full circle
THE INDEPENDENT MAGAZINE FOR THE UBUNTU LINUX COMMUNITY
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CREATE A MEDIA CENTER WITH UBUNTU, AN ACER REVO & BOXEE

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THE INDEPENDENT MAGAZINE FOR THE UBUNTU LINUX COMMUNITY

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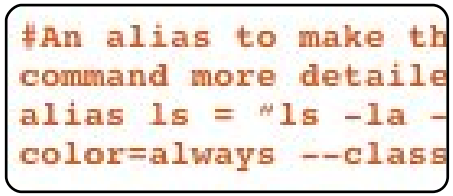

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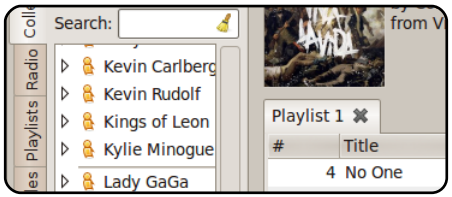

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EDITORIAL

Welcome to another issue of Full Circle magazine.

Last month, Andrew gave us his Top 5 Media Center applications. This month I've written a How-To on using Ubuntu on an Acer Aspire Revo to create the foundation for Boxee. For under £150 I've created a fantastic media center which not only looks great, it's fully customizable!

That's my media center story, but don't forget to read the My Story articles which this month focus on Ubuntu, Linux and open-source in public education, as well as how one man went from using old (modern at the time) computers, to using Ubuntu.

Another advertisement this month! But don't panic, it's only for this month and it's our way of trying to bring more attention to SCaLE 2010. February sees the eighth annual *Southern California Linux Expo*. Unfortunately I can't attend, but if anyone does attend, we'd love to hear what it was like, who was there, what happened, so fill us in!

Don't forget to read the Ubuntu Women interview, on page 28, with Jane Silber the COO at Canonical. As most of you will know, Jane will take over from Mark as CEO on March 1st.

And finally, Robin Catling, the man of many words, is considering resurrecting the FCM podcast. Care to help? - http://ubuntuforums.org/showthread.php?t=1380948

Enjoy the issue, and keep in touch!

All the best!
Ronnie
Editor, Full Circle magazine
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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!

Ubuntu Firefox shuns Google for Yahoo! search

The next release of Ubuntu will scrap Google as the default search engine on its Firefox browser in favor of Yahoo!, thanks to a new revenue-sharing deal between Yahoo! and commercial Ubuntu backer Canonical.

With regulators set to approve Yahoo!'s search pact with Microsoft, this means that Redmond will power the future of Firefox on Ubuntu, a combination with decidedly anti-Redmond connotations. The ultimate irony is that Microsoft will essentially be paying people to build a Linux distro.

Canonical's Rick Spencer announced the Yahoo! revenue deal on Tuesday, with a post to the Ubuntu developer mailing list.

With the next release of Ubuntu - version 10.4, dubbed Lucid Lynx and due in April - Yahoo! will be the default engine in the search box in the top right-hand corner of the Firefox browser bundled with the OS, and Yahoo! search will be the browser's default homepage.

As is typical with Firefox, users will have the option of changing the search box default. This means they can change it back to Google, and thanks to another Lucid Lynx change announced by Spencer, doing so will also switch the browser's homepage to Google. If you choose a search provider other than Google or Yahoo!, Lynx may or may not update the browser's homepage in similar fashion. Canonical has yet to sort out the situation involving other providers.

Source: theregister.co.uk

Ubuntu Primes Music Service

Although it is not yet official, Ubuntu's next release looks likely to include a music store service similar to Apple's iTunes.

The first hint that Ubuntu developers were considering a music store came in September last year when Canonical chief Mark Shuttleworth announced plans for Lucid Lynx, the next version of Ubuntu. At the time Shuttleworth made vague references to an Amazon- and iTunes-like music store for the next release.

Since then the noise around an Ubuntu music store has grown into a coherent direction and a number of details suggest that the Ubuntu One Music Store is on track for possible inclusion in Lucid Lynx which is scheduled to be released in April this year.

The most obvious clue to the Ubuntu One Music Store is the wiki page outlining plans for the product. Among other details, the wiki explains the Ubuntu One Music Store objective as such:

"*The Lucid music store project aims to deliver the ability to purchase music from within a desktop music player. The overriding requirement of the project is to minimise engineering effort. This will be achieved through the usage of off the shelf solutions with minimal modifications. Only changes classified as blockers will fall within scope of this project. No effort will be expended towards improving the user experience of the default off the shelf components.*"

According to the specifications users will log into the music store using their existing Ubuntu One username. [...] Already a Rhythmbox plugin for the Ubuntu One Music Store is listed in Ubuntu's blueprints.

Source: mybroadband.co.za

COMMAND & CONQUER

Written by Lucas Westermann

Now that we've covered the introduction to GNU Screen last month, we're ready to advance into slightly more useful configurations. I'll be covering only a few aspects of Screen that I use and find useful, but they are by no means as advanced as they get, nor are they the only aspects worth using in Screen. I'd be happy to have readers send in their favourite configuration/setting for Screen. I can post them at the start of Command & Conquer each month, so that we can learn something new from them. The things I'll be covering in this article are the following: automatically starting windows with commands, using Screen over SSH to daemonize commands, sharing Screen sessions, splitting the window, and the benefit of Screen over TTY screens or a normal shell. So, lets get started and fire up our Screen sessions, and our .screenrc files!

If you were looking through my configuration file last month, you must have noticed the following two lines at the end of my .screenrc:

```
# autostart screen sessions
screen -t Zsh 0 /bin/zsh
screen -t IRC 1 /usr/bin/irssi
```

The lines there add a new window (the number after the title) to Screen with the title (specified after the "-t" flag), and the following command. So, the .screenrc launches Screen with window 0 running my Z-shell, with a title of "Zsh", and window 1 with irssi running, and a title of "IRC". Screen will default to the newest window, so my Screen sessions always start in IRC, since that's what I'll most likely use. I don't know if there is a limit to how many windows Screen can have, but I would recommend not having more than the number of shortcuts to quickly switch between them (so a maximum of 9 windows). This feature is especially useful if you're the kind of person who regularly uses certain CLI-based programs (mutt, irssi, midnight commander, etc.), and want to have them readily available in one easy-to-access window without opening a horde of terminals.

If you're an SSH user, you've probably run into the problem where you access a machine, and run a command, and you end up losing your connection, and then frustrate yourself by having to re-run the command since you lost the output. This is why I, personally, feel that Screen (or another terminal multiplexer) is a must for any SSH users who will be connected for longer than a few minutes, and who may need to run more than one command. Even if you're one of those one-command and a few-minutes users, Screen might still be a very useful thing for you. If you connect via SSH, and run Screen, you can set up the commands to run, detach the Screen, and disconnect from the SSH server. If you want to re-connect and get the info back, all you have to do is re-attach the Screen session. I recommend detaching before disconnecting from SSH, but Screen should automatically detach and keep the Screen running when the connection closes. This is useful for system administrators who may need to run a script to update permissions or whatnot, and will save them the need to send the process to the background, or to keep the SSH connection open the entire time. If I remember correctly, you can even configure the SSH shell to automatically run Screen for any SSH login, meaning you're always going to be in a Screen shell.

Another extremely useful feature of Screen is the ability to share sessions. This is great if you're editing a script and need input from another user.

You can allow them to SSH to the box, and share the screen. To do this, the host (first user), has to do the following:

```
Ctrl + a
:multiuser on
```

The Ctrl +a is the actual keyboard combination, and you have to then type ":multiuser on". You then need to allow the remote user to connect to the Screen session with the following:

```
Ctrl +a
:acladd <ruser>
```

Substitute "<ruser>" with the username for the remote user. Once you've done that, the remote user can connect to the Screen session using:

```
screen -x $USER/<screen ID/name>
```

You need to replace $USER with the username of the original user (the "host"), and the Screen ID/name with the name or ID of the Screen session the user started. If you want to know how to set a Screen name, I'll be adding a few quick tips at the end of the article on securing Screen, and adding names to Screen sessions to make management easier.

The very last feature I'm going to cover for the moment is the ability to split the window in Screen. This means you can have two shells running parallel with a tiling window manager feel to it. Screen only supports horizontal splitting out of the box; there is a patch to enable splitting vertically, but it requires you to re-compile Screen by hand. In order to split the screen horizontally in Screen, hit the following key combination:

```
C-a S
```

For those who didn't read my last article, that means ctrl +a, then S (shift + s). This will take the current window and split it in half down the center. Once you have your two panes, you can switch between them with:

```
C-a <Tab>
```

where <Tab> is the actual tab key. If anyone wants to enable vertical splitting, I'll post a link to a tutorial in the Further Reading section.

The last thing I want to cover for this article is why someone should use this instead of a TTY screen, or a normal shell. The simple answer is personal preference. The long answer is that it allows SSH sessions to run multi-task without any chance of losing the processes when disconnecting, and it also allows you to minimize the amount of RAM being used. Also, it allows you to have a better overview of what is running - if you give the Screen windows titles, and keep them running in one terminal emulator, you'll have a status-bar type list of running programs. I'm by no means saying you have to use it, but for those people to whom the features of Screen appeal, I highly recommend using it and getting into the habit of using it regularly (which, I have to admit, I haven't managed yet). As always, feel free to email any questions you may have to lswest34@gmail.com. Any suggestions for new articles can be sent there too.

Last command for Screen:

```
screen -S <name of screen session>
```

The above command creates a Screen session using the name you supply after the -S flag, for quick and easy access (great for when you're running lots of Screen sessions).

Further Reading:

Vertical splitting: http://scie.nti.st/2008/8/22/gnu-screen-with-vertical-split-support
http://www.gnu.org/software/screen/manual/html_node/Default-Key-Bindings.html#Default-Key-Bindings – The manual page for keybindings on the GNU homepage.
http://www.math.utah.edu/docs/info/screen_9.html – Short and concise list of things for .screenrc files, and Screen in general

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.

