really started to get serious about working towards becoming a MOTU. I performed a lot of merges and syncs, and continued to patch bugs on Launchpad.

What helped you learn packaging and how Ubuntu teams work?

Emmet Hikory (persia) helped guide me when I first got involved. He helped teach me the basics of patching and some of the development processes. The many guides and irc logs on the wiki were also a great help. Almost every MOTU-related task has been documented on the wiki. I also can not forget to mention the IRC channels. They are filled with MOTUs and other Ubuntu users who helped answer all of my questions.

What's your favorite part of working with the MOTU?

My favorite part of working with the MOTU is that there is always something new to learn. When you master one thing (if that is even possible), there is always always something else out there for you to learn.

Any advice for people wanting to help out MOTU?

Spend time on IRC. IRC is one of the most valuable resources available. Not only is it full of thousands of people that are willing to help guide you on your way, but it also leads to many new friendships.

Are you involved with any local Linux/Ubuntu groups?

I am currently not involved with the Chicago LOCO. However, I have worked with many of the LOCO members over IRC.

What are you going to focus on in Jaunty?

Now that I am a MOTU, I am going to be devoting a lot of time to sponsoring patches from other Ubuntu contributors. I will also be reviewing more packages on REVU. I also want to get involved with Kubuntu.

What do you do in your other spare time?

When I am not at school or doing MOTU-related tasks, I am usually working on one of the many Perl scripts that I've started. For me, programing helps me think logically and relax.

LETTERS

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

VPN At Work?

I would like to see how one uses the VPN setup to connect to a server at a workplace. I would also like to encourage someone to write an article on viewing a home network with Ubuntu and/or troubleshooting thereof. I was able to see other members of my home network until I upgraded to Jaunty, now I can't see other computers, although I can Putty into my home SME server.

Ken

Droid Assault

Thank you for telling us about Slingshot. That game is awesome. Check out Droid Assault (above right): http://www.puppygames.net/droid-assault/

Anthony Parr

Outlook > Thunderbird

In answer to the question of reading Outlook emails (Kris Giellis) on Linux, Wombalton is half way there. Unfortunately Thunderbird is unable to work with Outlook's .pst files from within Linux. You need to install Thunderbird on your Windows machine then use its import feature there. You can then use the universal .mbox format to move your emails to another system. As a Mac and Linux user, this has worked a charm for me in the past.

Adam Barbary

LETTER OF THE MONTH

Writer of Letter of the Month wins two metal Ubuntu case badges!

I am the IT manager for a small rural hospital located in Humphreys County, TN. It is a one man shop with a budget that leaves little left over to implement technology. This is where Linux and other open source applications have shone through.

Zimbra Collaboration Suite, Network edition, with Zimbra mobile running on Ubuntu 8.04 which, at a cost of about $9 (US) per mailbox, makes it a logical choice when you compare it to the $200-plus Exchange solution.

Ubuntu 8.04 Server runs Apache and MySQL with Joomla and commercial plugins. We use Joomla for an internal employee website, giving information such as policies and procedure manuals, employee training complete with tests that are recorded and added to employee records.

Ubuntu 8.04 (desktop) with GNUMed coupled with a Fujitsu Scanner to archive medical records. This frees up tons of space and allows us to destroy old records. The electronic versions are indexable and take up very little space. Untangle is used as a pass through device that filters web pages, scans for viruses in emails, performs phish filtering, and loads more. We run the open source version and the implementation of OpenVPN is a piece of cake to use. In addition to the above we use Firefox, and OpenOffice.org products on the end users workstations. Several copies of Gimp, Scribus, Inkscape and a few others are also in use.

The previously mentioned software is already in use at the hospital. The next implementation will be another Ubuntu server using Bacula for some distributed backups.

Thank you to all those folks who have worked so hard on the products I use. Thanks for making stable products that I can run in a live environment that are easy to use and stable.

Joe Hildreth

Why No Hardware Reviews?

FCM has software review sections but why not a hardware review section? This would help in telling readers which hardware is compatible with Ubuntu. From my own experience I can say there are problems when it comes to buying some accessories. Many are either not supported or have drivers which need to be compiled. Compiling a driver is hard for a normal user like me.

