



full circle

THE INDEPENDENT MAGAZINE FOR THE UBUNTU LINUX COMMUNITY

ISSUE #37 - May 2010

GAME REVIEW
OSMOS



SCREENLETS - BEAUTIFY YOUR DESKTOP

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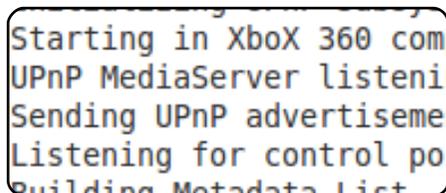


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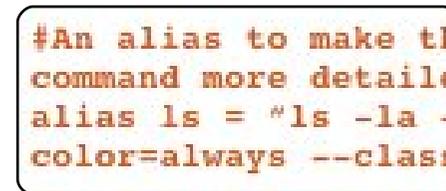
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Welcome to another issue of Full Circle magazine.

There's good news this month if you're looking for a lean, mean, distro for your laptop or notebook. Not only is there a review of **Lubuntu** (Ubuntu + the LXDE desktop), but **MeeGo** (Moblin + Maemo) version one is released. And if that's not enough the latest version of **Puppy** is out (v5.0) which is now based on Ubuntu (Lucid in this case)! I've always had a soft spot for Puppy, so I'll definitely be trying 'Lucid Puppy' on my old EEE 701 PC. I'll report back on that hopefully next issue.

I'd also like to thank all the people who've been sending us well wishes on our third birthday edition. Those messages really make it all worth while and help realise that even us non-programmers really can help the community.

I hope you'll all be buying the latest issue of **Ubuntu User** when it's released in your part of the world. Rikki at Ubuntu User has been kind enough to give Full Circle a full page ad, for free! Hence why we, in return, support Ubuntu User. So, if you can't find Ubuntu User in your part of the world, drop them an email via their website.

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!



MeeGo v1.0 Released For Netbooks

The Linux Foundation this week released the open source MeeGo OS for Intel Atom-based netbooks. The "uber-platform for the next generation of computing devices," can be installed over a USB drive, according to the Foundation.

MeeGo v1.0 is geared at developers and provides them "with a stable core foundation for application development and a rich user experience for netbooks," the foundation said. Tools for development of the MeeGo Handset user experience will be made available next month.

The platform is comprised of Intel's Moblin and Nokia's Maemo projects. It features a 2.6.33

Kernel; modern 2D/3D graphics stack including Kernel Mode Setting, non-root X; universal plug and play; voice and data connectivity with Connman connection manager, Ofono telephony stack and BlueZ Bluetooth; and next-generation file system BTRFS as the default file system.

The OS includes applications for instant access to email, synchronized calendar, tasks, appointments, recently used files, and real-time social networking updates all on the homescreen. It also has support for multiple languages.

Source: InformationWeek.com



Puppy Linux turns to Ubuntu for version 5.0

The Puppy Linux project has released version 5.0 of its fast, small-footprint Linux distro, based for the first time on Ubuntu. Puppy Linux 5.0 is built from Ubuntu 10.04 Lucid Lynx binary packages, and debuts a "Quickpet" application suite, choice of browsers, and a boot-to-desktop feature.

Code-named "Lup," or "Lucid Puppy," Puppy Linux 5.0 is "typically Puppy, lean and fast, friendly and fun," claims the project. Puppy is widely admired by those who like their Linux distros fast and lean.

Puppy Linux 5.0 is the mainstream member of a growing family of Puppy Linux

variations built on the project's "Woof" build system. Introduced in November 2008, and joined last year with a related Puppy Package Manager (PPM), Woof can build a Puppy variant from the packages of any Linux distro, including Debian, Ubuntu, Arch, Slackware, and T2, according to the project.

Source: DesktopLinux.com





COMMAND & CONQUER

Written by Lucas Westermann

If you own a laptop, you've probably often checked your emails, read up on news, or done something online - while travelling. If you're like me, you'll cringe inwardly whenever you do so, knowing full well that there may be someone else connected to the free/public hotspot running a packet sniffer and hoping for a few passwords or banking data. I have set a firm "no banking on-the-road" rule for myself and my family, but I'm also worried about our other passwords and private data. This is where SSH port-forwarding can be extremely useful. It uses SSL to encrypt all the data it sends; it uses the public wifi for nothing more than a link to whatever your SSH server happens to be (home server, home PC, work server, virtual private server, etc.); and it protects your traffic both to and from your computer from most packet sniffers and man-in-the-middle attacks.

The first thing you'll need to do is set up an SSH server on your PC, or sign up for a shell account/virtual private server somewhere, if you don't already have it set up. If you already have access to an SSH account, skip ahead to step 7.

First step:

Install OpenSSH server on your Ubuntu system:

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

Second step:

Create a backup of /etc/ssh/sshd_config

```
cp /etc/ssh/sshd_config ~
```

Third step:

Modify the sshd_config file. You can read up on possible options using the man page:

```
man sshd_config
```

The basic configuration should simply be to disable root login, and to specify users

who can log in via SSH. To do this, open /etc/ssh/sshd_config:

```
sudo vim /etc/ssh/sshd_config
```

Once it's open, change the line "PermitRootLogin yes" to "PermitRootLogin no" and add the line "AllowUsers user1,user2,user3" somewhere in the file. You need to, of course, change "user1" to the actual username, while user2 and user3 should be replaced with any other accounts who are permitted to connect to the server. For example my line would read:

```
AllowUsers lswest
```

Since I have only one permitted account and user, that is what I would enter.

Fourth step:

Restart the SSH server after you've completed your changes to the configuration file:

```
sudo /etc/init.d/ssh restart
```

Fifth step:

Create SSH keys (if you want to). Since this step is optional, I won't cover the exact commands. If you wish to generate keys, follow the instructions in the wiki (see the link in the Further Reading section).

Sixth step:

Configure your server/PC to allow internet access, and configure dyndns. I have never configured dynamic DNS for any computer, so I will leave those instructions to the wiki article (second link of my Further Reading section). A short-term solution would be to create a cron job to run the following command

```
curl http://www.whatismyip.org
```

and to redirect the output into your Dropbox or Ubuntu One folder, so you can check it from other computers. i.e.:



```
curl
http://www.whatismyip.org >
~/Dropbox/IP.txt
```

I explained cron jobs in Issue 24, in case you want a deeper understanding of it. If not, the following steps will set up a cron job to do the above command every day at 12 p.m. (noon):

```
crontab -e $USER
```

Add the following line to the file:

```
00 12 * * * curl
http://www.whatismyip.org >
~/Dropbox/IP.txt
```

Once this step is complete, you're ready to begin.

Seventh step:

You'll need the following information:

IP address of your server, username and password, or a username and a key file (from step 5).

To connect and forward all traffic over port 8080 to your SSH connection, run the following command:

```
ssh -D 8080 lswest@localhost
```

You'll then be asked to accept the rsa id from the server, to which you answer "yes", and then you will need to supply your password (if you don't have a key file generated). Once you've entered your password, you'll be greeted with the normal SSH prompt. You'll need to leave the connection active/window open (unless you run it in screen or tmux - then you can simply detach the session).

Eighth step:

Configure the SOCKS proxy in Firefox. This is simply done by going to Edit > Preferences > Advanced tab > Network sub-tab > Connection Settings. Once that opens, configure the settings shown in the image above right.

Ninth step:

Disconnecting from the SOCKS proxy. Simply change the configuration to "Auto-Detect proxy settings for this network", or to "No Proxy", and

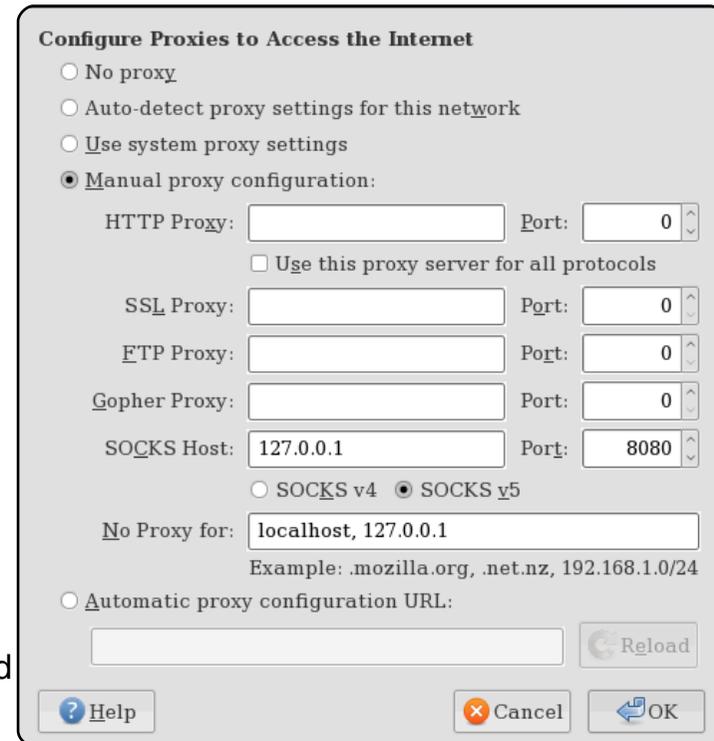
disconnect from the SSH server.

Hopefully, this article is useful for those who are very security-conscious, and maybe it will increase awareness for some everyday security problems that many people fail to realize. Naturally, there are more uses for this, and the proxy can be used in Evolution/Thunderbird, as well as many other programs, but I

felt that this was the most universal/more useful scenario in which it would be used. As always, I'm happy to answer specific questions, or take requests for articles by email. Send any feedback, questions, and so forth, to lswest34@gmail.com with the words "Command & Conquer" (or just C&C) in the subject line.

Further Reading:

<https://help.ubuntu.com/9.10/severguide/C/openssh-server.html> - Wiki article on installing OpenSSH



<https://help.ubuntu.com/community/DynamicDNS> - Wiki article on installing and configuring dynamic dns



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.





HOW-TO

Written by Greg Walters

Program In Python - Part 1 1

SEE ALSO:

FCM#27-36 - Python Parts 1 - 10

APPLICABLE TO:

ubuntu kubuntu xubuntu

CATEGORIES:



DEVICES:



Last time, I promised you that we would use our XML expertise to grab weather information from a website and display it in a terminal. Well, that time has come.

We will use an API from www.wunderground.com. I hear the question "What's an API" rising in your throat. API stands for Application Programming Interface. It's really a fancy phrase for a way to interface

with another program. Think of the libraries we import. Some of those can be run as stand-alone applications, but if we import the application as a library, we can use many of its functions in our own program, and we get to use someone else's code. In this case, we will use specially formatted URL addresses to query the wunderground website for information about the weather - without using a web browser. Some people might say that an API is like a secret back door into another program - that the programmer(s) intentionally put there for our use. Either way, this is a supported extension of one application for its use in other applications.

Sounds intriguing? Well, read on, my dear padawan.

Fire up your favorite browser, and head to www.wunderground.com. Now enter your postal code or city and state (or country) into the

search box. There is a wealth of information here. Now, let's jump to the API web page: http://wiki.wunderground.com/index.php/API_-_XML

One of the first things you will notice is the API Terms of Service. Please read and follow them. They aren't onerous, and are really simple to abide by. The things that are going to be of interest to us are the *GeoLookupXML*, *WXCurrentObXML*, *AlertsXML* and *ForecastXML* calls. Take some time to scan over them.

I'm going to skip the *GeoLookupXML* routine, and let you look at that on your own. We will concentrate on two other commands: *WXCurrentObXML* (Current Conditions) this time, and *ForecastXML* (Forecast) next time.

Here's the link for *WXCurrentObXML*: <http://api.wunderground.com/uto/wui/geo/WXCurrentObXML/i>

[index.xml?query=80013](http://api.wunderground.com/uto/wui/geo/ForecastXML/index.xml?query=80013)

Replace the 80013 U.S. ZIP code with your postal code or if you are outside the U.S. you can try city, country - like Paris, France, or London, England.