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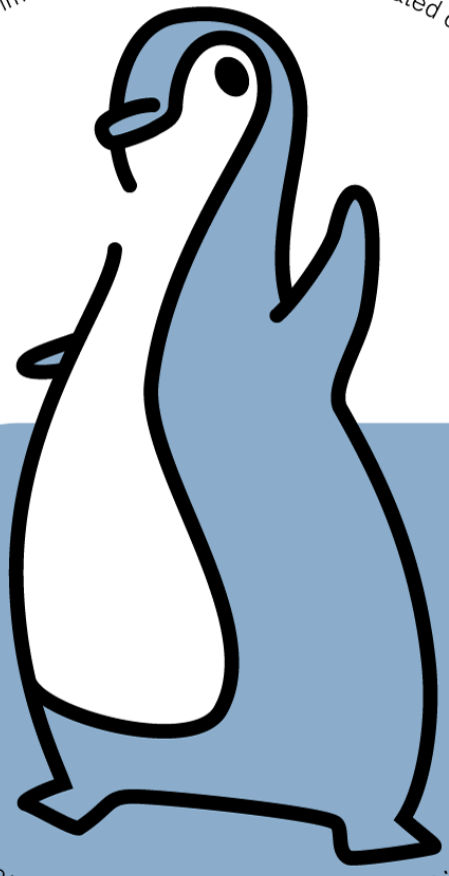

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Program In Python - Part 7

Written by Greg Walters

SEE ALSO:
FCM#27-32 - Python Parts 1 - 6

APPLICABLE TO:

ubuntu kubuntu xubuntu

CATEGORIES:

Dev Graphics Internet M/media System

DEVICES:

CD/DVD HDD USB Drive Laptop Wireless

Good morning Boys and Girls. It's story time. Everyone get settled and comfy. Ready? Good!

Once upon a time, the world was ruled by paper. Paper, paper everywhere. They had to make special homes for all that paper. They were called filing cabinets, and were big metal things that would take rooms and rooms and rooms at businesses to house all the paper. In each filing cabinet was something called a file folder, which attempted to organize relevant papers together. But after time, they would get over-stuffed, and fall apart when they got old or opened too many times.

Using these filing cabinets properly required a college degree. It could take days to find all the papers that were in the various cabinets. Businesses suffered horribly. It was a very dark time in the history of man- and woman-kind.

Then one day, from the top of a mountain somewhere (I personally think it was Colorado, but I'm not sure), came a lovely fairy. This fairy was blue and silver - with beautiful wings and white hair, and was about 1 foot tall. Her name, believe it or not, was See-Quill. Isn't that a funny name? Anyway, See-Quill said that she could fix everything having to do with all the paper and filing cabinets and wasted time, if only people would believe in computers and her. She called this power a "Database". She said that the "Database" could replace the entire filing system. Some people did, and soon their lives were very happy. Some didn't, and their lives stayed the same, lost in mountains of paper.

All fairy promises, however, come with some sort of requirement. That requirement was that whoever wanted to use the power of See-Quill needed to learn a bit of a different language. It wouldn't be too difficult a language to learn. In fact, it was much like the one the people already used. It just has a different way of saying things, and you had to think about things very carefully BEFORE you said them - to use the power of See-Quill.

One day, a young boy named, curiously enough, User, came to see See-Quill. He was very impressed with her beauty, and said "See-Quill, Please teach me to use your power." See-Quill said that she would.

She said, "First, you have to know how your information is laid out. Show me your papers."

Being a young boy, User had only a few pieces of paper. See-Quill said, "User, right now you could live with papers and file folders. However, I can get glimpses of the future, and you will someday have so many papers that they would, if placed on top of each other, be taller than you by 15 times. We should use my power."

So, working together, User and See-Quill created a "database thingie" (a fairy technical term), and User lived happily ever after.

The End.

Of course, the story is not

completely true. However, using databases and SQL can make our lives easier. This time, we will learn about some simple SQL queries, and how to use them in a program. Some people might think that this might not be the "correct" way or the "best" way, but it is a reasonable way. So let's begin.

Databases are like the filing cabinets in our story above. Data tables are like the file folders. The individual records in the tables are like the sheets of paper. Each piece of information is called a field. It falls together very nicely, doesn't it? You use SQL (pronounced See-Quill) statements to do things with the data. SQL stands for Structured Query Language, and is basically designed to be an easy way to use databases. In practice, however, it can become very complicated. We will keep things pretty simple for this installment.

We need to create a plan, like starting any construction project. So, think of a recipe card, which is a good thing to think about, since we are going to create a recipe database program. Around my house, recipes come in various forms: 3x5 card, 8x10 pieces of paper, napkins with the recipe scribbled on it, pages from magazines, and even stranger forms. They can be found in books, boxes, binders, and other things. However, they all pretty much have one thing in common: the format. In almost every case, at the top you have the recipe title and maybe how many servings it makes and where it came from. The middle contains the list of ingredients, and the bottom contains the instructions - dealing with the order that things are done in, the cooking time, and so on. We will use this general format as the template of our database project. We will break this up into two parts. We'll create the database this time, and the application to read and update the database next time.

Here's an example. Let's say we have the recipe shown right.

Notice the order we just discussed. Now when we design our database - we could make it very large and have one record for everything in the recipe. That, however, would be clumsy and hard to deal with. Instead, we are going to use the recipe card as a template. One table will handle the top of the card, or the gross information about the recipe; one table will handle the middle of the card, or the ingredients information; and one table will handle the bottom, or the instructions.

Make sure you have installed SQLite and APSW. SQLite is a small database engine that doesn't require you to have a separate database server, which makes it ideal for our little application. Everything you learn here can be used with larger database systems like MySQL and others. The other good thing about SQLite is that it uses limited data types. These types are Text, Numeric, Blob, and Integer Primary Key. As you have learned already, text is pretty much anything. Our

Spanish Rice

Serves: 4

Source: Greg Walters

Ingredients:
1 cup parboiled Rice (uncooked)
1 pound Hamburger
2 cups Water
1 8 oz can Tomato Sauce
1 small Onion chopped
1 clove Garlic chopped
1 tablespoon Ground Cumin
1 teaspoon Ground Oregano
Salt and Pepper to taste
Salsa to taste

Instructions:
Brown hamburger.

Add all other ingredients.

Bring to boil.

Stir, lower to simmer and cover.

Cook for 20 minutes.

Do not look, do not touch.

Stir and serve.

ingredients, instructions, and the title of our recipe are all text types - even though they have numbers in them. Numeric datatypes store numbers. These can be integer values or floating point or real values. Blobs are binary data, and can include things like pictures and other things. Integer Primary Key values are special. The SQLite database engine automatically puts in a guaranteed unique integer value for us. This will be important later on.

APSW stands for Another Python SQLite Wrapper and is a quick way to communicate with SQLite. Now let's go over some of the ways to create our SQL statements.

To obtain records from a database, you would use the SELECT statement. The format would be:

```
SELECT [what] FROM [which table(s)] WHERE [Constraints]
```

So, if we want to get all the fields from the Recipes table we would use:

```
SELECT * FROM Recipes
```

If you wish to obtain just a record by its primary key, you have to know what that value is (pkID in this instance), and we have to include a WHERE command in the statement. We could use:

```
SELECT * FROM Recipes WHERE pkID = 2
```

Simple enough...right? Pretty much plain language. Now, suppose we want to just get the name of the recipe and the number of servings it makes - for all recipes. It's easy. All you have to do is include a list of the fields that you want in the SELECT statement:

```
SELECT name, servings FROM Recipes
```

To insert records, we use the INSERT INTO command. The syntax is

```
INSERT INTO [table name] (field list) VALUES (values to insert)
```

So, to insert a recipe into the recipe table the command would be

```
INSERT INTO Recipes (name,servings,source) VALUES ("Tacos",4,"Greg")
```

To delete a record we can use

```
DELETE FROM Recipes WHERE pkID = 10
```

There's also an UPDATE statement, but we'll leave that for another time.

More on SELECT

In the case of our database, we have three tables, each can be related together by using recipeID pointing to the pkID of the recipe table. Let's say we want to get all the instructions for a given recipe. We can do it like this:

```
SELECT Recipes.name, Recipes.servings, Recipes.source, Instructions.Instructions FROM Recipes LEFT JOIN instructions ON (Recipes.pkid = Instructions.recipeid) WHERE Recipes.pkid = 1
```

However, that is a lot of typing and very redundant. We can use a method called aliasing. We can do it like this:

```
SELECT r.name, r.servings, r.source, i.Instructions FROM Recipes r LEFT JOIN instructions i ON (r.pkid = i.recipeid) WHERE r.pkid = 1
```

It's shorter and still readable. Now we will write a small program that will create our database, create our tables, and put some simple data into the tables to have something to work with. We COULD write this into our full program, but, for this example, we will make a separate program. This is a run-once program - if you try to run it a second time, it will fail at the table creation statements. Again, we could wrap it with a try...catch handler, but we'll do that another time.

We start by importing the APSW wrapper.

```
import apsw
```

The next thing we need to do is create a connection to our database. It will be located in the same directory where we

have our application. When we create this connection, SQLite automatically looks to see if the database exists. If so, it opens it. If not, it creates the database for us. Once we have a connection, we need what is called a cursor. This creates a mechanism that we can use to work with the database. So remember, we need both a connection and a cursor. These are created like this:

```
# Opening/creating database

connection=apsw.Connection("cookbook1.db3")
cursor=connection.cursor()
```

Okay - we have our connection and our cursor. Now we need to create our tables. There will be three tables in our application. One to hold the gross recipe information, one for the instructions for each recipe, and one to hold the list of the ingredients. Couldn't we do it with just one table? Well, yes we could, but, as you will see, it will make that one table very large, and will include a bunch of duplicate information.