Danish Lala

Ed: *I agree. We'd love to feature hardware reviews, feel free to encourage companies to send us hardware for review. Also feel free to review any hardware you've purchased. Did it work with Ubuntu out of the box? Did it require drivers and/or tinkering? Do tell!*

Creative Zen Delight

Imagine my surprise when Ubuntu 9.04 Jaunty Jackalope detected my Creative Zen V Plus! The device appears on my desktop and in Nautilus. I could browse the content and delete music in Nautilus then connect it to Rhythmbox and copy music to the device. It's really awesome and amazing.

Thank you Ubuntu developers!

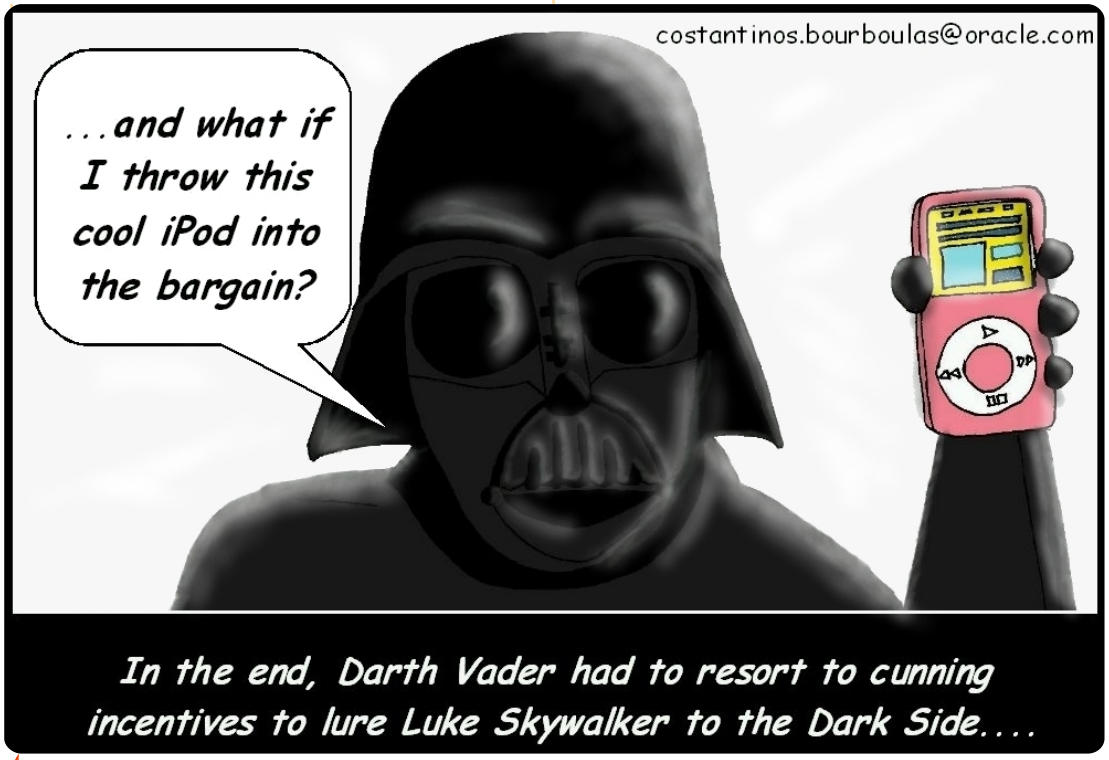
Dadan Ramdhan

Ed: *Seems you're not the only one Dadan. We've had several letters from happy Zen users who can now easily use their devices in Jaunty.*

More VirtualBox

If you are interested in running VirtualBox for something important and for functionality the best course of action is to go to the Sun website and download the personal use version. I use it for the two windows programs I can't replace with OSS. XP runs like it was meant to be there and I no longer have to reboot or muck up my hard drive with an NTFS partition. The major addition to the non-free version is the "guest additions" which enables things like sound and USB support. The major pain is the necessity to rebuild the kernel module each time the kernel gets an update. The documentation for vbox is copious and complete. I am a bit worried that Oracle might mess up my happiness but I can't get too worked up over stuff I can't control.

CW Moser



UBUNTU WOMEN

Written by Amber Graner

Amber Graner: Mackenzie, welcome and thank you so much for participating in this month's "Women Behind Ubuntu" interview - Please introduce yourself.

Mackenzie Morgan: I'm just your typical computer science student who works on free software to alleviate boredom. Or because the computer started doing something that annoys me, and it must be remedied.