And the link for the ForecastXML: <http://api.wunderground.com/uto/wui/geo/ForecastXML/index.xml?query=80013>

Again, replace the 80013 U.S. ZIP code with your postal code or city, country.

Let's start with the current information. Paste the address into your favorite browser. You'll see a great deal of information returned. I'll let you decide what's really important to you, but we'll look at a few of the elements.

For our example, we'll pay attention to the following tags:

display_location

```
observation_time
weather
temperature_string
relative_humidity
wind_string
pressure_string
```

Of course, you can add other tags that are of interest to you. However, these tags will provide enough of an example to take you as far as you would like to go.

Now that we know what we will be looking for, let's start coding our app. Let's look at the gross flow of the program.

First, we check what the user has asked us to do. If she passed a location, we will use that, otherwise we will use the default location we code into the main routine. We then pass that getCurrents routine. We use the location to build the request string to send out to the web. We use urllib.urlopen to get the response from the web, and put that in an object, and pass that object to ElementTree library function parse. We then close the connection to the web and start looking for our tags.

When we find a tag we are interested in, we save that text into a variable that we can use to output the data later on. Once we have all our data, we display it. Fairly simple in concept.

Start by naming your file w_currents.py. Here's the import portion of our code:

```
from xml.etree import
ElementTree as ET
```

```
import urllib
```

```
import sys
```

```
import getopt
```

Next, we'll put a series of help lines (above right) above the imports.

Be sure to use the triple double-quotes. This allows us to have a multi-line comment. We'll discuss this part more in a bit.

Now we'll create our class stubs, below right, and the main routines, which are shown on the following page.

```
""" w_currents.py
Returns current conditions, forecast and alerts for a
given zipcode from WeatherUnderground.com.
Usage: python wonderground.py [options]
Options:
-h, --help Show this help
-l, --location City,State to use
-z, --zip Zipcode to use as location
```

Examples:

```
w_currents.py -h (shows this help information)
w_currents.py -z 80013 (uses the zip code 80013 as
location)
"""
```

```
class CurrentInfo:
```

```
"""
```

```
This routine retrieves the current condition xml data
from WeatherUnderground.com
based off of the zip code or Airport Code...
currently tested only with Zip Code and Airport code
For location,
if zip code use something like 80013 (no quotes)
if airport use something like "KDEN" (use double-quotes)
if city/state (US) use something like "Aurora,%20CO" or
"Aurora,CO" (use double-quotes)
if city/country, use something like "London,%20England"
(use double-quotes)
"""
```

```
def getCurrents(self,debuglevel,Location):
pass
```

```
def output(self):
```

```
pass
```

```
def DoIt(self,Location):
```

```
pass
```

```
=====
# END OF CLASS CurrentInfo()
=====
```

You will remember from



previous articles the "if __name__" line. If we are calling this as a stand alone app, we will run the main routine - otherwise we can use this as part of a library. Once in the main routine, we then check what was passed into the routine, if anything.

If the user uses the "-h" or "--help" parameter, we print out the triple-commented help lines at the top of the program code. This is called by the usage routine telling the app to print __doc__.

If the user uses the "-l" (location) or "-z" (zipcode), that will override the internally set location value. When passing a location, be sure that you use double quotes to enclose the string and that you do not use spaces. For example, to get the current conditions for Dallas, Texas, use -l "Dallas,Texas".

Astute readers will realize that the -z and -l checks are pretty much the same. You can modify the -l to check for spaces and reformat the string before passing it to the routines. That's something you

can do by now.

Finally, we create an instance of our CurrentInfo class that we call currents, and then pass the location to the "DoIt" routine. Let's fill that in now:

```
def DoIt(self,Location):  
  
self.getCurrents(1,Location)  
  
self.output()
```

Very simple. We pass the location and debug level to the getCurrents routine, and then call the output routine. While we could have simply done the output directly from the getCurrents routine, we are developing the flexibility to output in various ways if we need to.

The code for the getCurrents routine is displayed on the next page.

Here we have a parameter called debuglevel. By doing this, we can print out helpful information if things don't seem to be going quite the way we want them to. It's also useful when we are doing our

```
def usage():  
    print __doc__  
    def main(argv):  
        location = 80013  
        try:  
            opts, args = getopt.getopt(argv, "hz:l:", ["help=",  
                "zip=", "location="])  
        except getopt.GetoptError:  
            usage()  
            sys.exit(2)  
        for opt, arg in opts:  
            if opt in ("-h", "--help"):  
                usage()  
                sys.exit()  
            elif opt in ("-l", "--location"):  
                location = arg  
            elif opt in ("-z", "--zip"):  
                location = arg  
        print "Location = %s" % location  
        currents = CurrentInfo()  
        currents.DoIt(location)  
  
        #=====   
        # Main loop   
        #=====   
        if __name__ == "__main__":  
  
            main(sys.argv[1:])
```

early code. If, when you are all happy with the way your code is working, you can remove anything related to debuglevel. If you are going to release this into the wild, like if you are doing this for someone else, be sure to remove the code and test it again before release.

Now, we use a try/except

wrapper to make sure that if something goes wrong, the app doesn't just blow up. Under the try side, we set up the URL, then set a timeout of eight seconds (urllib.socket.setdefaulttimeout(8)). We do this because, sometimes, wunderground is busy and doesn't respond. This

way we don't just sit there waiting for the web. If you want to get more information on urllib, a good place to start is <http://docs.python.org/library/urllib.html>.

If anything unexpected happens, we fall through to the except section, and print an error message, and then exit the application (sys.exit(2)).

Assuming everything works, we start looking for our tags. The first thing we do is find our location with the tree.findall("//full"). Remember, tree is the parsed object returned by elementtree. What is returned by the website API in part is shown below.

This is our first instance of the tag <full>, which in this

case is "Aurora, CO". That's what we want to use as our location. Next, we are looking for "observation_time". This is the time when the current conditions were recorded. We continue looking for all the data we are interested in - using the same methodology.

Finally we deal with our output routine which is shown top left on the following page.

Here we simply print out the variables.

That's all there is to it. A sample output from my zip code with debuglevel set to 1 is shown bottom left on the next page.

Please note that I chose to use the tags that included both

```
<display_location>
<full>Aurora, CO</full>
<city>Aurora</city>
<state>CO</state>
<state_name>Colorado</state_name>
<country>US</country>
<country_iso3166>US</country_iso3166>
<zip>80013</zip>
<latitude>39.65906525</latitude>
<longitude>-104.78105927</longitude>
<elevation>1706.00000000 ft</elevation>
</display_location>
```

```
def getCurrents(self, debuglevel, Location):
    if debuglevel > 0:
        print "Location = %s" % Location
    try:
        CurrentConditions =
        'http://api.wunderground.com/auto/wui/geo/WXCurrentObXML
        /index.xml?query=%s' % Location
        urllib.socket.setdefaulttimeout(8)
        usock = urllib.urlopen(CurrentConditions)
        tree = ET.parse(usock)
        usock.close()
    except:
        print 'ERROR - Current Conditions - Could not get
        information from server...'
        if debuglevel > 0:
            print Location
            sys.exit(2)
        # Get Display Location
        for loc in tree.findall("//full"):
            self.location = loc.text
        # Get Observation time
        for tim in tree.findall("//observation_time"):
            self.obtime = tim.text
        # Get Current conditions
        for weather in tree.findall("//weather"):
            self.we = weather.text
        # Get Temp
        for TempF in tree.findall("//temperature_string"):
            self.tmpB = TempF.text
        #Get Humidity
        for hum in tree.findall("//relative_humidity"):
            self.relhum = hum.text
        # Get Wind info
        for windstring in tree.findall("//wind_string"):
            self.winds = windstring.text
        # Get Barometric Pressure
        for pressure in tree.findall("//pressure_string"):
            self.baroB = pressure.text
```

getCurrents routine

```
def output(self):
print 'Weather Information From Wunderground.com'
print 'Weather info for %s ' % self.location
print self.obtime
print 'Current Weather - %s' % self.we
print 'Current Temp - %s' % self.tmpB
print 'Barometric Pressure - %s' % self.baroB
print 'Relative Humidity - %s' % self.relhum
print 'Winds %s' % self.winds
```

Fahrenheit and Celsius values. If you wish, for example, to display only Celsius values, you can use the <temp_c> tag rather than the <temperature_string> tag.

The full code can be downloaded from:
<http://pastebin.com/4ibJGm74>

Next time, we'll concentrate on the forecast portion of the API. In the meantime, have fun!

```
Location = 80013
Weather Information From Wunderground.com
Weather info for Aurora, Colorado
Last Updated on May 3, 11:55 AM MDT
Current Weather - Partly Cloudy
Current Temp - 57 F (14 C)
Barometric Pressure - 29.92 in (1013 mb)
Relative Humidity - 25%
Winds From the WNW at 10 MPH
Script terminated.
```



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.



Full Circle Podcast



AUDIO MP3



AUDIO OGG

The **Full Circle Podcast** is back and better than ever!

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 - Gaming - Steam coming to Linux?
 - Feedback
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- *Ed Hewitt*
- *Dave Wilkins*

The podcast and show notes are at:
<http://fullcirclemagazine.org/>





HOW-TO

Written by Pasha T

Add Screenlets

SEE ALSO:

N/A

APPLICABLE TO:

ubuntu kubuntu xubuntu

CATEGORIES:



DEVICES:



Screenlets are little widgets that you can put onto your desktop to keep track of various items, including RAM, CPU, disk usage, date and time, weather, and even the latest news. They are not only easy to use, but they don't get in the way, and are relatively light on the system. We will cover just two, and the rest you can try out on your own.

To install the screenlets program, go to a terminal and type in the following:

```
sudo apt-get install screenlets
```

However, for those who prefer to install the program in Synaptic or add/remove, just search for screenlets and install it there. After that, go to Applications > Accessories > Screenlets. You will see an assortment of various preinstalled screenlets that you can use. To use one, just click on it, then click Start/Stop over on the left, and you should see it pop up on the desktop. Take



a minute to play around with it, moving it around the screen and so on. (Note: if you want a screenlet to start when your computer starts, choose the "Auto start on login" option on the left.)

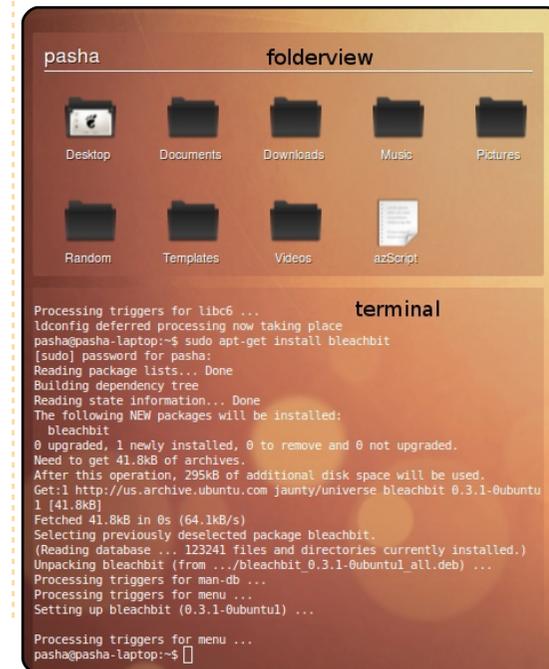
We can find many more screenlets online, in addition to the ones which come with the program.

Screenlets

The first screenlet we'll look at is called Folderview Screenlet. Those of you who have seen the new KDE4 desktop and loved the Folderview applet will want to use this. This is simply a desktop screenlet that you can use to quickly get to some folder in your home directory (or anywhere else, for that matter). See the screenshot (right) for an image of it. The second is called Terminal Screenlet and it is just that, a terminal that sits on your desktop for easy access. Again,

Screenlets are small applications (written in Python) that can be described as "the virtual representation of things lying/standing around on your desk". Sticky-notes, clocks, rulers... the possibilities are endless

see the screenshot below.