We can look at the table structure like this. Each column is a separate table as shown above right.

```
RECIPES
------------
pkID (Integer Primary Key)
name (Text)
source (Text)
serves (Text)
```

```
INSTRUCTIONS
----------------------
pkID(Integer Primary Key)
recipeID (Integer)
instructions (Text)
```

```
INGREDIENTS
--------------------
pkID (Integer Primary Key)
recipeID (Integer)
ingredients (Text)
```

Each table has a field called pkID. This is the primary key that will be unique within the table. This is important so that the data tables never have a completely duplicated record. This is an integer data type, and is automatically assigned by the database engine. Can you do without it? Yes, but you run the risk of accidentally creating a duplicated record id. In the case of the Recipes table, we will use this number as a reference for which instruction and which set of ingredients go with that recipe.

We would first put the information into the database so that the name, source and number served goes into the recipe table. The pkID is automatically assigned. Let's pretend that this is the very first record in our table, so the database engine would assign the value 1 to the pkID. We will use this value to relate the information in the other tables to this recipe. The instructions table is simple. It just holds the long text of the instructions, its own pkID and then a pointer to the recipe in the recipe table. The ingredients table is a bit more complicated in that we have one record for each ingredient as well as its own pkID and the pointer back to our recipe table record.

So in order to create the recipe table, we define a string variable called sql, and assign it the command to create the table:

```
sql = 'CREATE TABLE Recipes
(pkID INTEGER PRIMARY KEY,
name TEXT, servings TEXT,
source TEXT)'
```

Next we have to tell ASPW to actually do the sql command:

```
cursor.execute(sql)
```

Now we create the other tables:

```
sql = 'CREATE TABLE
Instructions (pkID INTEGER
PRIMARY KEY, instructions
TEXT, recipeID NUMERIC)'

cursor.execute(sql)

sql = 'CREATE TABLE
Ingredients (pkID INTEGER
PRIMARY KEY, ingredients
TEXT, recipeID NUMERIC)'

cursor.execute(sql)
```

Once we have the tables created, we will use the INSERT INTO command to enter each set of data into its proper table.

Remember, the pkID is

automatically entered for us, so we don't include that in the list of fields in our insert statement. Since we will be using the field names, they can be in any order, not just the order they were created in. As long as we know the names of the fields, everything will work correctly. The insert statement for our recipe table entry becomes

```
INSERT INTO Recipes (name, serves, source) VALUES ("Spanish Rice",4,"Greg Walters")
```

Next we need to find out the value that was assigned to the pkID in the recipe table. We can do this with a simple command:

```
SELECT last_insert_rowid()
```

However, it doesn't just come out as something we can really use. We need to use a series of statements like this:

```
sql = "SELECT last_insert_rowid()"

cursor.execute(sql)

for x in cursor.execute(sql):
    lastid = x[0]
```

Why is this? Well, when we get data back from ASPW, it comes back as a tuple. This is something we haven't talked about yet. The quick explanation is that a tuple is (if you look at the code above) like a list, but it can't be changed. Many people use tuples rarely; others use them often; it's up to you. The bottom line is that we want to use the first value returned. We use the 'for' loop to get the value into the tuple variable x. Make sense? OK. Let's continue...

Next, we would create the insert statement for the instructions:

```
sql = 'INSERT INTO Instructions (recipeID,instructions) VALUES( %s,"Brown hamburger. Stir in all other ingredients. Bring to a boil. Stir. Lower to simmer. Cover and cook for 20 minutes or until all liquid is absorbed.")' % lastid

cursor.execute(sql)
```

Notice that we are using the variable substitution (%s) to place the pkID of the recipe (lastid) into the sql statement. Finally, we need to put each ingredient into the ingredient table. I'll show you just one for now:

```
sql = 'INSERT INTO Ingredients (recipeID,ingredients) VALUES ( %s,"1 cup parboiled Rice (uncooked)")' % lastid

cursor.execute(sql)
```

It's not too hard to understand at this point. Next time it will get a bit more complicated.

If you would like the full source code, I've placed it on my website. Go to www.thedesignatedgeek.com to download it.

Next time, we will use what we've learned over the series to create a menu-driven front end for our recipe program - it will allow viewing all recipes in a list format, viewing a single recipe, searching for a recipe, and adding and deleting recipes.

I suggest that you spend some time reading up on SQL programming. You'll be happy you did.

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.

HOW-TO

Written by Ronnie Tucker

Ubuntu, Acer Revo & Boxee

SEE ALSO:
FCM#32 - TOP5 MEDIA CENTERS

APPLICABLE TO:

ubuntu kubuntu xubuntu

CATEGORIES:

Dev Graphics Internet M/media System

DEVICES:

CD/DVD HDD USB Drive Laptop Wireless

I decided just before Christmas that I'd like to retire my first generation Xbox (aka media center), and get something more up-to-date, so I bought an Acer Aspire Revo - a nettop, as they call them, which is basically a PC in the shape of a Nintendo Wii. Needless to say, the first thing was to get my Ubuntu 9.10 USB stick, and use it to install Ubuntu on the Revo. This is painless and is just a bog standard Ubuntu install.

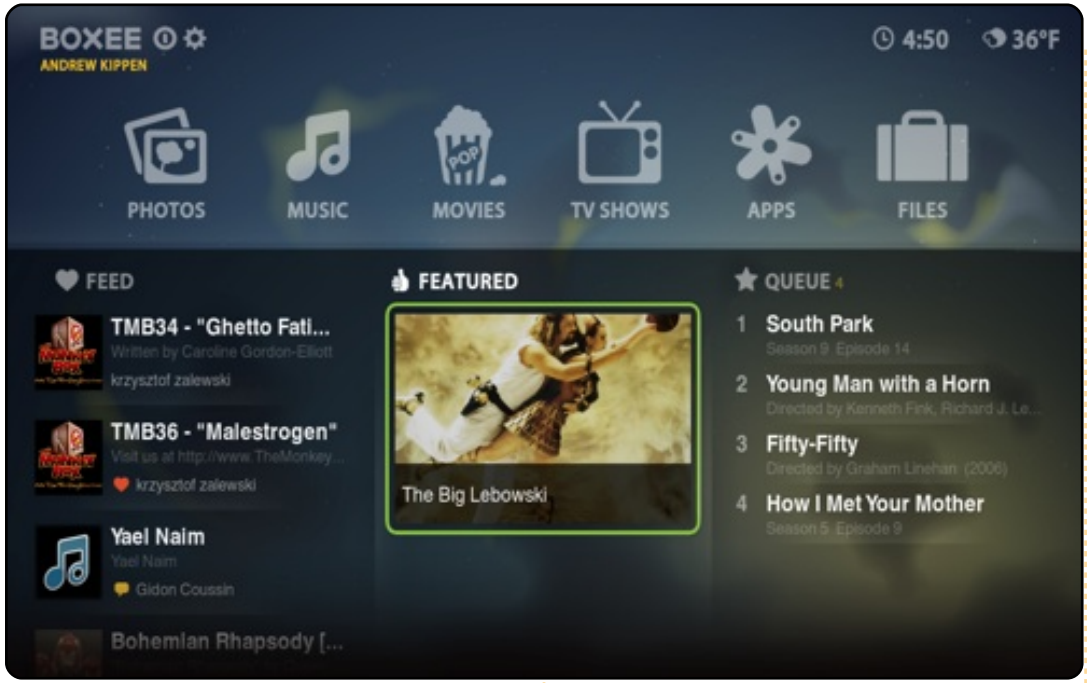
But what software would I use for playing my media?

Having used Xbox Media Center (XBMC) on my Xbox, it was an obvious choice to try XBMC on my Acer Aspire Revo - which I did - but I thought I'd give Boxee a try. I'd heard such good things about it that it would have been rude of me to ignore it. I have to say I really like it. Just this month the Boxee developers released the Boxee Beta to the masses! Not only that, but the Beta (unlike the Alpha) is fully compatible with Karmic.

The first thing to do is head over to the Boxee site (Boxee.tv) and sign up. The reason for this is that Boxee is part XBMC, part social media. Boxee is based on XBMC, but it has several useful addons that allow you to rate your media and recommend media to friends. All this is done via the Boxee website, hence the signup. Once you've signed up, you can go to the downloads page, grab the Ubuntu compatible 32/64bit .deb file, and double-click it to have it installed via Gdebi.

Once it's installed, Boxee is found in Applications > Sound & Video. With Boxee running, I added my local media folders and my wireless shared directories. From there, Boxee looks through your files guessing at their classification (Movies/TV), but you can assign a media type to a particular directory if you wish. It does the same with audio files, and it will automatically grab your album covers and band photographs. Editing audio/video, or entering information, is quite easy too - even without a keyboard, as Boxee has an on-screen keyboard which is easy to use.

As well as using your own media, you have access to dozens of 'applications' in Boxee, which are basically channels or feeds. Channels are video podcasts and internet episodes. The list is quite varied and has everything from CNN to Open University lectures to anime.



The only quibble I have with Boxee is that my (cheapo) Cyberlink remote control (right) didn't work as well with Boxee as it did with XBMC, but I found a solution at http://xbmc.org/forum/showpost.php?p=433877&postcount=1 You should follow this guide to the letter until it says the following in post #3:

```
sudo gedit ~/.xbmc/userdata/Lircmap.xml
```

For Boxee you should instead enter:

```
sudo gedit ~/.boxee/UserData/Lircmap.xml
```

And, yes, UserData and Lircmap.xml should be capitalized as shown.

Now, load up Boxee, and the vast majority of the Cyberlink remote buttons will work properly!

All in all, I'm really impressed with Boxee; I loved the Alpha, but the Beta just takes it to a whole new level with its new layout!

Look me up on Boxee, and 'friend' me - my username is ***ronnietucker***. I look forward to seeing your recommendations!