AG: How did you get involved in F/OSS and Ubuntu specifically?

MM: I had just finished high school and was going to, for the first time, have a computer I could do whatever I wanted to. So I decided to try something other than Windows. After I saw proof that Linux has GUIs, a FreeBSD user on Facebook recommended Ubuntu. It wasn't smooth sailing, but Xorg with AIGLX made me go to Edgy to get Beryl. I became addicted to new features and started alpha testing Feisty. As for F/LOSS, it didn't take long for me to realize how useful it was that I can just go fix it if an application doesn't work for me.

AG: What is it that you find engaging about Ubuntu?

MM: I get to watch it as it morphs from unstable to something that my brother and mother can use with ease and enjoy.

AG: What version of Ubuntu are you currently using?

MM: I'm tracking Kubuntu Karmic.

AG: I think it is great that you are seeking MOTU (Masters of the Universe) status. What can you tell us about the process from your perspective? What are the advantages of being MOTU or Core Developer over say Ubuntu member. Do you have to be an Ubuntu member first?

MM: The only thing those titles get you is permission to upload packages and patches. You can submit patches anyway, but you have to wait for someone to get to around to uploading them. I keep saying I'm going to apply "when quilt stops hating me," because I always need two (or more) tries to make that tool work. And no, Ubuntu Membership is not a pre-requisite (MOTU automatically become members).

AG: What areas of the distribution do you currently contribute to?

MM: The last couple days have been spent on a "paperkut" that affects a number of KDE applications. In general, my focus lately has shifted from triaging bugs to taking patches that are rotting away on Launchpad, testing them, making debdiffs, and finding someone to upload them. A team to focus on patch-rot was discussed at UDS, actually.

AG: You are involved in LinuxChix, and Ubuntu Women, right? Are there any other groups that you participate in that are designed to encourage people, especially women, in the F/LOSS communities.

MM: Aside from those, I'm in the not-F/LOSS-centric DevChix community. It's a good place to ask programming questions, and enough work on F/LOSS in their spare time that they can help with F/LOSS libraries.

AG: Karmic Koala, Ubuntu

9.10 is due the end of October, what excites you about this upcoming release?

MM: With my QA hat on, the symptom-based bug reporting should hopefully make triagers' and bug reporters' lives much easier. There'll be less back-and-forth to gather information and perform debugging steps that are the same for all bugs reported on a certain package.

With my user hat on, kernel modesetting rocks! X loads up quickly, and resume from suspend is nearly instant. I'm also glad to see better Notify-OSD integration with Kubuntu by matching the Plasma theme and adding a message indicator applet.

AG: You are involved in the planning of the Ohio Linux Fest, can you give us some information about this fest?

MM: I went to OLF for the first time last year. There were about 1200 people (up from just 100 seven years ago). This year, the new feature is Diversity in Open Source Day. This idea started out as being Women in Open Source Day, but as Moose was talking to Elizabeth Garbee, the idea was broadened. It's in Columbus, OH, Sept 25-27 and you can find information on http://ohiolinux.org

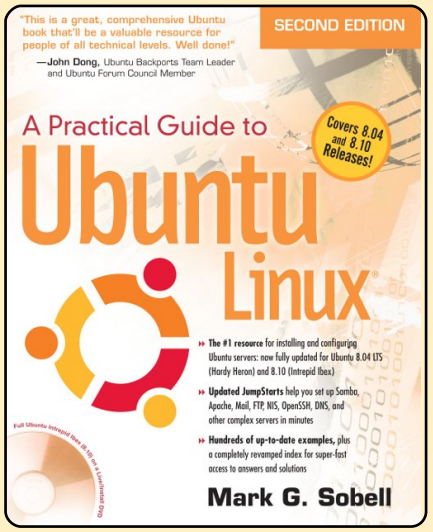
AG: I am sure there are many things about GNU/Linux and Ubuntu that you would like to discuss and that you are passionate about. Is there anything you would like to discuss or inform us about?

MM: I just want to reiterate that the barrier to entry for contributing isn't nearly as high as most people seem to think. The learning curve to fix documentation or test patches is not steep.

AG: Mackenzie, Thank you so much for taking the time giving us a glimpse into what it is about the F/OSS and Ubuntu communities that you enjoy and work on.

MM: Thank you for asking!