Installing Screenlets

We will first start off with installing them. Go to www.gnome-look.org, and, on the left side, you will see a search bar. First look up Folderview, and your result should lead you to the page for it. Download it there, and then go to your downloads folder. Click and drag the tar.gz file into the screenlets manager and it will install it for you. Repeat the same for Terminal Screenlet, and install it. Next, start them up and play around with them.

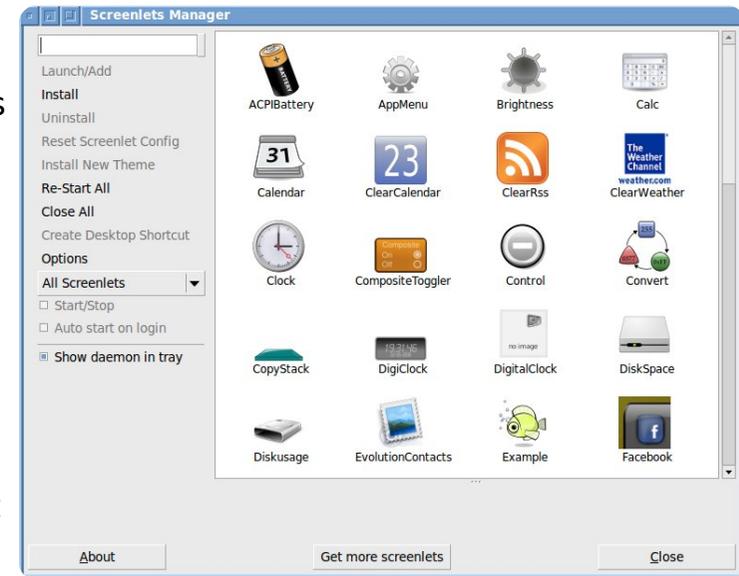
Next up is setting the properties on these screenlets. We'll start off with Folderview. Right-click it and select properties. You will see three tabs: About, Themes, and Options. The Themes folder is where you can find various themes for a screenlet. In this case, there is only the default one. Next is the Options tab. Here you will find the actual settings for this particular screenlet. You can look through the options and what you will need. For example, I

selected "Stick to Desktop" because I want this screenlet to be on all of my desktops (1, 2, 3, etc.). I also picked "lock position" because I tend to accidentally move the screenlets around. The next tab you see is the Folder tab. Here you can set how many icons you want in this screenlet, and also the folder path. If you wanted, you could have numerous Folderview screenlets running on your desktop for whatever different places you wanted to access - your home folder, your downloads, documents, etc. Last up, you will see the Look tab. Here you can set the look of the screenlet, such as color, opacity, border widths, and other things. Play around with the settings until you find something you like. Just remember, if you want to have the screenlet look nice, and you want opacity, you will need either Compiz to be on, or Metacity compositing (I prefer Metacity compositing—it's a lot lighter on the computer, and doesn't require fancy graphics cards). Next up you can play around with Terminal Screenlet and its properties. You should

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mess around with the properties of whatever screenlets you use, to adjust them to your preferences. After all, that is what Linux is all about—choices.

So have fun with screenlets, and if you want more, just click on "get more screenlets" at the bottom of the Screenlets Manager (shown above right).





HOW-TO

Written by Phil Krämer

Stream Media, Ubuntu & Xbox 360

SEE ALSO:

N/A

APPLICABLE TO:

ubuntu kubuntu xubuntu

CATEGORIES:



DEVICES:



One of the main benefits of Microsoft's Xbox 360 is the ability to stream media data, e.g. videos from a PC with Windows running on it, to the gaming console. This is especially useful if your graphics card does not support a direct connection to a TV and you want to watch movies you have saved in your PC on your television.

The problem that occurs when you try to connect an Ubuntu PC with an Xbox 360 is that the gaming console does not recognize the computer in the network, because Ubuntu has no recognized media server included. A possible solution is called uShare, which is a part of GeeXboX, a Linux distribution for Home Theater PCs - see related links at the end for more information on GeeXboX. uShare basically sets up a UPnP (Universal-Plug-and-Play) server which provides the Xbox 360 (and other UPnP devices) information about media files stored on a computer in the home network.

The program itself is available from the Ubuntu repositories - the package to be installed is ushare. After a successful installation, you will have to open the configuration file, which is located in /etc/ushare.conf and edit it to suit your needs. Here is an example of how to configure it (important settings only):

```
USHARE_NAME=Name_Of_Your_Server
```

```
USHARE_IFACE=wlan0#x0d;
(enter the network device to be used here; e.g. wlan0, eth0, ...)
```

```
USHARE_PORT=49153#x0d;
```

```
USHARE_DIR=/path/to/media
```

```
USHARE_ENABLE_XBOX=yes#x0d;
```

Although UPnP suggests otherwise, it might be that you will have to restart your Xbox after you saved the config-file and started the uShare-server - by typing ushare -x on a terminal (-x is necessary to activate Xbox-compatibility). On my machine, which uses a wireless-adaptor to connect to the network, uShare told me "Interface wlan0 is down." -

just ignore this message. The server will work properly even if the error is shown.

With the server running, navigate to the video library on your Xbox, and select the media server you have created.

If the media server does not appear on that list, you will have to check your firewall and router (e.g. forward port 49153). My router blocked my first attempts, until I re-configured NAT. If everything goes well, you'll be able to enjoy your favorite movies from your settee with the Xbox 360's remote controller in your hand.

Related links:

[1] <http://ushare.geebox.org/>

```
Starting in Xbox 360 compliant profile ...
UPnP MediaServer listening on 192.168.2.103:49153
Sending UPnP advertisement for device ...
Listening for control point connections ...
Building Metadata List ...
Looking for files in content directory : /media/93f491f2-4a86-48b8-85d4-7271
Found 6264 files and subdirectories.
```



MY STORY

Written by Randy

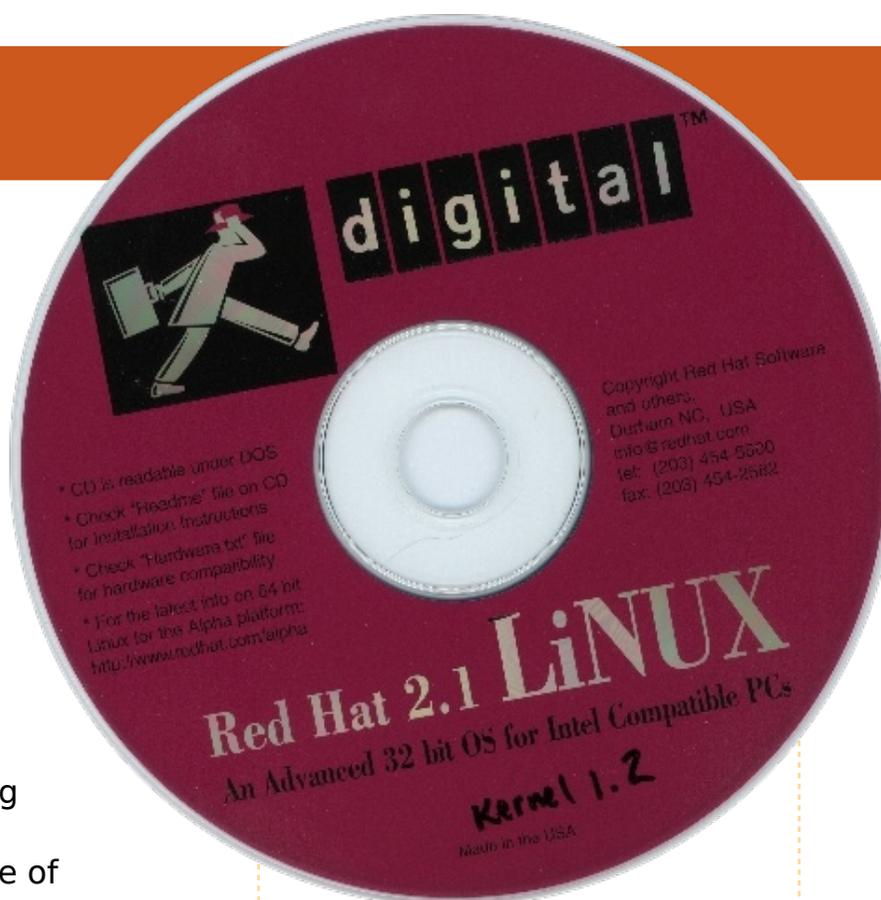
My current workstation is a custom-built Intel Core i7 2.93GHz, 12GB RAM, 1.75TB RAID (8 spindle SATA II RAID5) array, 2 dual-DVI Sapphire ATI Radeon HD 4850 graphics cards, dual CDRW/DVDRW/BluRayROM optical drives, ABS Canyon 695 case, 2 20" and 2 24" LCD monitors running Ubuntu 64-bit workstation.

I've been using Linux since about 1992 when Linus Torvalds gave a presentation at a USENIX conference on this neat new thing he was doing. I started out with the RedHat CDROM distributed by Digital Equipment Corporation at that USENIX (RedHat 2.1, Kernel v1.2). I used RedHat, then Fedora, then Fedora Core, and then Ubuntu. I still have that RedHat CD.

My first hardware firewall was an old 486 16MB machine with Fedora 4 that I built and configured myself. Its max

uptime was well over 3 years until I retired it in favor of a dedicated firewall/router/VPN device. It kept the bad guys at bay the entire time according to the log files.

I've got many machines running Linux (mostly Ubuntu): a couple of 10TB rack-mount custom-built servers running Ubuntu 64-bit server for file sharing and VM hosting; an old Dell server running FreeNAS (BSD based) as a near line (hierarchical) backup server; an old laptop running obdgslogger on top of Ubuntu 9.04 64-bit workstation for my car telematics; my laptop running ubuntu 9.04 64-bit workstation with VirtualBox for those very rare times I need to do something in Windows at



Kernel 1.2

high performance compute cluster using MPI to work on a special problem I was trying to solve - worked so well that my bank of UPSs started chirping about an overload condition.

client sites; a server running Ubuntu 9.04 64-bit server as a web host VM server; and an old Dell Optiplex SX260 bolted to the wall next to my firewall as my MRTG, Nagios, SNMP, Wireshark, syslog, and Splunk LAN monitor running a custom hardened version of Ubuntu server.

I have even configured all 8 or 10 of my machines into a



MY STORY

Written by Reginald J Manzer

How Ubuntu Became My OS

My computer story begins when I was in grade 10. I opted to take the one-year computer course my high school offered. This was a course on computers, but it was specifically focused on programming in BASIC. The computer lab had enough TRS-80 III computers so that every student had a machine to use. The TRS-80 III was built by Tandy Radio Shack in 1981 and sported a peppy Zilog Z80 processor running at a blazing 2.03 MHz. It had a fancy built-in monochrome monitor, two 5¼ floppy disk drives, and 48 K of RAM, and it used TRS DOS for its operating system.

I found out that I really enjoyed programming, and, while some people struggled with it, I usually finished my program and added additional features to it beyond the requirements.

Upon graduation, I decided to take Electronics Engineering

Technology in college and got to learn some C programming. I worked in the electronics field for a few years, but I always enjoyed programming at home in my spare time, usually writing BASIC programs in those days. I decided to return to college, and this time I enrolled in Business Information Technology Specialist (BITS, a.k.a.

Computer Programming), which included a basic UNIX course. By 1999, I was working for a company as a programmer writing business applications, but unfortunately the language was COBOL on the mainframe. I know there are those who love COBOL and the mainframe, but I was not one of them. I was able to make a move to a new project,

because they needed a C programmer and were having difficulty getting someone who was willing to program in C. There seemed to be an unwarranted fear of pointers (a C language way to look at a memory location) among the staff, so I had no competition in getting this position. This is when I first began writing software on AIX (IBM's version of UNIX). It was version 4 of AIX, and I used X Windows some, but most work was done in the terminal. Since I was familiar with this environment, most of the bash scripts that were needed got assigned to me as well. That was a nice little bonus.