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APPLICABLE TO:

ubuntu kubuntu xubuntu

CATEGORIES:

Dev Graphics Internet M/media System

DEVICES:

CD/DVD HDD USB Drive Laptop Wireless

We can install Postfix, Courier, Saslauthd, MySQL, rkhunter, and binutils - with a single command:

(Prefix each command with sudo, if appropriate).

```
aptitude install postfix
postfix-mysql postfix-doc
mysql-client mysql-server
courier-authdaemon courier-
authlib-mysql courier-pop
courier-pop-ssl courier-imap
courier-imap-ssl libsasl2-2
libsasl2-modules libsasl2-
modules-sql sasl2-bin libpam-
mysql openssl getmail4
rkhunter binutils
```

You will be asked the following questions:

New password for the MySQL "root" user

Repeat password for the MySQL "root" user

Create directories for web-based administration?
Enter: **No**

General type of mail configuration:
Enter: **Internet Site**

System mail name:
Enter: **server1.example.com** (but using your .com)

SSL certificate required
Enter: **OK**

Next we install maildrop as follows:

```
update-alternatives --remove-
all maildir.5

update-alternatives --remove-
all maildirquota.7

aptitude install maildrop
```

You will ask yourself why we didn't install maildrop together with all the other packages. The reason for this is a bug in the courier-base package - if you install maildrop together with courier-pop, courier-pop-ssl, courier-imap, and courier-imap-ssl, you will get the following error:

```
update-alternatives: error:
alternative link
/usr/share/man/man5/maildir.5
.gz is already managed by
maildir.5.gz.
```

We want MySQL to listen on all interfaces, not just localhost. Therefore we edit /etc/mysql/my.cnf and comment out the line bind-address = 127.0.0.1:

```
vi /etc/mysql/my.cnf
```

[...]

```
# Instead of skip-networking
the default is now to listen
only on

# localhost which is more
compatible and is not less
secure.

#bind-address           =
127.0.0.1
[...]
```

Then we restart MySQL:

```
/etc/init.d/mysql restart
```

Now check that networking is enabled. Run:

```
netstat -tap | grep mysql
```

The output should look like this:

```
root@server1:~# netstat -tap
| grep mysql

tcp 0  0 *:mysql *:* LISTEN
 6267/mysqld

root@server1:~#
```

During the installation, the SSL certificates for IMAP-SSL and POP3-SSL are created with the hostname localhost. To

change this to the correct hostname (server1.example.com in this tutorial), delete the certificates...

```
cd /etc/courier

rm -f /etc/courier/imapd.pem

rm -f /etc/courier/pop3d.pem
```

and modify the following two files - replacing CN=localhost with ''CN=server1.example.com' (and you can also modify the other values, if necessary):

```
vi /etc/courier/imapd.cnf

[...]
CN=server1.example.com
[...]
```

```
vi /etc/courier/pop3d.cnf

[...]
CN=server1.example.com
[...]
```

Then recreate the certificates:

```
mkimapdcert

mkpop3dcert
```

and restart Courier-IMAP-SSL and Courier-POP3-SSL:

```
/etc/init.d/courier-imap-ssl restart

/etc/init.d/courier-pop-ssl restart
```

Install Amavisd-new, SpamAssassin, And Clamav

To install amavisd-new, SpamAssassin, and ClamAV, we run:

```
aptitude install amavisd-new spamassassin clamav clamav-daemon zoo unzip bzip2 arj nomarch lzop cabextract apt-listchanges libnet-ldap-perl libauthen-sasl-perl clamav-docs daemon libio-string-perl libio-socket-ssl-perl libnet-ident-perl zip libnet-dns-perl
```

Install Apache2, PHP5, phpMyAdmin, FCGI, suExec, Pear, And mcrypt

Apache2, PHP5, phpMyAdmin, FCGI, suExec, Pear, and mcrypt can be installed as follows:

```
aptitude install apache2 apache2.2-common apache2-doc apache2-mpm-prefork apache2-utils libexpat1 ssl-cert libapache2-mod-php5 php5 php5-common php5-gd php5-mysql php5-imap phpmyadmin php5-cli php5-cgi libapache2-mod-fcgid apache2-suexec php-pear php-auth php5-mcrypt mcrypt php5-imagick imagemagick libapache2-mod-suphp
```

You will see the following question:

Web server to reconfigure automatically:
Enter: **apache2**

Configure database for phpmyadmin with dbconfig-common?
Enter: **No**

Then run the following command to enable the Apache modules suexec, rewrite, ssl, actions, and include:

```
a2enmod suexec rewrite ssl actions include
```

Restart Apache afterwards:

```
/etc/init.d/apache2 restart
```

Install PureFTPd And Quota

PureFTPd and quota can be installed with the following command:

```
aptitude install pure-ftpd-common pure-ftpd-mysql quota quotatool
```

Edit the file /etc/default/pure-ftpd-common:

```
vi /etc/default/pure-ftpd-common
```

and make sure that the start mode is set to standalone and set VIRTUALCHROOT=true:

```
[...]
STANDALONE_OR_INETD=standalone
[...]
VIRTUALCHROOT=true
[...]
```

Then restart PureFTPd:

```
/etc/init.d/pure-ftpd-mysql restart
```

Edit /etc/fstab. Mine looks like Fig.1 on the following page (I added

,usrjquota=aquota.user,grpjquota=aquota.group,jqfmt=vfsv0 to the partition with the mount point /):

```
vi /etc/fstab
```

To enable quota, run these commands:

```
touch /aquota.user
/aquota.group

chmod 600 /aquota.*

mount -o remount /

quotacheck -avugm

quotaon -avug
```

Install MyDNS

Before we install MyDNS, we need to install a few prerequisites:

```
aptitude install g++ libc6
gcc gawk make texinfo
libmysqlclient15-dev
```

MyDNS is not available in the Ubuntu 9.10 repositories, therefore we have to build it ourselves as follows:

```
cd /tmp
```

```
# /etc/fstab: static file system information.
#
# Use 'blkid -o value -s UUID' to print the universally unique identifier
# for a device; this may be used with UUID= as a more robust way to name
# devices that works even if disks are added and removed. See fstab(5).
#
# <file system> <mount point>   <type>  <options>       <dump>  <pass>
proc            /proc           proc    defaults        0       0
/dev/mapper/server1-root /                ext4    errors=remount-
ro,usrjquota=aquota.user,grpjquota=aquota.group,jqfmt=vfsv0 0       1
# /boot was on /dev/sda5 during installation
UUID=9ea34148-31b7-4d5c-baee-c2e2022562ea /boot           ext2    defaults        0
      2
/dev/mapper/server1-swap_1 none            swap    sw              0       0
/dev/scd0       /media/cdrom0   udf,iso9660 user,noauto,exec,utf8 0       0
/dev/fd0        /media/floppy0  auto    rw,user,noauto,exec,utf8 0       0
```

Fig. 1

```
wget
http://heanet.dl.sourceforge.
net/sourceforge/mydns-
ng/mydns-1.2.8.27.tar.gz

tar xvfz mydns-
1.2.8.27.tar.gz

cd mydns-1.2.8

./configure

make

make install
```

Next, we create the start/stop script (shown on the following page) for MyDNS:

```
vi /etc/init.d/mydns
```

Then we make the script executable, and create the system startup links for it:

```
chmod +x /etc/init.d/mydns

update-rc.d mydns defaults
```

Install Vlogger And Webalizer

Vlogger and webalizer can be installed as follows:

```
aptitude install vlogger
webalizer
```

Install Jailkit

Jailkit is needed only if you want to chroot SSH users. It can be installed as follows (important: Jailkit must be installed before ISPConfig - it cannot be installed afterwards!):

```
aptitude install build-
essential autoconf
automake1.9 libtool flex
bison

cd /tmp

wget
http://olivier.sessink.nl/jai
lkit/jailkit-2.10.tar.gz

tar xvfz jailkit-2.10.tar.gz
```

```
#! /bin/sh
#
# mydns          Start the MyDNS server
#
# Author:        Philipp Kern <phil@philkern.de>.
#                Based upon skeleton 1.9.4 by Miquel van
Smoorenburg
#                <miquels@cistron.nl> and Ian Murdock
<imurdock@gnu.ai.mit.edu>.
#

set -e

PATH=/usr/local/sbin:/usr/local/bin:/sbin:/bin:/usr/sbin:
/usr/bin
DAEMON=/usr/local/sbin/mydns
NAME=mydns
DESC="DNS server"

SCRIPTNAME=/etc/init.d/$NAME

# Gracefully exit if the package has been removed.
test -x $DAEMON || exit 0

case "$1" in
  start)
        echo -n "Starting $DESC: $NAME"
        start-stop-daemon --start --quiet \
                --exec $DAEMON -- -b
        echo "."
        ;;
  stop)
        echo -n "Stopping $DESC: $NAME"
        start-stop-daemon --stop --oknodo --quiet \
                --exec $DAEMON
        echo "."
        ;;
  reload|force-reload)
        echo -n "Reloading $DESC configuration..."
        start-stop-daemon --stop --signal HUP --quiet \
                --exec $DAEMON
        echo "done."
        ;;
  restart)
        echo -n "Restarting $DESC: $NAME"
        start-stop-daemon --stop --quiet --oknodo \
                --exec $DAEMON
        sleep 1
        start-stop-daemon --start --quiet \
                --exec $DAEMON -- -b
        echo "."
        ;;
  *)
        echo "Usage: $SCRIPTNAME
{start|stop|restart|reload|force-reload}" >&2
        exit 1
        ;;
esac

exit 0
```

```
cd jailkit-2.10

./configure

make

make install

cd ..

rm -rf jailkit-2.10*
```

Install fail2ban

This is optional but recommended, because the ISPConfig monitor tries to show the fail2ban log:

```
aptitude install fail2ban
```

Next month, in the final installment, we will install SquirrelMail and ISPConfig3, giving you the perfect server, ready to go!

Linux, Ubuntu & FOSS In Education

Written by Chris Shearer

Much like any change in public education, the decision to study a migration to more open-source applications and Linux occurs very slowly. With all the legacy applications a school uses designed for one browser (IE6), or one operating system (Windows), inflexible applications for state and federal reporting paint us into a corner where we either submit to the application of choice, or rebel and receive no support for running said applications. While the interest and passion of open source does grip many educators, these obstacles do take time, but, with patience, we are beginning to see a trend to more school systems exploring open-source. In spite of these challenges, Linux and open source is alive and gaining support in K-12 education.