Quick Book Review



A Practical Guide to Ubuntu Linux - Second Edition
Marc G Sobell
Prentice Hall 2009
1,209 pages
ISBN 978-0-13-700388-4

This is by far the thickest book about Ubuntu that I've come across, and not one page is wasted. It is, not only a reference, but also a book of tutorials, the writer literally teaches you Ubuntu. Sobell gives you many examples and advice for troubleshooting.

After every section there are study questions to help you ferret out the most important topics. But the most useful part of this book is the "Jump Starts" they include, among others: CUPS, OpenSSH, NFS, SAMBA and more. How about starting a SAMBA server in less than half an hour? It's possible. Once it's up and running you get indepth advice on administration, and I'm talking detail here. This feature makes it useful both for new users and for more experienced users and administrators.

It is a book I highly recommend as I too am new to Ubuntu. It got me out of some fairly tricky spots. It is also fairly recent, published in 2009, with sceenshots from January. It covers 8.10 in detail, and 1,200 pages does get you far.

Corwyn

UBUNTU GAMES

Written by Edward Hewitt

GAME NEWS

- **Arena Live** – A new open-source, browser-based FPS (first-person shooter) currently in development will be coming to Linux soon.

- **VirtualBox 3.0** in Beta – An important release of VirtualBox has support for DirectX 8 & 9. It's great for gaming on Linux.

During the past few weeks the gaming world has been in shock with the unexpected buyout of id Software by ZeniMax Media.

In the world of Linux gaming, id Software has been a beloved developer, thanks to their support of Linux. They have given us the Quake, Doom, and Enemy Territory series, which are the best games on Linux. id Software has been very important for the success of gaming on Linux in the past, and presumably in the future with games like Quake Live and Doom 4 expected soon. ZeniMax is most famous for owning Bethseda Studios, makers of The Elder Scrolls and Fallout series. This developer makes marvelous games for the consoles and Windows PCs. ZeniMax has no experience or involvement with Linux -- this concerns Linux gamers.

A statement released by id Software states that the acquisition will give id more resources and allows it to work on many different games at the same time. In addition, id will also gain access to ZeniMax's resources and developers, and vice versa. If so, then id Software may be able to make more games and create new IPs for availability on Linux. Moreover, ZeniMax may allow id Software's Linux team to port over ZeniMax games to Linux. Then Oblivion or Fallout 3 may be available for Linux.

However, I'm concerned that ZeniMax may want to make some changes with the way id is currently being run. This may involve cost cutting, which is a likely strategy for ZeniMax, since many developers have lost revenue in 2008 and the first quarter of 2009 -- some have become bankrupt. The Linux team could even be fired because of the relative lack of demand for Linux games. We have seen signs of developers threatening to drop support for certain consoles because of low demand for games such the PS3 and PSP. If these popular consoles were dropped by developers, then Linux games would be even more likely to be so affected. However, I do think that Linux games will survive in id Software, largely because ZeniMax and id have said nothing about cost cutting, but a lot about giving more resources to id Software. I believe we will see a lot more titles come from id Software, though I doubt that we will see ports of Bethseda's titles.

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

Q&A

Written by Tommy Alsemgeest

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

Q I have a number of external drives, all previously formatted to NTFS, which worked just the way I wanted in 8.10. I decided to change to ext3, reformatted one and found it would not mount or show any indication of being recognized.

What is the correct procedure to format external drives to ext3 so that they can be used by anyone, and on a number of different computers all running Ubuntu 9.04?

A First run:

```
sudo fdisk -l
```

to see which device you want to modify. Then mount your device to a folder, with something like

```
sudo mount /dev/sdb1 /media/disk
```

Replacing /dev/sdb1 with the device you found with fdisk, and /media/disk with a folder you want to mount it to. Then, to change the permissions you would run

```
sudo chmod 777 /media/disk
```

Once again replacing /media/disk with the folder you mounted it to. Now your device can be accessed by anyone.

Q My usual requirement is to find a file containing some text. Usually I have an idea in which folder it is, but if it is a package, I have no idea where to look for it. If someone could clear this up, I would greatly appreciate it.

A It seems the best solution to your problem is to use grep. There is a very nice explanation on how to use grep in *Command and Conquer* in FCM#19. I am sure you will grow to love grep.

Q Where can I find a list of commands just for Ubuntu without the commands Ubuntu does not recognize? I think each distro should include a current version command line list, viewable from GUI if installed, like a thesaurus: a list with a short explanation.