I had been hearing the rumblings about Linux for a little while, and heard that it was getting more user friendly and that I could install it on my home PC. That sounded good to me, so I decided to give Linux a try. I purchased a three-inch-thick book called *Mastering Linux Premium*



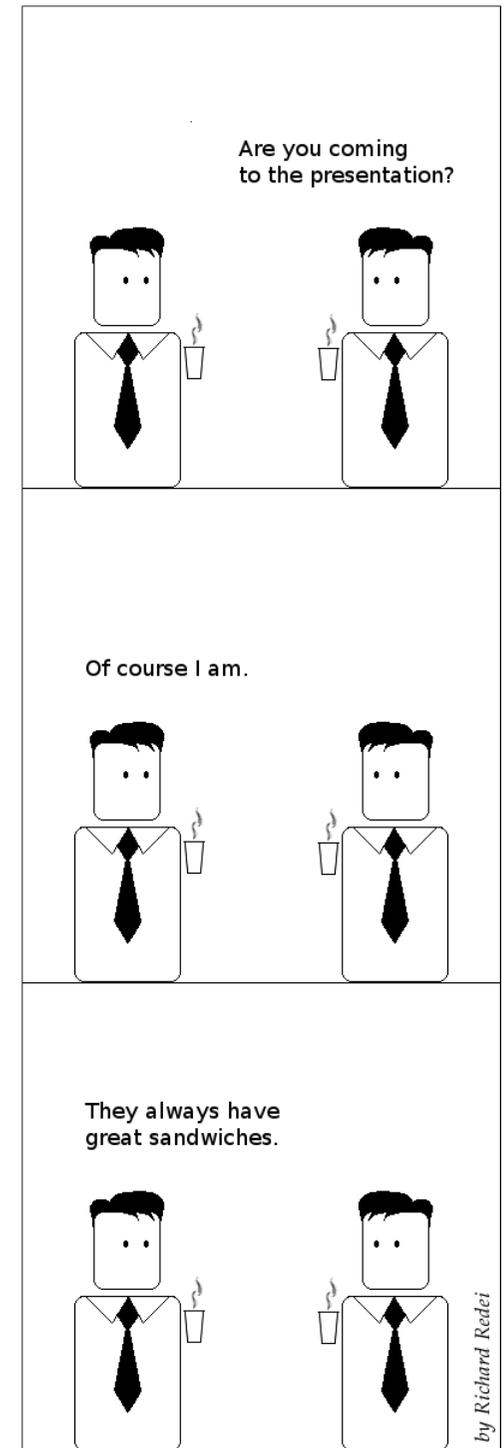
Edition, which contained two CDs of Red Hat Linux 6.0 and some additional Linux software such as Corel WordPerfect 8 for Linux. I was very excited to get Linux installed on my home PC, and it met the minimum system requirements: 486 MHz CPU, 16 MB RAM, 500 MB HD, and a bootable CD-ROM. It looked as if I was all set to go. I installed Red Hat Linux over Christmas break of 1999 amid all the impending doom of the year 2000 bug. This is where my troubles began. The Linux CD had a very limited set of hardware drivers, and after much internet searching on dialup, I came to realize that I would not be getting GNOME, or KDE, or even the ugly X Windows, on my PC. Even worse was that my MODEM was not supported - this meant no internet. I played for a while in the Linux terminal, but with Windows 95 sitting there playing games, music, videos, and surfing the web, Linux on my PC wasn't very attractive. I was disappointed and put the Linux book and the Red Hat disks away in the attic for storage.

In mid 2000, I began working for IBM, and my job role changed as I began doing mostly web development. I was seeing Linux on servers running many websites and I figured that was Linux's niche, so I didn't revisit Linux on the desktop for several years. It wasn't until 2007 when I was reading an article (<http://www.popularmechanics.com/technology/upgrade/4230945.html>) in *Popular Mechanics* (PM) magazine that I saw Linux on the desktop as something I wanted to try again. PM had built a Mini Monster PC running a Linux OS that I had never heard of called Ubuntu. The article spoke very highly of Ubuntu, which could be downloaded for free from the Ubuntu website. I decided to check it out and see what this strangely named OS was like. I downloaded the ISO disk image and created a live CD from it. I put it in my ThinkPad and booted it up. Amazingly, it recognized all my hardware, and Linux was running from the CD. I was shocked, amazed, and very impressed to see how far Linux had come from the previous time I tried

it. It just worked. I began exploring the OS menus, tried browsing the Web, and then I spotted the terminal. I popped open the terminal window and issued a few commands, and that is when I knew, I had to have this OS.

I did a little searching on my company's internal website and found out that there was already a very active Ubuntu Linux community in IBM running Ubuntu on their ThinkPads as their primary OS. There were packages available for employees with all the necessary IBM software. Well, the rest of the story is history, I started with Gutsy, upgraded to Hardy, etc. I use Ubuntu every day, and now for some reason I get a silly grin when some one has a blue screen in Windows XP or their Vista refuses to boot. That is when I tell them about Ubuntu.

Legal Disclaimer: *The views and opinions expressed in this article are the views and opinions of Reginald J Manzer and do not reflect the views and opinions of IBM.*





MY OPINION

Written by Gord Campbell

Help A New User

After years of being annoyed with Microsoft, anti-virus vendors, and expensive buggy software, you decide to try the Ubuntu CD your buddy gave you. You install it, and it works. Almost.

There's just this one little problem, but it's a deal-breaker. Being a bright guy, you post a message on Ubuntu Forums asking for help. No one answers. Oh well, you can always give it a few more years; maybe then you can escape the clutches of Microsoft.

How can we stop this from happening again? Even a reply which doesn't solve the problem can help the original poster (OP) find a solution. By discovering *Full Circle* magazine, you have proved that you can find things, and you could probably spend half-an-hour giving back to the community from time to time.

Here's the approach I use: I log on to the Ubuntu Forums. I click "New Posts", then click "Last" to get messages which are usually an hour old. I scan down the column labelled "Replies", looking for posts which have zero replies. I let my mouse hover over the message subject, which displays the first couple of lines of the message. If it looks like something I might be able to help with, I right-click on the subject, and select "open in new tab".

Now I'm looking at the message. One of the interesting items is on the left, a line which shows "beans". This is the number of messages the person has written, and if it's less than a dozen, the OP is probably a new user. These are the ones I really try to help in some way, even if I don't have the final solution.

Quite often, a new user doesn't get any reply to a

question because he doesn't provide enough information. Telling the person how to get that information doesn't solve the problem, but it can help the OP move toward the solution. For example, if it's a question about sound, it might be useful to know what sound hardware is in the OP's computer. Usually, the terminal command `lspci` will display the video and sound hardware identification. Likewise, `lsusb` will identify most webcams. Telling the OP how to run the command, and suggesting that he search the forums using that information, will often help him get the solution.

If you're going to spend time doing this, you have to be good to yourself: recognize that you won't be able to solve every problem. For example, I don't understand Linux permissions well enough to help anyone with them, but I know a lot about hardware. You also have to avoid getting frustrated with people asking the same

questions again and again. You can kindly point out to them that a Google search will find the answer, which has been sitting waiting for them all this time. Be nice, and you will add to the number of people using Ubuntu, one at a time.

A housekeeping note: if you do much of this, you will find yourself "subscribed" to a large number of message threads. You will need to take a few minutes now and then to unsubscribe. Start at "User CP," then near the bottom of the page is "list subscriptions." Once again, we use "Last" to find the message threads which have been inactive for the longest time. Click the "notification" boxes, select "Delete subscription", then "go".

Give a solution, and you have made a person happy. Show him (or her) how to find solutions, and you have made them happy for many, many days.



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Dan: Xubuntu is not the lightweight Ubuntu it should be. It's easy on CPU, but uses about the same memory as Ubuntu. Lubuntu, however, has much lower memory usage as well as lower CPU usage than any of the 'buntus, including Xubuntu. I used to use Xubuntu, and recommend it to family and friends, but became frustrated by things that seemed clunky and occasionally slow, such as slightly blurred text, the memory-usage thing, and Thunar (the file manager) not always functioning correctly or crashing when in tree mode.

I had been following LXDE (Lightweight X11 Desktop Environment) for about a year, and finally started using it in Ubuntu about 8 months ago when I spotted a custom "LXubuntu" ISO image online. I'm currently using Ubuntu Karmic Mini with LXDE, which I installed according to Masonux (<http://sites.google.com/site/ma>

sonux/home/notes-to-myself). There are some little tweaks I've done that could have used a GUI, but I figured them out. It runs snappily on my EEE PC701 overclocked to 900Mhz with 512 MB RAM, and, with /usr squashed, it leaves nearly 3 GB free of the 4 GB solid-state hard disk. And it's beautiful. Memory usage is typically around 100 MB, and climbs to about 175 MB when I have Firefox (with several extensions), VLC, Skype, Parcellite, network manager, and EEE-control running.

I'm not in any way affiliated with or profiting from promotion of LXDE, but I love it. It's more attractive, lighter, more stable, and faster than XFCE. I realize Lubuntu may not be perfectly polished just yet, but soon I anticipate the question of the need for Lubuntu will be replaced by the question of the need for Xubuntu.

Robin: The first thing that impresses on running Lubuntu on my modest Compaq Evo laptop (Pentium-M, 512 MB RAM) is the small memory footprint. Don't take my word for it, there are convincing benchmarks online for both Live CD and installed Lubuntu (start with Linux Magazine - <http://www.linux-mag.com/cache/7520/1.html>). It beats Karmic on Gnome, and Xubuntu on Xfce, by a mile. The Evo used to take 60 seconds-plus to boot to the desktop, LXDE takes exactly 30. Yet you're not restricted; gtk2 applications are well supported, and Synaptic hooks up to the Ubuntu repositories for package management (so you can pull down Open Office to replace the default Abi-Word without crippling the machine).

Lubuntu comes with a selected set of lightweight applications, and even loading up a full complement - terminal (LXTerminal), file manager

(PCManFM), calculator (Gcalculator), image viewer (GPicView), text editor (Leafpad), archive manager (Xarchiver), web browser (Chromium or Firefox), mail client (Claws), chat program (Pidgin), bittorrent client (Transmission), audio player (Aqualung), video player (MPlayer) - still takes up only about 170 MB of RAM, leaving you plenty of working memory.

The PCManFM file manager needs a little more maturity to compete with Thunar, but it's a competent and robust application that doesn't hog resources like Nautilus or Dolphin.

If you want a lightweight 'buntu solution, this is the one.





MOTU INTERVIEW

Taken from behindmotu.wordpress.com

Stefan Lesicnik

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: 28

Location:

Johannesburg,
South Africa

IRC Nick:

stefanlsd

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

I've been involved with Linux since around 1996. After leaving school and doing an MCSE (sorry!), I knew I wanted to work only with Linux. My first distribution was Redhat 3.0.3 (Picasso).

How long have you been using Ubuntu?

After using Gentoo for many years, I finally moved to Ubuntu Feisty, and haven't looked back since!

When did you get involved with

the MOTU team, and how?

I started to contribute during the Intrepid cycle. I am not a great programmer (although I really enjoy it), so I mainly started with small fixes - adding a watch file, incorporating a patch, looking at various bugs and trying to assist. I attended or read the logs of all of the Ubuntu developer week sessions (<https://wiki.ubuntu.com/UbuntuDeveloperWeek>), and followed the MOTU resources from the wiki (<https://wiki.ubuntu.com/MOTU/GettingStarted>)

What helped you learn packaging and how Ubuntu teams work?

I like to try to do something myself. It's typically then when I run into all the problems, and deepen my understanding of how things actually work. I started by upgrading some packages (GPA), and then finally packaging something (Google Gears).