As a lifetime educator, starting as a classroom teacher, my personal experiences with open source and Linux began with a Washington Post article on Firefox in December, 2004. Up until that point, my frustration with Internet Explorer grew and grew with each new Web application my school purchased. At that time, I worked as a technology facilitator in one school, assisting teachers to integrate technology into their classrooms. IE just never worked - between the Active X errors and the consistent crashes. As a K-5 school, the trend of Web-based applications for student tutorials just began, and many of the applications struggled in the IE environment. After that article, we decided to deploy Firefox in one school lab,

and, sure enough, the errors and crashes disappeared. I struck gold! We eventually added Firefox to all the school's computers. Our school-based technician shared some other applications with me, and pointed me toward Linux as a replacement operating system. I targeted an ancient desktop, poised to make the next trip to the warehouse, and reformatted it to run Edubuntu. Wow! It worked, and actually ran applications smoothly, whereas, when running Windows, the desktop bogged down even when running only one application. When reformatted under Edubuntu, I could use Open Office, Gimp, and more applications at the same time with little performance issues. While I knew the challenge to even begin exploring a larger Linux deployment could not occur at that time, we explored other applications for deployment. Audacity continued to receive heavy use for creating podcasts. We dabbled with Gimp for graphic design. We also deployed applications on the network side for monitoring servers and bandwidth, but that was the limit then.

After a role at the state level, and seeing more examples of school systems exploring open source and Linux, I wanted to transition into a district that actively looked at the innovation possible with these tools. One district in particular continued to explore various applications, and I sought out that opportunity. As I became a director in this school system of 14 schools, I wanted to continue to utilize their existing tools and investigate more uses. Some additional innovations did not receive the road blocks that can occur in

other districts. For instance, we opened a new elementary school stocked with 150 eeePCs running Xandros Linux this year. While I will not say we did this without obstacles, all my staff realized the potential for using these tools, so we worked to solve the issues of network printers, wireless access, and network storage in a Windows environment. Students benefited from utilizing laptops in a pseudo-1:1 environment, and became adept at using an alternate operating system. Other schools jumped on board, and we moved toward the Dell Mini-9, 10, and 12 netbooks running Ubuntu exclusively. After struggling with the Dell distro, we did move to Ubuntu Netbook Remix, and we continue to see more of our schools purchasing these for their classrooms. We continue to utilize open-source applications more often now as well. When confronted with the increasing desire of blogging by classroom teachers, we looked for a tool we could host and manage as opposed to the commercial/proprietary products (Blogger, Edublogs, etc.) - and settled on WordPress, installed on a Ubuntu server. Our solution to course-management systems came to the same conclusion: abandoning the proprietary Blackboard CMS in favor of Moodle. Both of these tools allowed us the freedom to tailor our teacher and student needs in ways that proprietary tools did not. We add modules to Moodle to allow tight integration with other tools, such as an e-portfolio tool. With WordPress, custom add-ons allow teachers functionality that replaces their antiquated HTML-inspired Web pages.

Now, at the end of another year, we take a brief pause to reflect on the past-year's successes. One cannot help smiling at having overcome the obstacles and seeing the successful deployment of so many open-source tools. While in no way satisfied with the progress, our district definitely built a strong foundation with which we can continue to seek out solutions to our problems, solutions that will provide us with the flexibility, and sometimes scalability, that will allow growth to continue throughout the years.

While public education often shows up late to the party, many in education now see open source, Linux, and Ubuntu as viable and necessary to their futures. Besides the cost savings, finding applications that they can tailor to specific needs, beyond what can be done with proprietary software, means a great deal, and will force them to move from traditional practices to utilize these advantages. While a total move may never occur, more and more are moving to open source and Linux, and many of us in the field will continue to make a strong case for them. If you want to help spread Linux and open-source in public education, target principals and superintendents. Chances are, most Technology Directors, CIOs, and CTOs, know about the benefits. Many of our schools' principals and superintendents probably do not. Start a dialogue with them, and ask them how they are utilizing open source for cost savings and adaptability. If you receive puzzled looks, you know where to begin!

Chris is first a proud papa to his four- and two-year-old girls. He also serves as the Director of Technology of a school system in North Carolina. His free time is spent following the Carolina Hurricanes, maintaining K-12 Open-Source Classroom (www.k12opensourceclassroom.org), and training for marathons.

Why I Use Linux

The first computer I used was a Televideo 802 running CP/M on a Z80 chip - with two 5.25-inch, single-sided, floppy-disk drives, and 32K or 64K of RAM. Except for an industry specific program, the only application was WordStar. The next computer was an IBM PC, followed by a Televideo Portable the size of a Samsonite. All these were text-based with green screens. My first exposure to a GUI was Tandy's Deskmate. Then, finally, came Windows on a Tandy 2500 with VGA. We also had SCO Unix and some dumb terminals for word processing with Microsoft Word and Real World Accounting, and then Novell 2. These were all company owned machines.

My first personal machine was a mail-order box, from some long-gone builder, with an Intel 486DX33, 4MB RAM, a 260MB HDD, 1MB Video, and a 2400-baud modem, plus a 15-inch .28 SVGA Color Monitor. I was cooking. I upgraded MS-DOS at every opportunity, and jumped on Windows for Workgroups with both feet. I read all the magazines, tweaked, upgraded and reformatted with abandon. I tried DESKview and PCTools. I bought and proudly registered all my software, and had a bookcase of manuals. I even Netscaped my way onto the Internet with my CompuServe account. When I took a new job that required me to travel, I couldn't wait to get to CompUSA to pick out my ThinkPad with Windows 95 with a free upgrade to the soon-to-be-released Windows 98. I desktop published, I databased, I accounted, I spreadsheeted and emailed.

Then it happened... somewhere, somehow, I discovered something called Linux. I don't remember if it was Slackware or Mandrake or Suse or Redhat. I do know I tried every flavor on the old 486 and on the ThinkPad - until the memory and disk space requirements exceeded what was left.

When the ThinkPad finally wore out, I bought my current Acer Notebook with Vista installed. While I have always been an admirer of Bill Gates, and never personally had any big problems with Microsoft Windows or the applications, Vista forced me over the edge. It just didn't work very well for me. I had read about Ubuntu Linux, and decided to give it a try from the CD-ROM. I was hooked. Everything worked. After years of being a tinkerer, all I really want today is simple, stable and clean. I installed Ubuntu 7.04 64-bit to dual-boot with Vista. I never looked back. I recently moved to 9.04 on the entire disk. I can do everything I want to do with speed and elegance. And regardless of popular opinion, I did not have to become an engineer to make things work. Any help I've needed or any questions I've had have been quickly resolved by generally respectful and enthusiastic users like myself. Truly a community. The more I learn, the more I like. I have become an advocate as well as a user. My next computer... Linux for sure and maybe that monster I always wanted to build when I was a tinkerer.

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Exaile

I would like to present my favorite music player in Ubuntu. It's Exaile, a player for GTK+, written in Python. It incorporates automatic fetching of album art, lyrics fetching, artist/album information via Wikipedia, support for many portable media players including iPods, internet radio such as shoutcast, and tabbed playlists. I would like to tell you how I came to this player.

When I initially used Ubuntu (Gutsy Gibson, 7.10), I immediately disliked Rhythmbox - the standard Gnome player. Its interface and configuration didn't appeal to me. Then I read something about a popular player called Amarok, and installed it. Although it didn't fit well into the Gnome desktop, I liked it. I subsequently replaced the unsuitable blue icons with Gnome Icons, which I found on gnome-look.org. Then I was very happy with the music player.

After I began learning to program in Python, I chanced upon Exaile, which is written in Python. I noticed that it is similar to Amarok and looks better on the Ubuntu Desktop. It also starts faster than Amarok, because it doesn't need the KDE libs.

Exaile has an interface like Amarok 1.4, so some people say it's just a clone of the great Amarok player. But what's wrong with imitating a fine product? Amarok 1.4 is a great music player, because, despite its many features, its interface remains simple and intuitive. Even first-time users will be able to use it adequately.

Since Amarok2 was released, many users haven't let go of the old Amarok player, because its interface is more intuitive. Exaile also has an intuitive, relatively minimalistic interface, but this is greatly extensible through plugins.

I'm very happy with Exaile now. It runs well without problems. Although the number of its plugins is tiny compared to Amarok, I don't care, because I use only a few.

Exaile is in active development. Recently, Exaile was rewritten from the ground up for release 0.3.0. This should make development of future versions much easier. Because its system requirements are low, it has been the default player in Xubuntu since release 9.10.

If you are running Ubuntu, and want a cool way to play and manage your music collection, you might want to give Exaile a try. You'll find Exaile in the Ubuntu software repository, and you can get the newest version with the developers' PPA. In my opinion, Exaile is a top-notch audio player.

MOTU INTERVIEW

Taken from behindmotu.wordpress.com

Didier Roche

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: 25
Location: Paris/France
IRC Nick: didrocks

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

I started using Linux with Red Hat 6 in 1999. I have been a regular Linux user since the arrival of KDE-based Mandrake 7. I used Mandrake until release 9.0, and then I decided to try Debian. I was truly satisfied with it, despite the long configuration time needed for a working environment (this is no longer the case).

How long have you been using Ubuntu?

I was seeking an easy to use and install Linux distribution. I found the “no-name-yet” just a little before the release of October 2004, known now as Ubuntu. After testing it, I loved it. I have stuck with it, and I love the GNOME environment.

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

Last July, during the RMLL (Libre Software Meeting in France), I spoke with Christophe Sauthier (huats) and he told me he was making some packages for Ubuntu. He presented the process, and then I decided to start learning how to package.

What helped you learn packaging and how Ubuntu teams work?

Read, read documentation! I've never ceased to read documentation, starting from the great resource on Ubuntu wiki. Now that I have finished the “how to secure Debian” and the “Debian reference guide”, I am getting into the “Debian FAQ”, just for fun!