A Such a list would be prohibitively large, and near-impossible to maintain. From the terminal you can get a partial list of commands by typing:

```
info
```

The best way to learn the commands is to use them as you need them, to go looking for a suitable one when the need arises. If you come across a command but don't know what it does or how to use it, it is best to view the man page for it. For example, if you didn't know what the *ls* command did, you would type:

```
man ls
```

However, if you want a list of the common basic commands, there is one on the Ubuntu wiki for Ubuntu 9.04: https://help.ubuntu.com/9.04/basic-commands/C/

Q KompoZer has started crashing after I updated to Ubuntu 9.04. There is no error message; it just goes away. Is there a fix for this?

A The best way to find a fix this type of error is to get the terminal output of the program. You do this by opening the program from the terminal i.e. open a terminal and type "kompozer". Copy the error message into Google to see if anyone else has had the problem. If no one has, you should file a bug report. There is a nice how-to here: http://ubuntuforums.org/showpost.php?p=6367705&postcount=1

MY DESKTOP

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

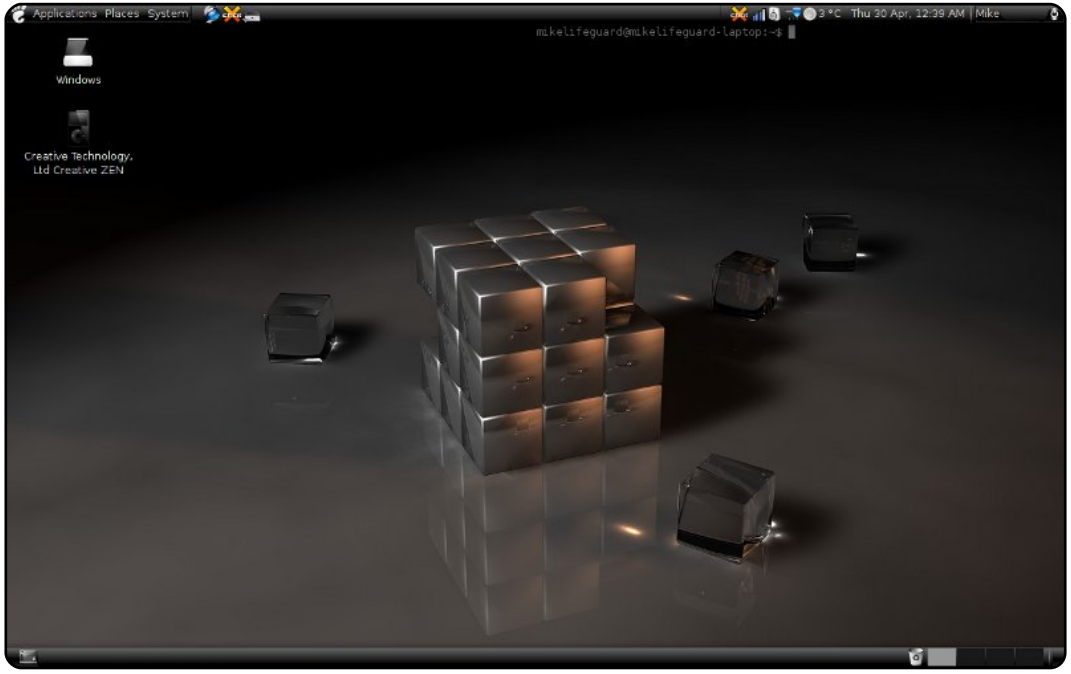
Here is my desktop. I use sw_waiting_on.jpg as wallpaper (http://www.desktopstarships.com/SwGallery/Sw_11.html). The theme is *Slickness Black* (http://www.gnome-look.org/content/show.php/Slickness+Black?content=73210), and the nice menu in the left bottom is *GnoMenu* (https://launchpad.net/gnomenu/trunk/1.6). I also use *Conky* and *conkyforecast* to have information about local weather conditions. I created this desktop from reading the Ubuntu forums. I am working with Ubuntu 8.10 on my *Toshiba Satellite L40 14F*, and I am happy with 8.10 because there are no longer any problems with the wireless connection as there were on Ubuntu 8.04. I am writing my PhD thesis now, and I find Ubuntu has everything I need to make beautiful presentations and professional looking articles.

Thank you, all Ubuntu developers, for making a nice and easy to use operating system!