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

I love being able to improve something I use and work with everyday. I enjoy the challenges and learning more about how an operating system and community fit together technically, and also socially.

Any advice for people wanting to help out MOTU?

Just do it! There is an initial curve when learning the basics, but it gets easier. You don't need to be a programmer to help, and there are great resources and people to assist you. Join us on IRC and ask questions! The MOTU mentorship program also is there to help you - <https://wiki.ubuntu.com/MOTU/Mentoring>

Are you involved with any local Linux/Ubuntu groups?

I am involved with the Ubuntu-ZA loco (<http://wiki.ubuntu-za.org/>). On the 27th of June 2009, we ran our PackagingJam (<https://wiki.ubuntu.com/Jams/P>

[ackaging](#)) in Johannesburg!

What are you going to focus on in Karmic?

I am currently working on a way to assist in the syncing of security fixes from Debian to Ubuntu. Furthermore, I would like to look at the process on how the merges and syncs are conducted, and how this can be improved. I want to get Google Gears into the archive, as well as assist with sponsoring work from contributors.

What do you do in your other spare time?

I focus a fair amount on my real job and social life. I love reading, and learning new things (currently German and Python mainly).





Less Complicated

In FCM#36 there are two commands that I believe are overcomplicated.

The first one is on page 32, in Q&A. Finding a file or directory is much easier by using:

```
sudo updatedb
```

```
locate .dwg
```

then:

```
find ~ -iname '*.dwg'
```

On page 33 it is totally obsolete to create a file and then to fire up gedit. Instead the output of sudo lshw should be piped to less or more

```
sudo lshw | less
```

or:

```
sudo lshw | more
```

Gabor Zalai

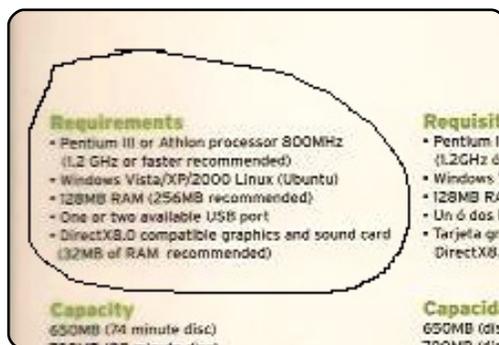
Gord replies: *If you want to flip back and forth within the output of lshw, and also search for various words, less and more will just frustrate you.*

Ubuntu Hardware

Thought you might like a picture of a hardware vendor who is supporting Ubuntu.

The photo shows the side of the box I got from an office store which contained an I/O Magic USB, external, 8 x DVD-RW which indicated it is supported in Ubuntu. Nice to see that hardware vendors are starting to come around!

David Mawdsley



TurboPrint

As an Ubuntu user and a Full Circle reader here in the States, I wanted to point out a piece of software that has not only helped me, but several others, make a complete switch to Ubuntu. This saving grace is called TurboPrint Pro for Linux (<http://www.turboprint.info/>).

It's not free software, but I am very happy it exists. I have been a Canon printer fan for some time. My first jump into the Linux world left me cold when I couldn't get two of my printers to work. Printing in general seemed like an afterthought to Linux. Once I tried Ubuntu, I wanted to make this my goto operating system from here on out. Once again, printer support was very poor for Canon. I could have purchased an HP, but after all, I had spent a good deal of money on my current printer. After a good long session of

searching forums and workarounds, someone suggested TurboPrint for Linux. The program lets you try it for a month before you buy it.

Within minutes I had full printing abilities. I was more than willing to purchase this piece of software. Ubuntu and the Linux community in general have so many great people who work so hard to provide the rest of us free software. But on the hardware driver front, focusing on one thing, and doing it well, deserves a little reward.

Gary White

9.10 Woe-Free

I read the "My Opinion" written by William Arledge in FCM#34, in which he severely criticizes Ubuntu 9.10 and says that the system works badly with all things: booting, HDD, video, hibernate, Internet.

I have not had a quarter of your problems. It works normally here and for many months! I installed it for some of my friends and they have not had any complaints at all. What did you do with your system? I don't even know how to get your problems!

Nestor Oak

Another Way

I know nothing about the author of the article (GIMP 2, FCM#36) and I do not wish to offend anyone, but the author is not utilising the potential of GIMP. Using the Free Select Tool described here is quite inconvenient and demands a lot of time.

I would copy a layer, add a mask to the layer, then - using a large brush - erase all unnecessary detail and then use Gaussian Blur on the layer. After that, with a small paintbrush (on the mask) I would erase the eyes,

eyebrows, nostril, and so on.

Natan Talifero

Ed: *I think you're both right. One of the good things about GIMP is that there are several ways to do everything. In my opinion as long as it works in the end, that's all that matters.*

Podcast Feeds

Sorry if this is a dumb question ... but I want to subscribe to a feed for the Podcast (only) on my laptop, and to the magazine on my desktop. I can't find out how to subscribe to them individually.

JdeP

Robin replies: *It's not a dumb question at all! The audio RSS dropped out in our site make-over. Our RSS feeds (a separate feed for MP3 and OGG) should be up for episode #6. Hang in there!*

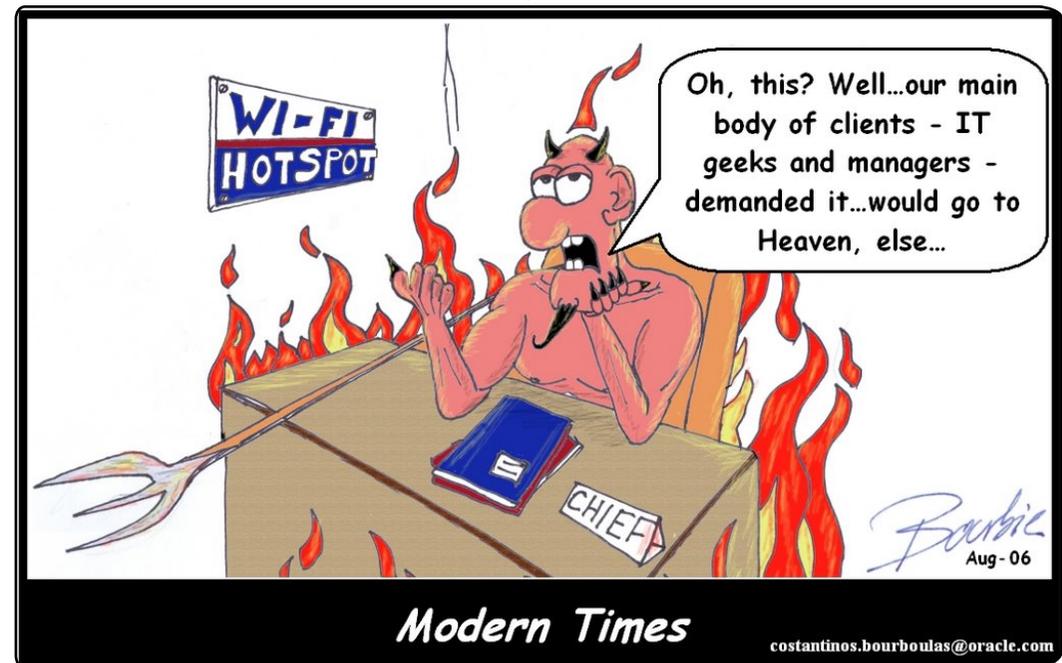
What's Your Top 5?

Andrew Min is unable to do a Top5 for next month (FCM#38, but fear not, he'll be back for FCM#39) so I'd like to throw the floor to you, the readers, for next month. **What are your Top5 applications?**

For each application you must submit:

- it's title
- a homepage URL
- a single screenshot
- a one hundred word explanation of why it's crucial to you
- and the package name, or detailed instructions on how to install the app.

Please note: you have a better chance of being published if you write your five pieces in the order detailed above.





Isabell Long: Firstly, please tell us a little about yourself.

Penelope Stowe: I've been an Ubuntu user on and off for almost 3 years now (my "other distro" is, admittedly, MacOS). Until recently, I was working in publishing, but I've quit my job and am now exploring possibilities for what I'll do next. I figure it's a good time to be adventurous and push past things I'd planned, and look at new possibilities.

I tend to be interested in

everything, and, while I don't believe in knowledge for knowledge's sake, I do believe that anything you learn can be useful and often is.

IL: What inspired you to get involved in the Ubuntu community?

PS: The short and immediate answer is that a friend badgered me about it enough over about 6 months before I got actively involved. The longer answer is that I finally got to the point where I stopped being too shy to get involved, which had to do a lot with having friends who were involved and were enthusiastic about getting me involved. I'd been using Ubuntu long enough beforehand that it wasn't a huge jump to getting involved, just a personal hurdle.

As for why I started using Ubuntu, I've always had friends who were Linux geeks, and I finally got around to giving it a try in 2007, and everyone told

me Ubuntu was the way to go. I'll admit I'm not a full-time user and I'm not sure I'll ever be. However, I've always been interested in free culture, so using free software is a natural progression from that. I'm much more a philosophical user than I am a "this just works" person, especially as I increasingly need accessibility tools, many of which don't "just work" yet in any Linux distribution.

Also, working on Ubuntu is something I can do when I'm physically unable to do much else. I have a physical disability, and sometimes am limited to things I can do lying down, but as long as I have my laptop I can still be doing things for Ubuntu.

Finally, I love the Ubuntu community. It's one of the friendliest communities I know of any type, and I do think the community is the strongest part of the operating system.

IL: What are your roles within the Ubuntu community?

My current big project is trying to revive the Ubuntu Accessibility Team. It's been going on quietly as a support only team using the mailing list and forums for a few years, but I'm hoping to get it to a point where it's updating documentation for what's available, and where there's some organisation addressing what the team would like to see in future Ubuntu releases as well as some coordination with upstream. There's been a lot of enthusiasm from people for this, so I'm hoping it all comes together. Accessibility is such a difficult thing because it is so varied. What I need is completely different from what someone with a visual impairment needs. Even people with other mobility problems may have different needs than I have. There's also a huge emphasis on discussions to focus on development, and I'd like to



branch that out some - because we really need to update documentation and awareness. Ubuntu could open itself up to a large group of new users if accessibility could be improved, or even if people knew what already existed.

I am also one of the team that runs the Ubuntu User Days for new users. We started Ubuntu User Days to provide a day of more basic "how to" for setting-up and using Ubuntu, and the first one was a great success. The next one is June 5th. I'm hoping it goes as well as the first. We've got so many ideas for what we want to have happen. It's nice to see it all come together.

Finally, I'm active in Ubuntu Women where I have been helping to get the mentoring program running again, and have been doing anything else they ask me to do. I was a little less active towards the end of the Lucid cycle. However, I'll be getting more involved again as I have more time.

IL: You've done quite a lot in the short time you have been

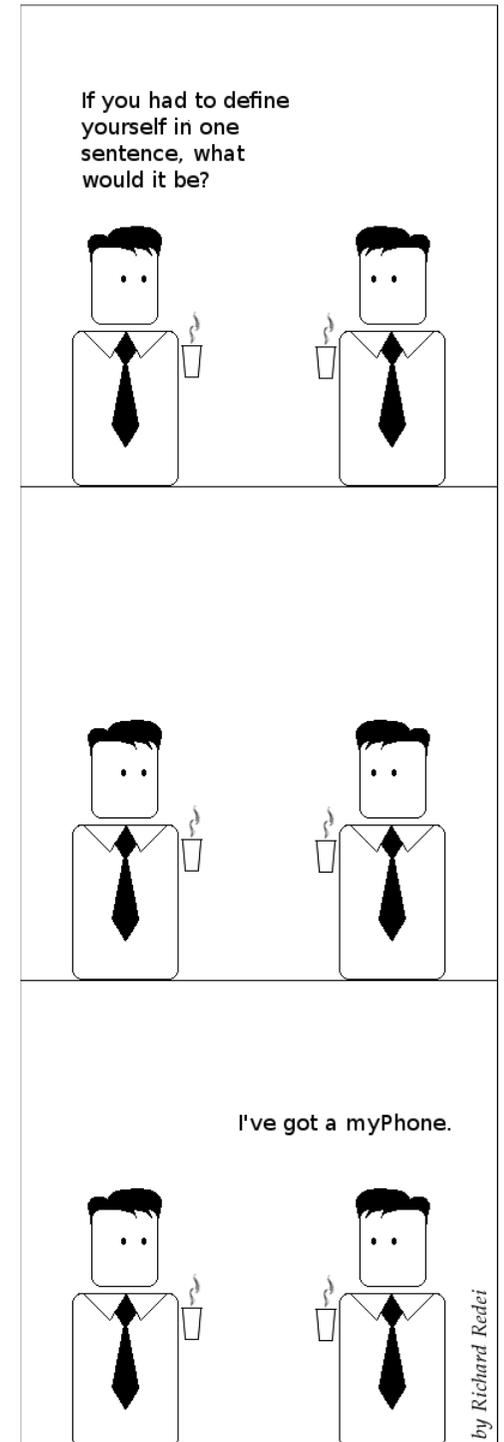
involved in Ubuntu. Is there anything you haven't done that you'd like to try?