Ubuntu, as a derivative distribution of Debian, benefits from the huge documentations of both distributions. I was also part of the mentoring program, and I asked my mentor, Andrea Colangelo (warp10), a lot of questions. High-five to him! When other/more detailed explanations were needed, I jumped to #ubuntu-motu or other Ubuntu channels. Nobody can know everything, and that’s where the team is fantastic: you will always find someone who will be able to help you.

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

My favorite part is, without any contest, interaction with others. You will find great people - a big bunch of helpful and talented developers. With them, you can discover a new thing/concept every day. How exciting it is to see how far GNU/Linux is today!

Any advice for people wanting to help out MOTU?

Do not hesitate to jump in! No programming skills are required. Everyone can make Ubuntu better, and that’s a great opportunity. You can read https://wiki.ubuntu.com/MOTU/GettingStarted, and https://wiki.ubuntu.com/UbuntuDeveloperWeek (the first session is available through 5

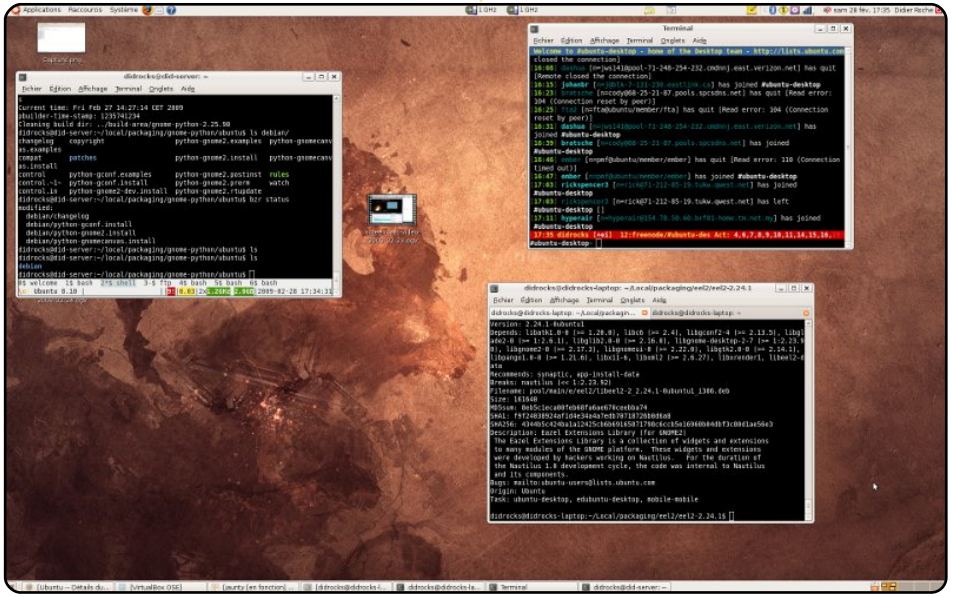
languages!). Sign up for the mentor process if you prefer to have a mentor guide you through your MOTU journey!

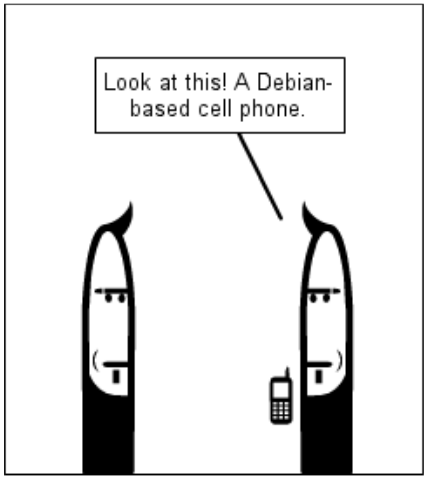
Are you involved with any local Linux/Ubuntu groups?

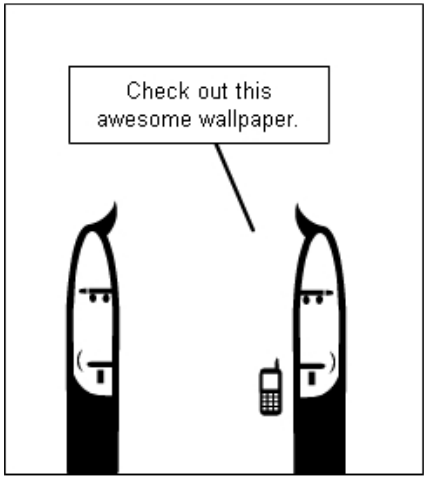
Yes! I am involved in the French non-governmental Ubuntu-fr loco team - as a member of the administration, and a part of the chair (the secretary). Within this, I participate in the French Ubuntu Party as a core organizer, and go to various French FOSS meetings to promote Ubuntu. I also have some relations with the press. The last events we organized were the Ubuntu Global Bug jams in Toulouse and in Paris. We will participate in 3 events in France this month, one of which is Solutions Linux.

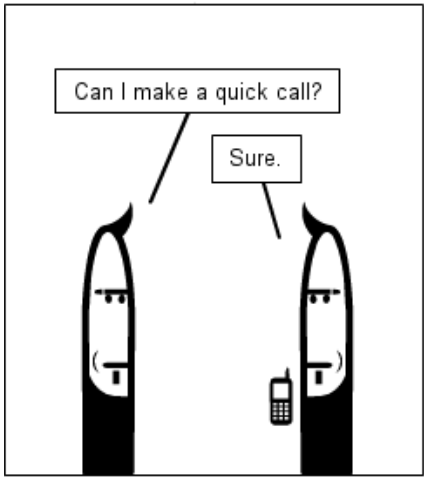
What are you going to focus on in Jaunty and Jaunty+1?

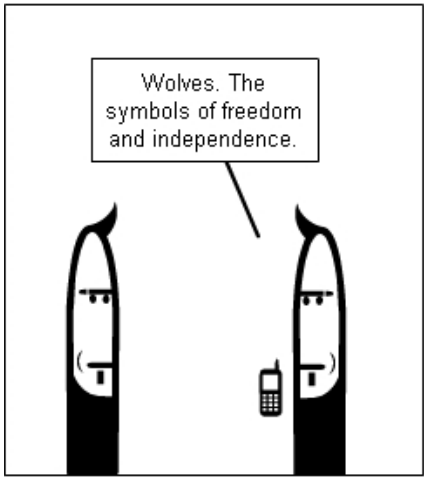
I will still help in the GNOME desktop area with the desktop team. People from other countries, please come in! It seems to be a French place there! I will also try to dedicate some time to gchildcare, which will be a simple, user-friendly, secure, parental, child-protection software application.

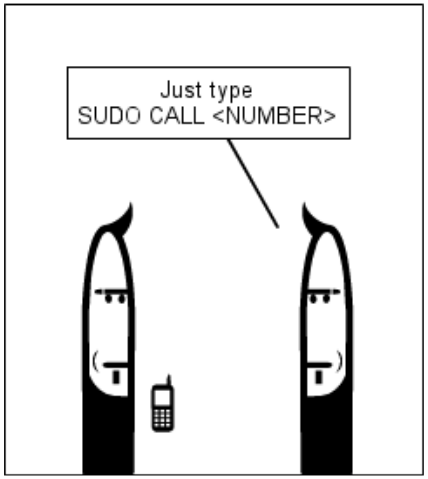


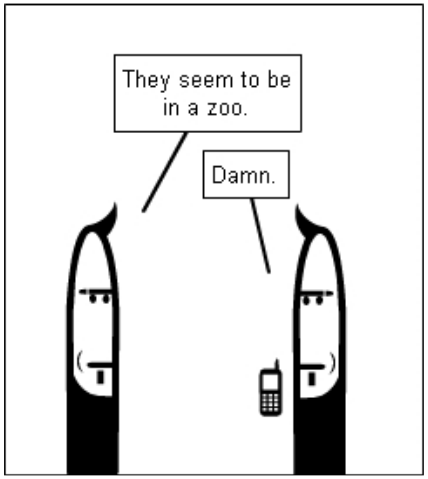












LETTERS

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.

Mounting Problems

In the hope that this may help some of the poor hapless people who have had USB drive mounting problems and are on the point of doing irreparable harm to their computers or themselves I offer what I hope to be some comfort.

I have two laptops, one is an updated Jaunty to Karmic system and the other is a new system. I have had little or no problems with the upgraded system, but the new fresh install will not mount a USB drive properly. The drive is seen by the system. When fdisk -l was run in a terminal, I could see the drive correctly identified as sdb1. However, the system made no attempt to finish the automount by placing a drive icon on the desktop or opening a Nautilus window. After Googling I was no further forward other than to see that a lot of other users were having the same issue.

LETTER OF THE MONTH

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

The Universe of Sound article (FCM#31) mentions that there is a "record" button in Exaile, which allows the recording of a radio song. This does not seem to exist on my machine running Ubuntu 9.10 with Exaile 0.3.0.1.

Nigel Dao

Fernando replies: *I was not aware that the Exaile media player has a new version in the repository. The new version does not include the streamtuner/streamripper function to enable ripping radio stations to your hard disc. The reason is probably due to the fact that the developers of streamtuner have abandoned the development of new and better versions.*

But as we say, fear not! Exaile continues to be an excellent media player, with or without the radio ripping function. Moreover, there is superb radio ripping application in the repository called Tunapie. It works marvelously. It can tune radio stations from the Shoutcast and Icecast servers and you can rip the songs to your hard disc by clicking the red button that says 'record'. Recordings can be set to start and finish at specific times.

There is a cool function called TV. It connects you to those radio stations where the Disc Jockey has a camera; so besides listening to the radio station, you can watch in high resolution the DJ as he works in his cabin or booth. You'll need a high speed internet connetion for that to work well. It is best to have the VLC media player (Videolan) installed as it uses it to reproduce the streaming video of the DJ.

In 'preferences', you can choose the media player of your liking to reproduce the radio stations and the folder where you want the music files to be saved. The default folder is a hidden folder in your home directory called .tunapie (dot tunapie). You may want to change that to something easier to find.