Marianna

I am running Jaunty Jackalope on my *Dell XPS m1530* laptop. The wallpaper is "Atmosphere", and the icon set is "Polar Icons 2." I have banished both panels to the top of the screen, then set them to hide when the mouse isn't trained on them. After that, I used the Configuration Editor (apps > panel > toplevels > bottom_panel_screen0 / top_panelscreen0) to set the 'Auto Hide Size' to zero, and therefore stop the bottom edge from poking out onto the screen. Likewise I use *Guake* for my terminal because of its ability to tuck away nicely – yet remain acceptable. Along with this, I run a pretty simple *Conky* to keep track of the time and system stats, along with *Gnome-Do*. I don't think I can use a computer any more without Gnome-Do's help, especially on a laptop; the keyboard is much quicker, and more comfortable to navigate, than the track pad.

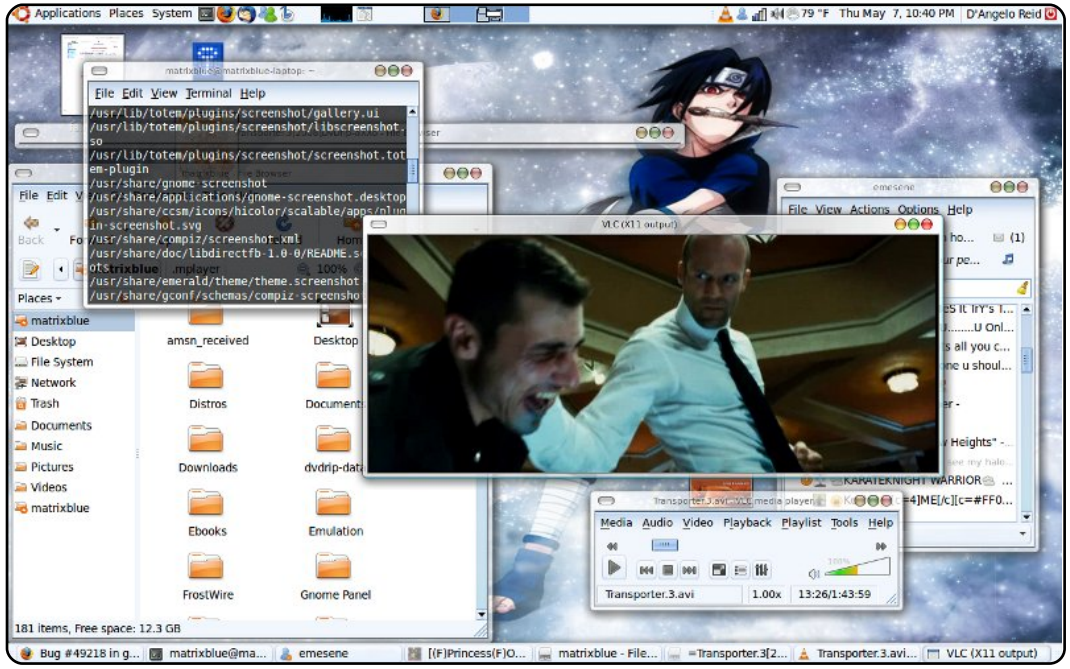
Nick



This is what I accomplished on my first day after switching from Windows: I've always liked dark themes, which generally turn out horribly under Windows. So, after installing Linux for the first time, I was excited to find one and see if this theme worked better in Ubuntu. I'm using TheRob's *Slickness-Black* theme with Rob Randtoul's *Rubik* wallpaper. I've set the skydome for Compiz Fusion's desktop cube to Parth's *Neutron Revolver* – a nice splash of colour when the cube rotates. I've also added spdf's terminal screenlet with transparency and no border – just enough that it's there if I need it, and it's unobtrusive otherwise. The Creative MP3 player you see on the desktop was a nice surprise in 9.04 – it couldn't be mounted under 8.10, but does so automatically with Jaunty. Well done!

I think my Desktop looks pretty sweet for only a day's worth of work, and knowing next to nothing about Linux beforehand. I look forward to more tweaking as I figure out what works and what doesn't, and maybe you will see it here again.