PS: A better question is if there's anything I haven't done that I don't want to try. I definitely want to get involved with documentation. I think it's really important, plus it's somewhere that I can put skills I already have to use. I'd also like to learn how to bug triage and help out the bug squad. Also, one of the things I'm going to do - when not working - is try to learn to program. I took a couple of programming courses in college, and so will probably try to refresh my memory of those languages and pick up Python. I'm sure there are other things I either haven't thought of, or am not remembering that I want to do, but generally it comes down to: if I hear about it, it's probably on my long list of things to learn or do eventually when I have time/energy/resources.

IL: What other things are you interested in outside of OSS and Ubuntu?

PS: I'm a pretty solid book geek (mostly fantasy, but I do branch out). My main client at the job I just left was a science fiction and fantasy publisher, so it was a wonderful way to feed my book addiction. I'm also very interested in disability studies and disability rights, and I'm quite interested in how much of the disability rights and studies movements these days happens online as well as offline.

My non-techblog is wheeledtraveler.blogspot.com, although it's seen less use recently as I've traveled less and not been spending time blogging. Since I theoretically have more time now, that should change.





GAME NEWS

Steam coming to Linux? -

In the Mac Steam Beta installer there is code which references support for Linux on Steam. No official announcement yet though.

Alien Arena 2010 is out! -

This year's version adds new levels, improved graphics, and gameplay tweaks.

Osmos is a brand-new commercial game released in the last few weeks from Hemisphere Games. It's a puzzle game, based on physics, and set in the ambient world of Osmos. The world is very elegant and space-like. This is where you propel your 'mote' around the world - absorbing smaller motes to make you larger. However, you must watch out for larger motes which could absorb you!

There is no story to the game. It requires completing 47 levels with varying aims and degrees of difficulty. The game starts off fairly simply. There is a nice tutorial to guide you through the early parts of the game. You will be flying around, absorbing motes easily, but soon the game becomes ridiculously hard, by adding harder puzzles and new kinds of motes. At times you may find some of the levels almost impossible. However, Hemisphere developers have solved this problem by adding 'Procedural generation'. If you get completely stuck on a level, you can hit this button from the menu. Then a new randomly generated level is created for you to complete, so you can continue playing Osmos. As you play the game, you will unlock achievements which add replay value to the game



while you are trying to get all the achievements.

your mote all over Osmos, watching other motes flow by is a very relaxing experience. A great game to play after a hectic session playing an action game.

The gameplay is nothing like you will have experienced before. To move your mote around, you move your cursor to the side of the mote you want to push it from. You can do short quick bursts to quickly turn or adjust your mote, or long clicks to speed up your mote. However, every time you move your mote, it will begin to shrink, so you will need to be careful not to become too small. The whole flow of the game is very relaxing, pushing

The game looks spectacular. Space-like effects really suit the game. The glow of the motes looks brilliant as they move calmly through Osmos. It's minimalist, but looks stunning. The sound is high quality - the game's sound track is one of its best aspects. As I have mentioned before, the game is very relaxing, and the soundtrack complements this.

Osmos is a great game with an unique atmosphere and gameplay. There is plenty to



do, and there are unlimited random levels to play if you get stuck, which is likely as the difficulty increases quickly. The graphics and sound are excellent, and suit the game's atmosphere. "Achievements" adds finish to the game, and makes you play the game more to get all the achievements. It would be nice if Osmos had some online features, such as downloadable mods, or online leaderboards. Osmos is available for \$10, with a deb installer available. There is even a demo with a few levels you can try out. Osmos is definitely worth a try for gamers and non-gamers alike.

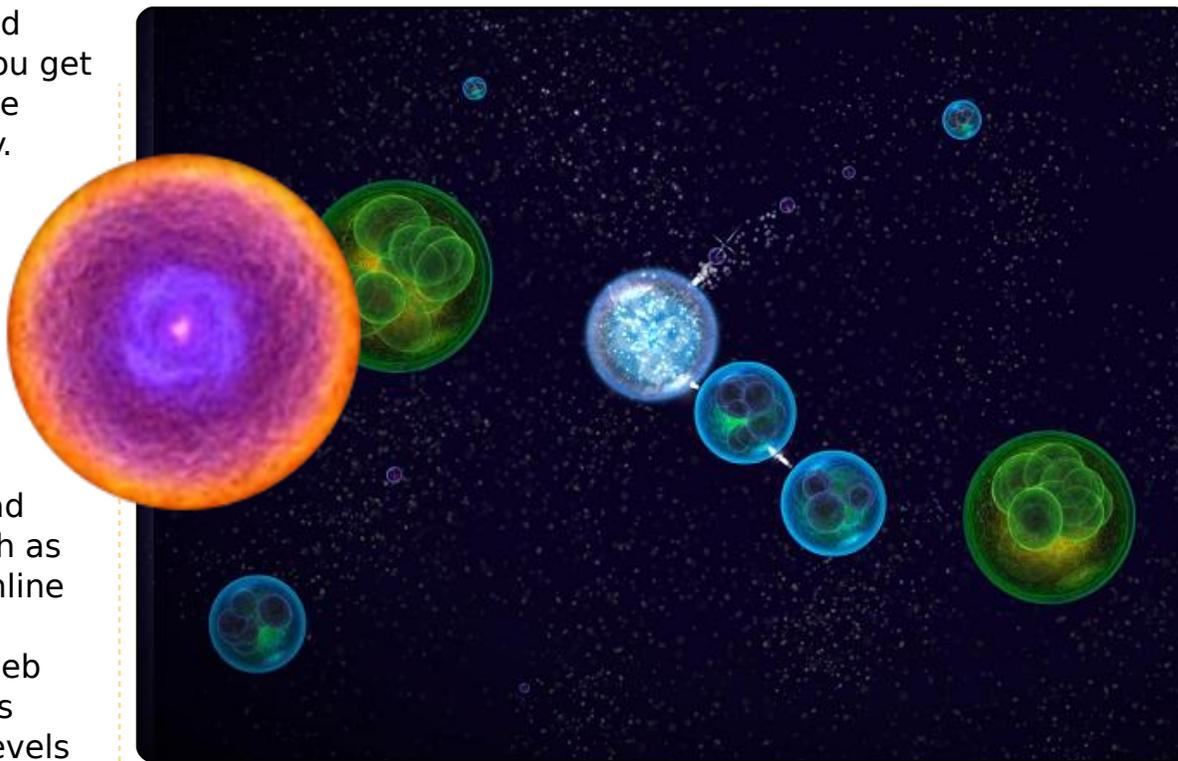
Score: 8/10

Good:

- Plenty of Levels
- Random Generated Levels
- Great soundtrack
- Achievements

Bad:

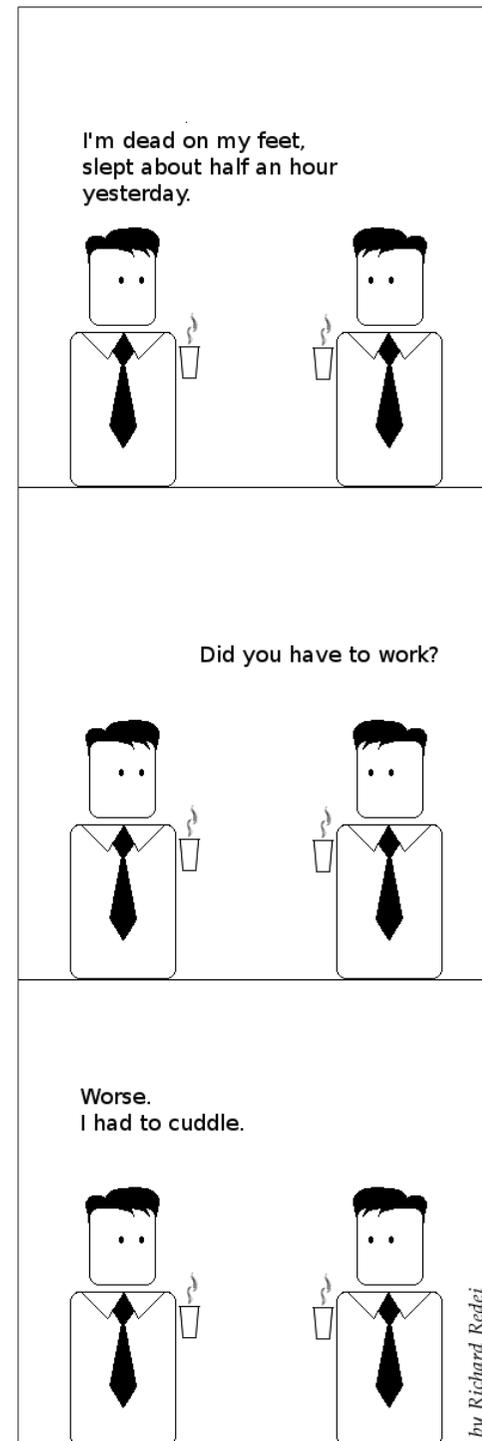
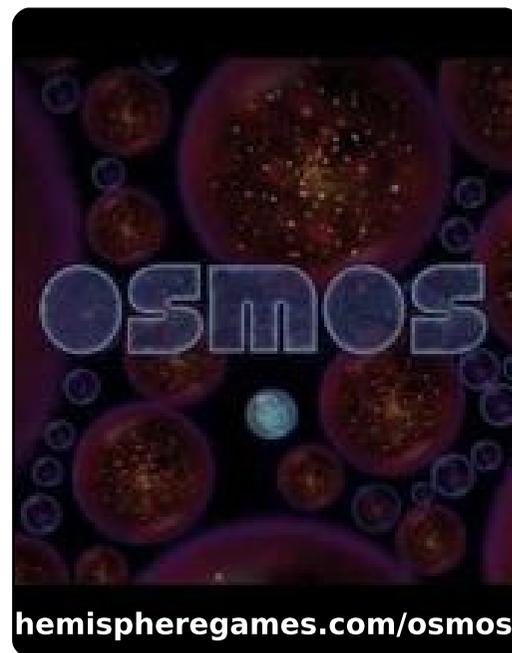
- Nice to have mods and online support



Full Circle would like to thank Hemisphere Games for supplying our review copy of Osmos. **Hemisphere Games are independent game producers who support Linux, please support them.**



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





Q&A

Written by Gord Campbell

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

Q Can I move the "maximize, minimize, close" buttons to the right in Lucid?

A open gconf-editor from terminal, then go to apps > metacity > general and, finally, change button_layout value to :maximize,minimize,close.

Q My computer has a Blu-Ray player. How can I watch Blu-Ray discs in Ubuntu?

A Most Blu-Ray discs have an excessive level of "digital rights management". If you google blurayandhddvd (blu ray and hd dvd, but all one word), the first search result should be the Community writeup on playing Blu-Ray discs.