To choose the media player:

Go to file/preferences. In 'media player' click 'browse' The usr/bin folder will open automaticaly. Scroll down until you find 'rythmbox' and click it. Click 'save' (I am assuming you want Rythmbox.)

To change the folder where the music files will be saved:

First create a new folder in your home folder (directory). You may call it simply Tunapie. Again in 'preferences' look at the box that says 'Path to rip directory'. Click 'browse'. The tree of your home directory will open automatically. Scroll down until you find your newly created folder called Tunapie. Click it. Click 'save'

If you do not wish to change the default directory where your ripped music files will be saved, you can find them by doing the following:

The names of hidden files begin with a dot. To show the hidden files in your main directory first open it. In the menu 'show', click the submenu 'show hidden files' or alternatively, type the keys 'Ctrl/H' simultaneously. You will see your usual folders plus other ones that begin with a dot. Scroll down until you find .tunapie. Open it to find your saved ripped music files.

A word of caution: Tinkering with hidden files in your home directory can be risky. In this particular case only use the folder called .tunapie and don't meddle with the rest. Once you close your home folder, the hidden files will not be visible until you repeat the same procedure to show them.

More by accident than by design I stumbled upon System > Administration > Disk Utility. As soon as this was run, it opened a window called Palimpsest Disk Utility. I cannot find much information about it, but I now have full auto-mounting of my drives, and it gives the ability to manage the unmount of the drives. At least I am now able to use USB drives as before. Karmic has been a good upgrade and the above is not a complaint. After all, I paid nothing for the OS, it is solid, reliable and I use it every day. I have taken much more than I have given to the community, so this is a small opportunity for me to give something back.

Iain Mckeand

Writing Tools

As a writer I really enjoyed the article in FCM#30 about the writing tools. It did, in my honest opinion, miss some applications worth mentioning. Writers Café is a commercial product with lots of features, but for those not willing to pay for a program there are some alternatives I'd like to mention.

Personally I use a combination of four programs to write my articles and short stories: *Freemind; Little Red Notebook; Storybook* and *OpenOffice Writers template*.

For brainstorming and initial notes I use Freemind: http://freemind.sourceforge.net, a brilliant piece of mind mapping software. Next to that I use Little Red Notebook as a writers diary, scrapbook, or notebook. It is in the repository and a mighty powerfull tool to use. I personally love the possibility to tag the contents. Want to play a scenario or timeline? Use StoryBook: http://storybook.intertec.ch. This is a powerfull freeware tool giving you all sorts of possibilities. And for creating the final manuscript you can use the template provided at http://groups.google.com/group/open-office-writers. This project deserves all the support it can get. Brilliant work.

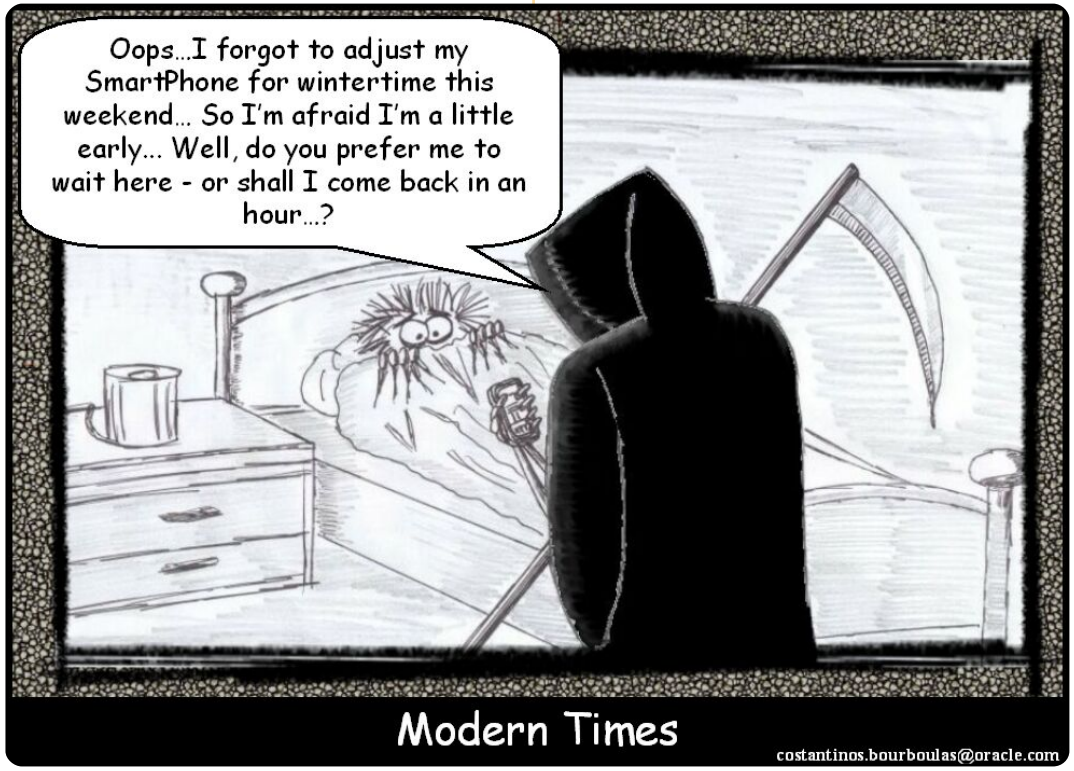
I'm not saying these products are better than the ones you mentioned, but it sure gives an alternative.

Arnold IJzermans

Keep GIMP

I am a Ubuntu user for over two years and am also against removing Gimp from Ubuntu. I think there are many Ubuntu users who use Gimp instead of F-Spot or g-Thumb Image viewer for correcting or tweaking images and photos. I do not understand the logic of removing Gimp. On what basis is Gimp being removed? I think the developers should take a poll whenever there are major shifts such as removal of a standard program which comes with the OS.

Danish Lala



UBUNTU WOMEN

Written by Amber Graner

Jane Silber Interview

Amber Graner: This Ubuntu Women interview in the Women of Ubuntu Series is with Jane Silber, the current Canonical COO, but as of March 1st, 2010, she will be taking the reins of Canonical as the CEO. More about this announcement, and Jane's history with Canonical, can be found here: http://blog.canonical.com/?p=307. First I want to welcome you Jane, and thank you for taking part in this interview series.

Jane Silber: Thanks very much. I'm delighted to have the opportunity to support the Ubuntu Women initiative.

AG: After reading the announcement that you would be taking the reins as CEO for Canonical, I couldn't help but be excited for you personally, for Canonical, the Ubuntu Community and, by extension, Women in Open Source. I noticed in the announcement made on Dec. 17th on the Canonical Blog that, when asked about "How will this impact Mark's role on the Ubuntu Community Council and the Ubuntu Technical Board?", you stated, "One thing this move will bring about is a clearer separation of the role of CEO of Canonical and the leader of the Ubuntu community. It will be two different people now, which I think will be helpful in both achieving their joint and individual goals more quickly." Can you elaborate on what those joint goals of Canonical and Ubuntu are, and what the individual goals are besides the obvious commercial differences?

JS: Canonical and Ubuntu have many common goals. First among those is to make Ubuntu the most widely adopted free software platform - and Canonical invests heavily in the development and marketing of Ubuntu to make that happen. Elsewhere, the goals diverge in places where something is of less interest or less suited to one than the other, rather than the goals being in conflict. For example, Canonical has a large team that works with OEMs to get emerging, pre-production hardware enabled for Ubuntu. The contractual and liability requirements for such work simply aren't well suited to community work. In contrast, local advocacy (e.g., installfests, local events, etc.) is much better suited to the LoCo teams in the Ubuntu community than to Canonical. There are areas where we are exploring how Canonical and Ubuntu relate to each other, and breaking some new ground in the models. The Ubuntu One services are a good example of that. Fundamentally, however, Canonical and Ubuntu have a symbiotic relationship in which each benefits from the other.

AG: Since you mention that the roles of CEO and leader of the Ubuntu Community will now be separate, and Mark stated that he will be able, thanks to you, to concentrate on product design and development, and talking to partners, and gathering feedback, does this mean Canonical now has a R&D team lead by Mark, being developed under your guidance?

JS: There isn't a new R&D team being stood up, but we do continue to have a good amount of R&D work happening throughout Canonical. In some cases this is concentrated in a specific team, such as our Design and

Desktop Experience teams, which are responsible for things like the notification infrastructure, the Ubuntu Netbook Edition launcher, and the revamped Software Center. In other cases, this R&D-type work happens organically throughout the company, including the Ubuntu team itself. Prime examples of this are Scott James Remnant's work on Upstart (http://upstart.ubuntu.com/), and Rick Spencer's work on Quickly (https://edge.launchpad.net/quickly). So, this move doesn't signal a dramatic shift into the R&D world - we plan to continue what we've been doing. But rather than having product design and strategy receive a portion of Mark's attention, my new role will allow him to dedicate nearly all of his attention in that area.

AG: When surveying what the transition of COO to CEO entails, what do you see as the biggest challenge?

JS: My history at Canonical, and close collaboration with Mark and the rest of the senior team over the years, gives me a solid foundation on which to build. But there are clearly challenges ahead for Canonical and for me personally. My focus over the last couple years has been largely internal, and naturally the CEO role will add a more external, outward facing element. Additionally, while my current operations focus will remain, the CEO role will require a strategic leadership and decision-making capacity, whereas I have been in more of a strategic advisory role to date. The changes may seem subtle, but I think they will require something of a mind shift on my part.

AG: Just from some cursory searches on the Web in referencing women CEOs for OSVs (operating system vendors), I could not find a long or readily available list of women. It would seem you are blazing a trail and raising the bar. How does this feel?

JS: I am proud of my contributions to Canonical and Ubuntu to date, and look forward to continuing to help make them successful. But I am by no means the trailblazer for women in open source or women in IT. You may be right about OSVs in particular, but in the open-source world, Mitchell Baker (Mozilla, left) springs to mind, and there are many examples in IT in general. The phrase "on the shoulders of giants" often gets used in the open-source world, and I think it's applicable here too. I'm proud to be part of the group of women executives, but I certainly am not the first.