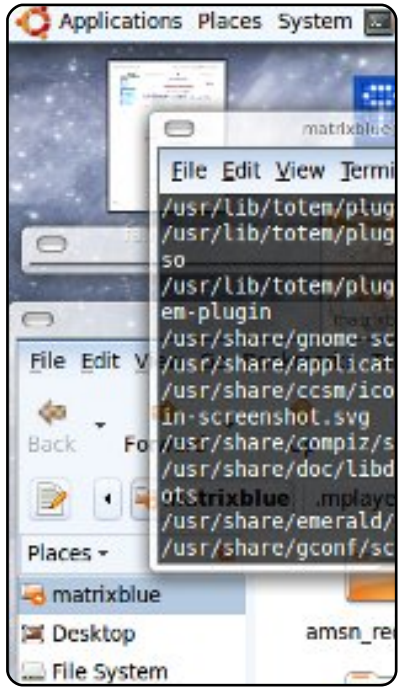
Mike



I have a *Toshiba Satellite a135-s2386* running at 1.73 GHz (dual core), with 2gigs of RAM and an *ATI Radeon XPress 200M* graphics card. I'm running Ubuntu 9.10 with the open source graphics driver. I'm using *Emerald* as my window decorator.

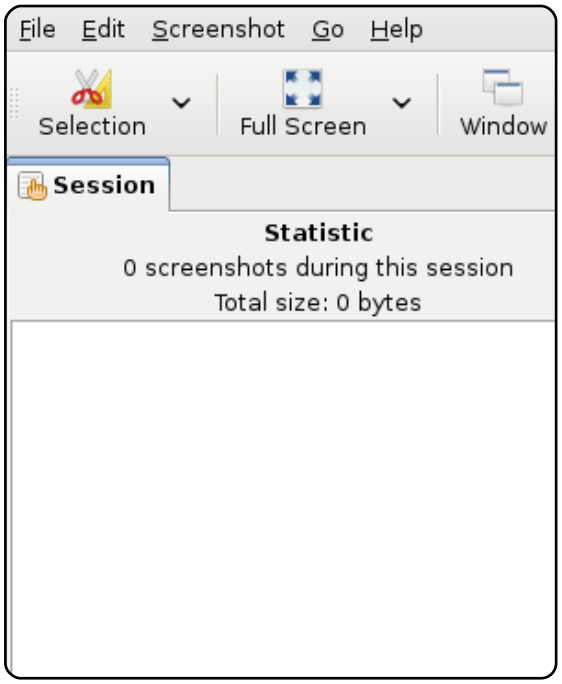
Basically, I mixed elements of different themes that I liked – to get an icy looking theme to match the wallpaper. I love the sheer combustibility that FOSS allows you as a user. You don't have to pay for a third party app to run on top of the user interface (e.g. Windows Blinds), but rather your choice as a user is completely by design.

D'Angelo Reid



Shutter

http://shutter-project.org/

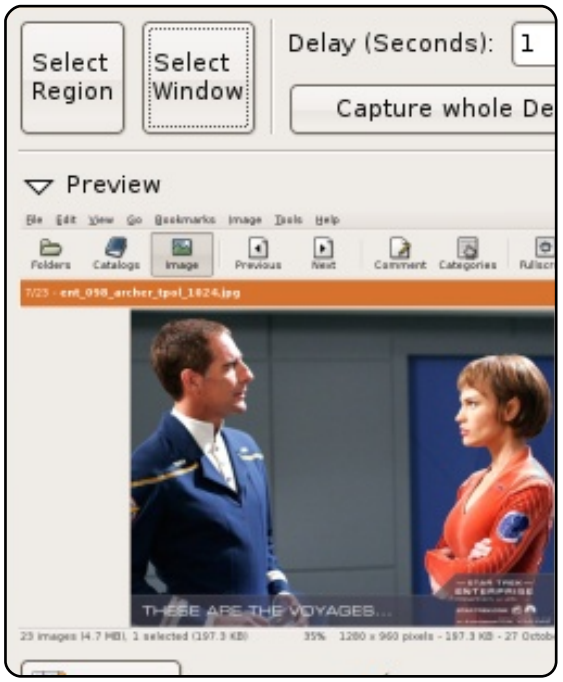


Shutter (formerly known as GScrot) is one of the most advanced screenshot tools created for the Linux desktop. It has the standard selection, window, and full-screen options, but also provides a webpage-capture feature. In addition, it has tabbed image management, basic image editing features, and even the ability to upload to various image hosts. It's a tool that belongs in any Web columnist's Gnome Panel.