Q I have a laptop mounted under a kitchen cabinet (see next page) with the

screen hanging down. I would like the display to be upside-down so I can read it. The laptop has an nVidia FX 5200.

A Enter the following command into Accessories/Terminal:

```
gksudo gedit /etc/X11/xorg.conf
```

(Note the upper-case "X" in "X11"!)

If there is no Device section add one, otherwise just add an "option" line to it as follows:

```
Section "Device"
Option "RandRRotation" "True"
EndSection
```

Save the file and reboot. Now you can enter this command in Terminal:

```
xrandr -o inverted
```

To make the display right-side-up, use this command:

```
xrandr -o normal
```

Q How can I change the name of my computer?

A Open Accessories/terminal and enter this command:

```
gksudo gedit /etc/hostname
```

The file contains one line, the name of the computer. Then:

```
gksudo gedit /etc/hosts
```

Make the name change. After saving the file, reboot.

Q How can I quickly check on whether a package is installed?

A Open Accessories > Terminal and enter this command:

```
aptitude show (name of package)
```

e.g., aptitude show vlc (Thanks to *Ratcheer* from Ubuntu Forums for this tip)

Q I have a Sony Vaio laptop (vgn-sr21m). Using Karmic I can not record voice from the laptop's microphone.

A Open Accessories > Terminal and enter:

```
gksudo gedit /etc/modprobe.d/alsa-base.conf
```

Add this line, or modify an existing line to say "auto":

```
options snd-hda-intel model=auto
```

Reboot and configure the input levels, using "mic" not "front mic."

(Thanks to *Benaddi Tarik* on the Yahoo Ubuntu Linux Group.)



Tips and Techniques

Your Answer is in the Cloud

It might seem as though a person writing this column would need to know everything about computers, but it's not true.

My primary skill is being able to use a search engine more effectively than most people, and I hardly ever need Google's advanced features. Most of my searches include three or four words, and one of them is "linux," or "ubuntu."

If hardware is somehow involved, I will include a model number for the hardware, such as vgn-sr21m, which is a model of Sony laptop. "Sony laptop" is too vague to be useful.

The other word or words relates to the question. For example, questions in this issue used these words: blu-ray, invert, name.

If you make a perfect search, you will get one result,

which answers your question. I've only seen it once in my life! If your search is very specific, it usually returns a few dozen results. If you get thousands of results, you need to work on choosing specific words which go right to the heart of the question.

In selecting what search results to follow, I will go first to any result in the Ubuntu Community Documentation. Some of the Community Docs are outdated, so I quickly try to establish whether this one is, and whether it matters. Second, I check threads in the Ubuntu Forums, especially if the word "solved" appears in the title. There are numerous blogs by people who sometimes write about Linux, some of whom are very knowledgeable, and excellent writers. In some cases, a vendor site contains essential information, especially if you want to download a manual. Finally, there are other forums in the Linux universe, which can sometimes be useful.

When I follow a search result, I always open it in a new



tab, on the assumption that I will want to come back to the search results. I don't think this qualifies me as a pessimist; there's a reason Google provides many search results.

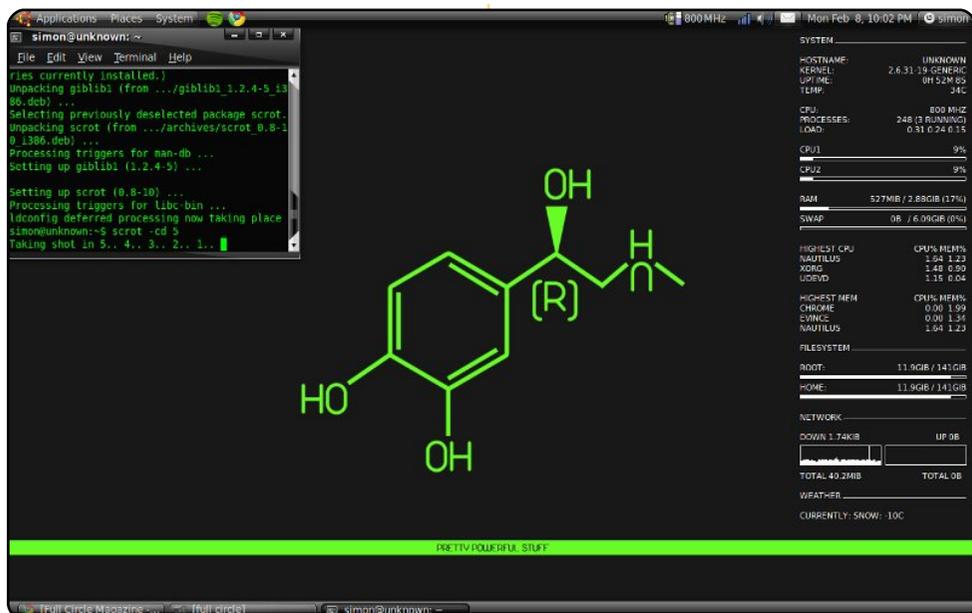
The Ubuntu Forums contain a search function, which I have only found useful when I am searching for a single word. Even then, Google is usually a better choice.

Has this worked for me? Since choosing Ubuntu I have had many questions, and I have always been able to find the answer by searching! I use the Ubuntu Forums a lot, but I have never started a thread there.



MY DESKTOP

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

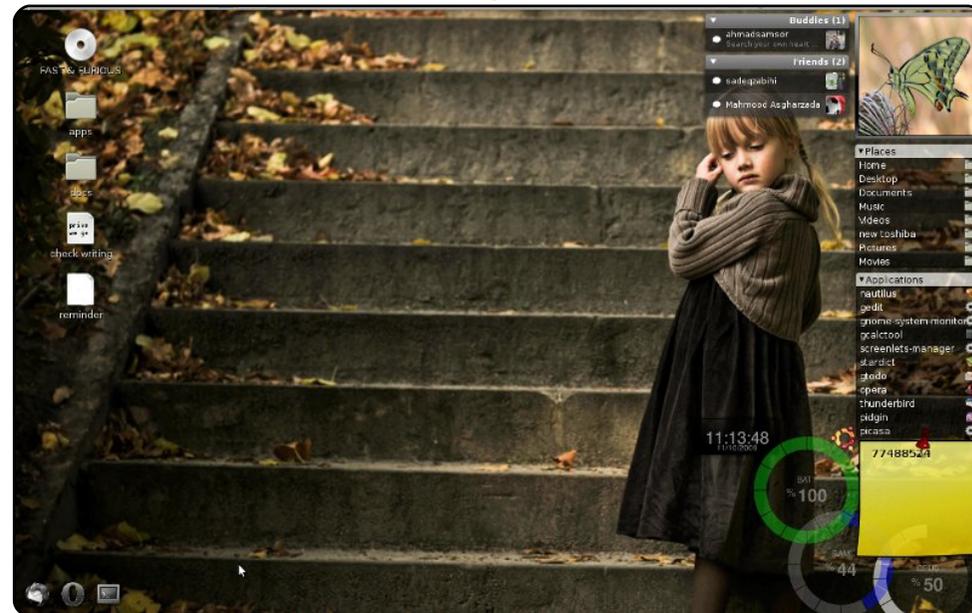


This is my Linux desktop. I've used Linux for several years, and my favorite distro is Ubuntu due to its ease of use.

In this screenshot, I'm running Ubuntu 9.10 with Gnome. The background is Adrenaline_by_vargeEEEEen from Deviantart and I use Conky for system monitoring. I use Emerald Theme Manager to run the theme Slickness.

The computer is a HP 2230s laptop with Intel Core 2 Duo T5870, 2GB RAM, 160GB HDD, and a 12.1" screen. Most of the hardware worked straight away in Ubuntu except for the webcam and the fingerprint reader.

Simon Brännström



This is a screen shot of my Toshiba Satellite laptop running Ubuntu Intrepid Ibex. Hardware Specifications: CPU is an Intel Pentium Dual core, 1.7 GHz; RAM is 1.5 GB; H.D.D is 160 GB; Graphic card has 256 MB. The system is dual boot with Microsoft Windows 7, but I rarely have to boot Windows.

The system is running Screenlet with pidgin plugin and other stuff. I run almost every kind of application on my laptop, because I am a Computer Science student and like to try every open-source application. Each one always works properly. Some of the applications I've installed are Java compiler, Eclipse, VLC player, Google desktop, Google Chrome web browser, Stardict, Inkscape, Wireshark, Skype, and Filezilla.

Sadeq Zabihi





Hello, here is my desktop. I'm running Ubuntu 9.10 on a machine with an Intel Core Duo E7400 processor, ATI Radeon HD4670, Gigabyte EP31-DS3L, and 4GB RAM. Everything works great and out-of-box.

Wallpaper: <http://www.therapycompanion.com/wp-content/uploads/2009/09/aero-blue-abstract-wallpaper.jpg>
Sidebar is Conky application (<http://conky.sourceforge.net/>)
Dockbar is AWN (<http://wiki.awn-project.org>)
Gnome Color Chooser (<http://gnomecc.sourceforge.net/>) for text color in Gnome panel.

Everywhere are custom icons

Goran Zdjelar



This is my laptop's desktop.

Avant Windows navigator is the dock. Wallpaper is from DesktopNexus. The theme is zni3 from gnomelook, and the icon pack is Black and White Style from deviant art.

Laptop is a Compaq Presario c700 with 2 GB of RAM, 120 GB HDD and is dual-booting Windows XP Professional and Linux Mint 7.

I use Windows for gaming, and Mint for pretty much everything else - that being mostly Gimp, Inkscape, and all of the other fabulous design tools in Ubuntu.

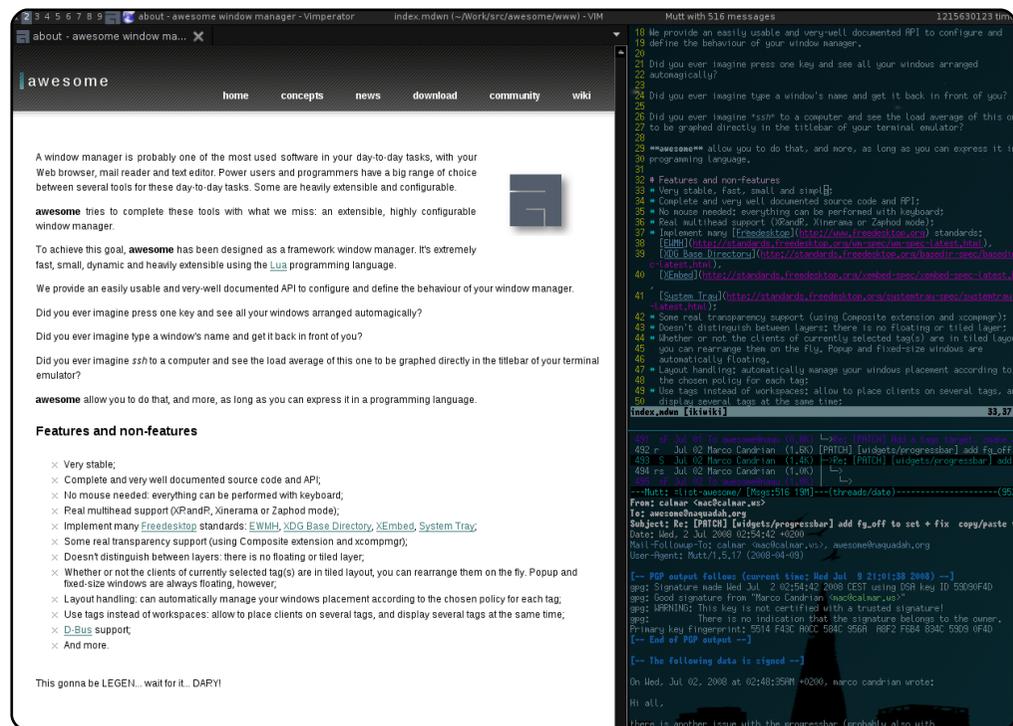
Watson Ndethi

AwesomeWM

<http://awesome.naquadah.org/>

AwesomeWM is a dynamic tiling window manager written in Lua. It can handle both floating and tiling window layouts, and does not handle floating windows in the “always above” way that most other tiling window managers do. It contains a built-in panel and system tray, and has excellent multi-monitor support. Sadly, the configuration syntax does change fairly frequently, making a re-write of the configuration file necessary.

Package: **awesome** in universe repository.

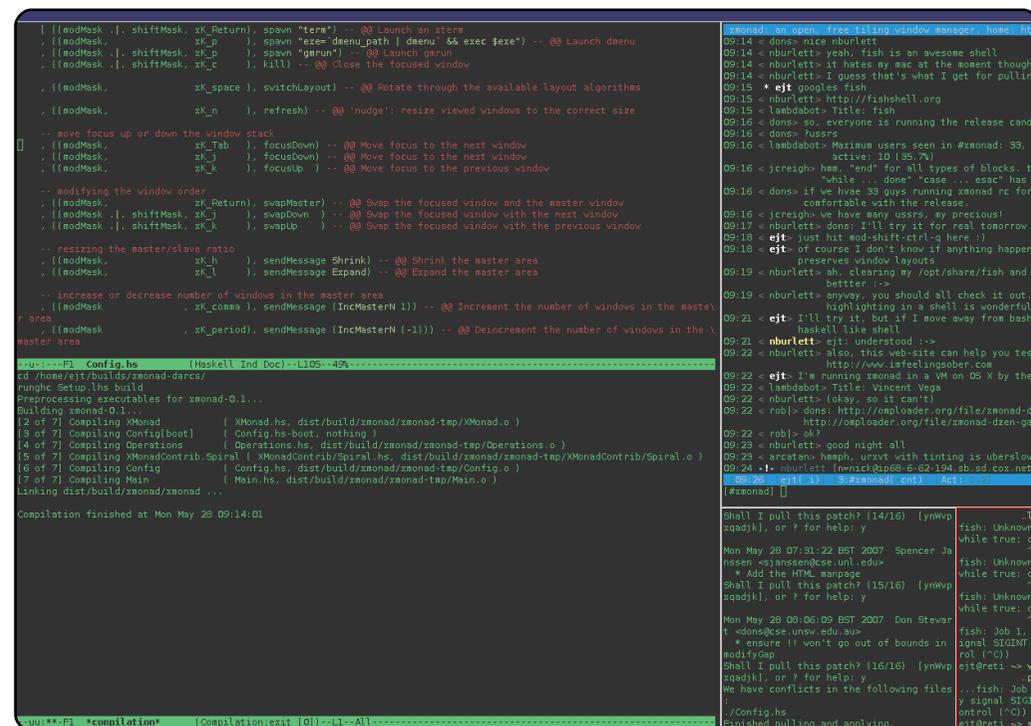


Xmonad

<http://xmonad.org>

Another dynamically tiling window manager written in Haskell. Floating layer is always on top. Configuration files are documented well, and the program itself is robust. Excellent program to help you hone your Haskell skills, or to give you a view into the possibilities of Haskell. Allows customization of workspaces by screen (i.e. different tags and layouts on a second monitor than the first). Requires xmonbar and a custom dzen bar for panel/system tray.

Package: **xmonad** in universe repository.

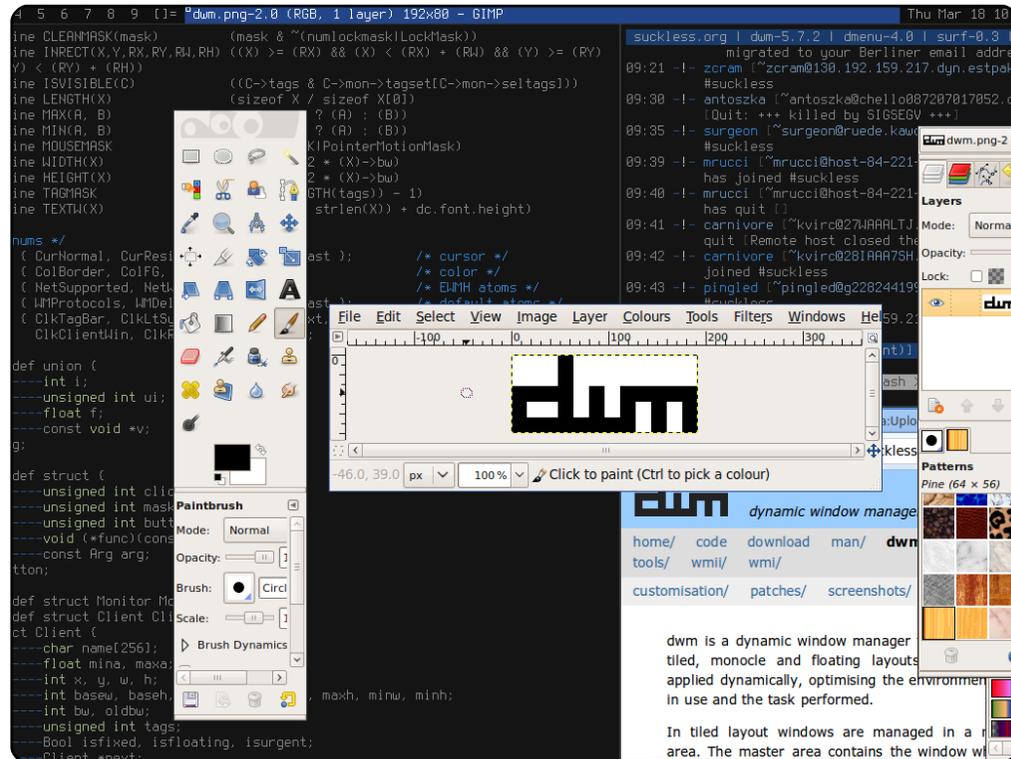


DWM

<http://dwm.suckless.org>

DWM is a dynamic tiling window manager written in C. It is intended to be a small, single-binary system, never exceeding 2000 Source Lines of Code. Uses tags on windows to manage floating and tiled windows, giving fine-grained control over each window. Requires a re-compile after every change of the configuration file. Excellent system to use and expand on if you're learning C. Floating windows are, again, always on top (but can be brought to the front from a separate workspace).

Package: **dwm** in universe repository.

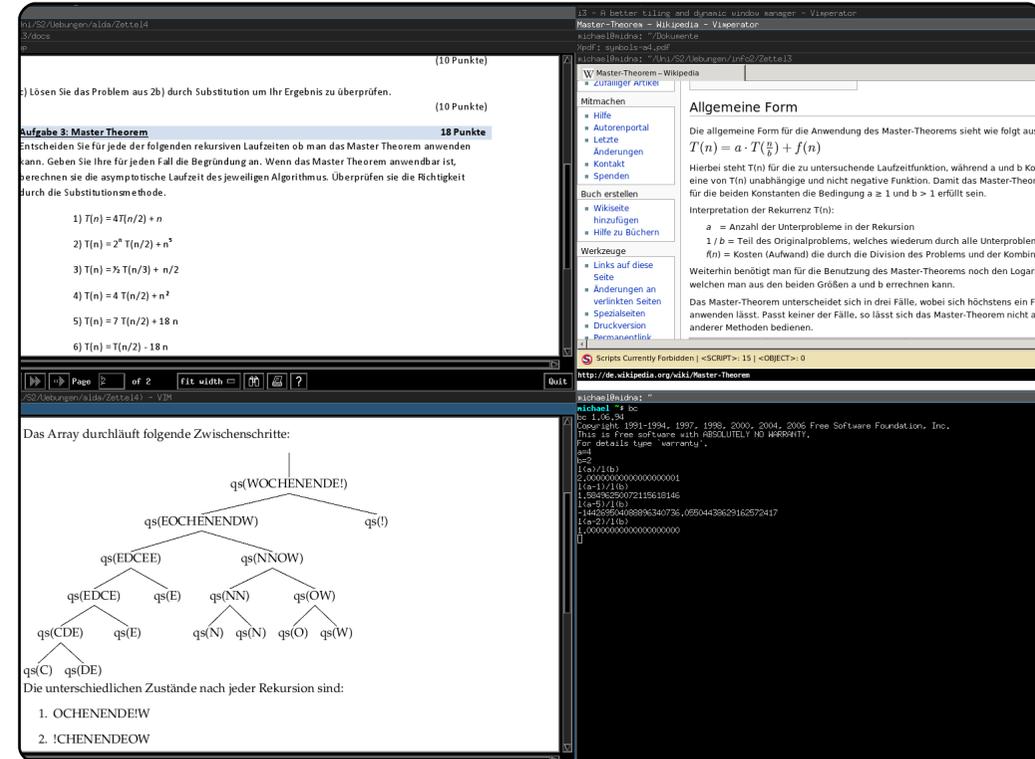


i3

<http://i3.zekjur.net>

i3 is a dynamic tiling window manager written in C, written from scratch. It is fast and stable. It is also documented well, and offers resources to allow developers to easily contribute to, or modify, i3. It generates workspaces dynamically (and there is no limit). Similar pros/cons to the previous tiling window managers.

Package: **i3** in universe repository

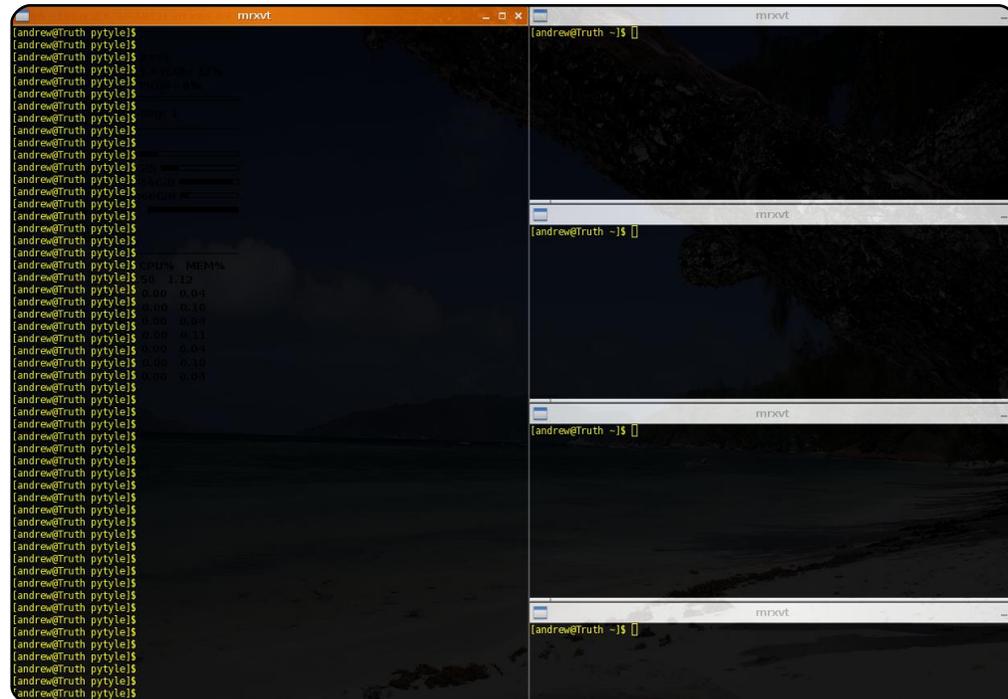


PyTyle

<http://pytyle.com>

PyTyle is a Python script intended to mimic the behaviour of a tiling window manager within a different window manager. Due to the fact that it is a script, it can be used in Openbox, Gnome, and so forth. Does not dynamically tile windows, but is lightweight and easy to use. Sadly, no deb files currently exist, but there are instructions for installing the script on the wiki above (using a setup.py file).

Package: <http://sourceforge.net/projects/pytyle/files/>



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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