Shutter will be included in the upcoming Ubuntu 9.10 release, slated for October. In the meantime, grab packages for 7.10 to 9.04 at http://url.fullcirclemagazine.org/997643.

Desktop Data Manager

http://data-manager.sourceforge.net/

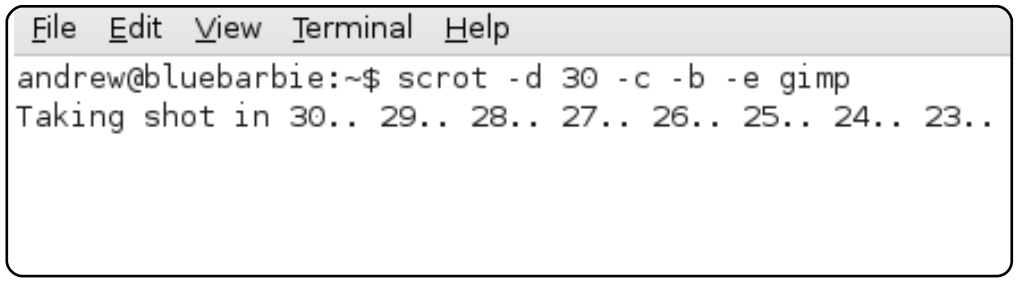


Much more than a simple screenshot program, Desktop Data Manager is a contextual clipboard application with a bevy of features. You can take screenshots of windows, the desktop, or a user-defined selection. You can also automatically convert URLs to images on the fly. Best of all, Desktop Data Manager, automatically throws the item on your clipboard, making it extremely easy to cut-'n'-paste into a working document.

Like Shutter, DDM isn't (yet) in the Ubuntu repositories. In the meantime, use the download instructions at http://url.fullcirclemagazine.org/76cc9e.

scrot

http://linuxbrit.co.uk/scrot/

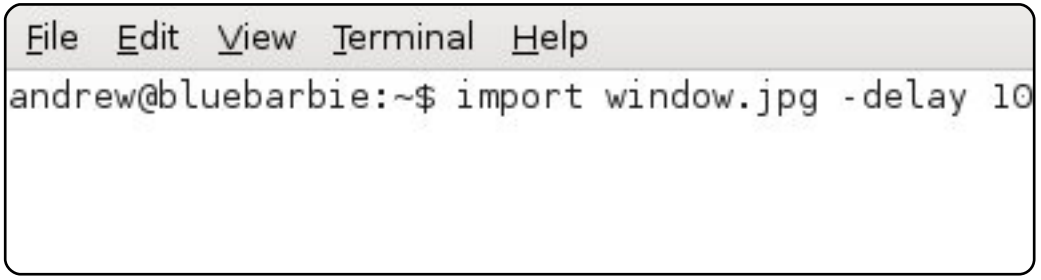


scrot (SCReenshOT) has been honored throughout the ages as one of the most powerful screenshot tools for the Linux desktop. It's a command-line tool that offers support for just about all the standard features: delays, selections, and even grabbing from multiple displays. Many screenshot programs for Linux, including Shutter, are based on this grandaddy of all screenshot programs. A decade later, it's still going strong.

To install scrot, use the ***scrot*** package in the 'universe' repositories.

ImageMagick import

http://www.imagemagick.org/



If you've been around Linux long enough, you've probably run into ImageMagick, a suite of image tools. One of the best features is the import application, a little tool that imports some or all of your X-server screen to an image file. import, of course, has all the standard screenshot features, but it also contains powerful image-manipulation tools, thanks to its integration with ImageMagick. So you can change the contrast, assign a label, monochrome, and resize, all from the same command.

To install ImageMagick, use the ***imagemagick*** package.

Screengrab

https://addons.mozilla.org/en-US/firefox/addon/1146

For some Web developers, it might be overkill to use Shutter or DDM (all you need is a website screenshot), and underkill to use scrot or import. The solution? Screengrab, the powerful Firefox add-on. Simply put, Screengrab converts websites to images. Additionally, it's WYSIWYG, so if you have Flash or Java on your site, Flash or Java are included in the screenshot. It can select just the window, the entire page, selections, and frames.

To install Screengrab, use the above home page. You'll need Firefox installed.

ubuntu-uk
local community support team

The Ubuntu UK podcast is presented by members of the United Kingdom's Ubuntu Linux community.

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

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

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

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