AG: Speaking of blazing a trail, the news of you becoming the CEO of Canonical spread like wildfire throughout the community, especially the Ubuntu Women Community. Do you see yourself as a role model for other women, not only in the Ubuntu Project but in open source as a whole?

JS: I think that only an individual can decide who she or he thinks of as a role model, and the reasons for it. I.e., it doesn't matter if you think of yourself as a role model or not - you are a role model only to the people who find that quality in you. If my new role as CEO provides a positive example or inspiration for someone, then that's great. But for me personally, role models are people who have qualities that I aspire to or that I have to work at (as opposed to achievements or career successes). I am very aware of the impact of positive examples as role models and as learning opportunities, and I try to always be conscious of the impact of my actions and words. That's true whether I am coming from the perspective of a woman in open source, or a manager, or a co-worker or friend.

AG: As a strong leader and role model within the Ubuntu Community, do you now or have you ever participated in FOSS projects or groups specifically created to encourage women? If so can you tell us a little about them? If not can you elaborate on why?

JS: I joined the Ubuntu Women mailing list around the time it was created. And while I have followed the ups and downs of that group with interest, I haven't taken an active role in the group. I recognise that due to my role at Canonical, my experience in the community as a woman is very different than others, and I thought it was important to provide the space for other women in the community to understand and articulate the issues from their perspective. I recognise the value of sharing experiences and having the support of people in a similar position, and I relied on women's groups early in my career. In particular, when I was working as a software developer/researcher in Japan, I joined the Systers email community (started by Anita Borg, and now part of the Anita Borg Institute, http://www.anitaborg.org/initiatives/systers/). At a time when I felt I was an isolated minority (by gender, exacerbated by culture), the Systers list gave me real support. Knowing that I could find people with similar experiences and even solutions at times was a real boon for me. I hope that the Ubuntu Women's group can provide similar support within the Ubuntu community.

AG: As the transition to CEO should be complete by March 1, 2010, does this mean you will be announcing the -M name, or will that still come from Mark? You will be opening UDS-M as the new CEO. Have you thought about how you will inspire and encourage and keep the excitement and energy levels from undulating and remain steady and constant during UDS?

JS: Good question! Mark and I haven't discussed the -M name yet... maybe I'll sneak that privilege into my new job description. With respect to UDS, I am always amazed at the excitement and energy levels on display there. But I think that is clearly due to the Ubuntu community - LoCo teams, developers, translators, documentation writers, advocates, etc. It's my job to ensure that Canonical can continue to provide the forum and infrastructure and opportunity for the UDS magic to happen, but it is the collection of people who participate in UDS, whether in person or remotely, that provides that energy.

AG: At UDS-L, I had the opportunity to interview Mark about Canonical's enterprise strategy. What is your strategy? I asked him specially when he named 10.04, Lucid Lynx, referring to a clear-minded thoughtful predator. I now wonder if that describes you, and your plan of execution in taking on the enterprise market with this LTS release?

JS: Don't expect a dramatic change in strategy as I take on this new role. Mark and I have had a very close partnership, and are in agreement about our current strategy. We have different styles and experiences, and this will inevitably result in different decisions, but the starting point for my tenure as CEO is building on Canonical's successes and strategies to date, not cleaning house or changing direction.

AG: Jane, thank you again for taking time for the interview, and congratulations on your new role as Canonical CEO.

UBUNTU GAMES

Written by Edward Hewitt

GAME NEWS

FreeCol 0.9 out - Improved AI, graphics, and UI

Alien Arena 7.33 out - Adds matchmaking, in-game IRC, headshots, and new graphic effects

One of the most-popular, casual, puzzle games of all time, Bejeweled has finally found its way onto the Linux platform, under an open-source version called **Gweled**.

If you have never heard of Bejeweled, it's a small puzzle with the aim to align 3 or more gems, vertically or horizontally, by swapping adjacent gems. Gweled works the same way as the original game, which is not a problem. It is a very addictive and enjoyable game, which can be played for hours on end.

Gweled has two game modes, Normal and Timed. Normal is the standard game - try to get the highest score; game ends when there are no moves you can make. This is my only complaint about the game - it can be tens of minutes before the game is over; if you want a quick game it's not possible. If you want your scores to be high, you need to complete the game. This mode would be far better if you could save the game and go back to it at a later date. However, the Timed mode gives you only a certain amount of time to get a high score, which kind of solves my complaint about the game.

The graphics are clean and colourful. There is nothing special about the look of the gems, but the falling animations of the gems are smooth. The sound is great - just a simple bit of background music.

There is not a lot to this game, but it's great to have a much-loved game ported to the Linux platform. Gweled is an excellent version of Bejeweled. My only request to the developer is to put a save button in the game. You should try this game - I'm sure you'll enjoy it! Version 0.9.0 can be found in the Ubuntu repos.

Score: 9/10

Good Points:

- Excellent port of Bejeweled to Linux
- Fun and addictive game
- Strong graphics

Bad Points:

- Normal game could last a long time

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 am not able to view videos on Firefox from sites such as YouTube. Also, I cannot see the flash format files which are a part of web pages these days. I have searched forums, and Googled for help, and applied the steps listed, but the problem stands unresolved.

A Start off by removing any flash players that could be interfering:

```
sudo apt-get remove swfdec-mozilla mozilla-plugin-gnash adobe-flashplugin flashplugin-nonfree
```

Then install the flash plugin:

```
sudo apt-get install flashplugin-nonfree
```

Restart firefox and you should have flash working again.

Q I am considering putting Ubuntu on my system, and was wondering if Windows 7 and Linux would play well together. I've heard horror stories of people trying to dual boot Ubuntu/Vista, and was wondering if Windows 7/Ubuntu would be as bad. Or, would it be better to, say, install VirtualBox and run Linux within Windows? Which would be my best bet for using both systems, dual Boot (if possible), or running it within Windows via VB, etc.

A They should play very nicely together. Simply install Windows first, then run the Ubuntu installer, choosing the amount of hard-drive space you want for each OS. If you already have Ubuntu installed, you can still install Windows, but you will need to restore the grub as per this post: http://ubuntuforums.org/showthread.php?t=1014708

Q I have a second hard drive I want to add. My main drive has 9.10 installed. Can I use the 9.10 disc to dump whatever is on the XP drive leaving me a drive with only Windows XP on it, so I can boot to it if I want to use Windows XP, and, if so, will it delete any passwords/usernames associated with XP?

A You can indeed. First, run

```
sudo fdisk -l
```

to see what the device numbers are, then use dd to move the partition across. So, if the XP partition is /dev/sda2, and the new hard drive is /dev/sdb, you would run:

```
sudo dd if=/dev/sda2 of=/dev/sdb
```

Then you need to reinstall the XP bootloader to the second hard drive, so follow the XP instructions here: http://ubuntuforums.org/showthread.php?t=1014708

Also, it will not delete any usernames/passwords in XP.

Q Is there a way to make bittorrent download faster? Download speed is 15.6 kb/s to 18.3 kb/s. I'd like to increase download speed. My connection is broadband.

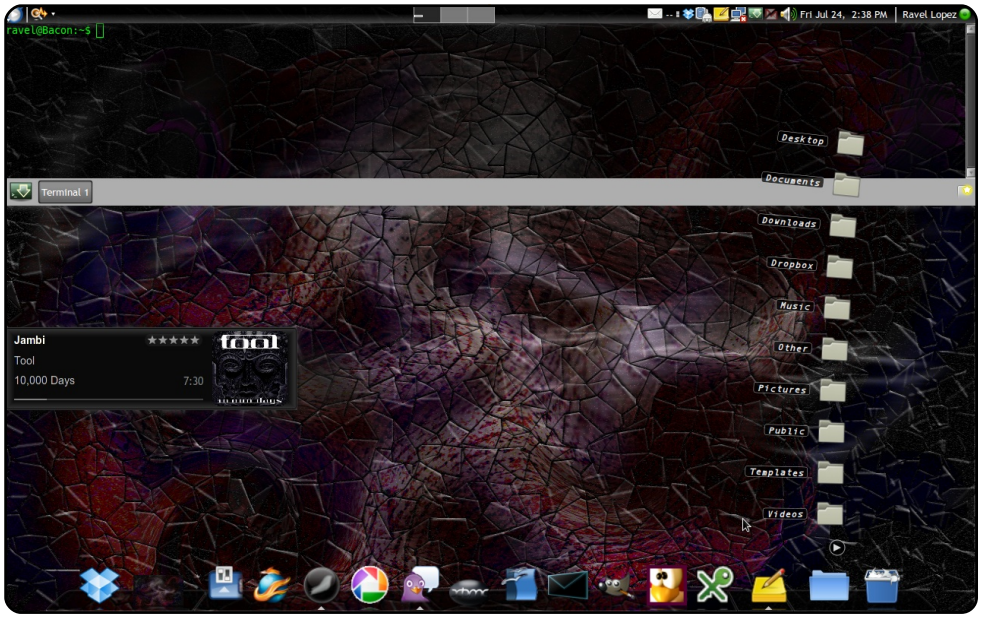
A Due to the nature of bittorrent, your speeds can vary greatly, depending on what torrent you download, and how many people are downloading. However, one thing that can greatly speed up torrent downloads is port forwarding. Take a look in the preferences of your torrent client, and find which port it is using. Then go through this site to find instructions for your specific router.

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.

I'm running Ubunutu 9.04 solely on my Acer Aspire 4315, with Intel Celeron and 1.5 GB RAM. I use a dark theme because a light color is too bright on my laptop and irritates my eyes. I used Screenlets to add gadgets. I prefer an analog clock (to easily estimate how many hours are left based on the position of the hour hand), a calendar for days and scheduling, and a performance counter (to monitor my laptop because I tend to push it hard). I added a trash icon, because I wanted to drag files that I'll delete. Finally, my wallpaper is a pleasure to look at.

Marcelino Deseo, Jr

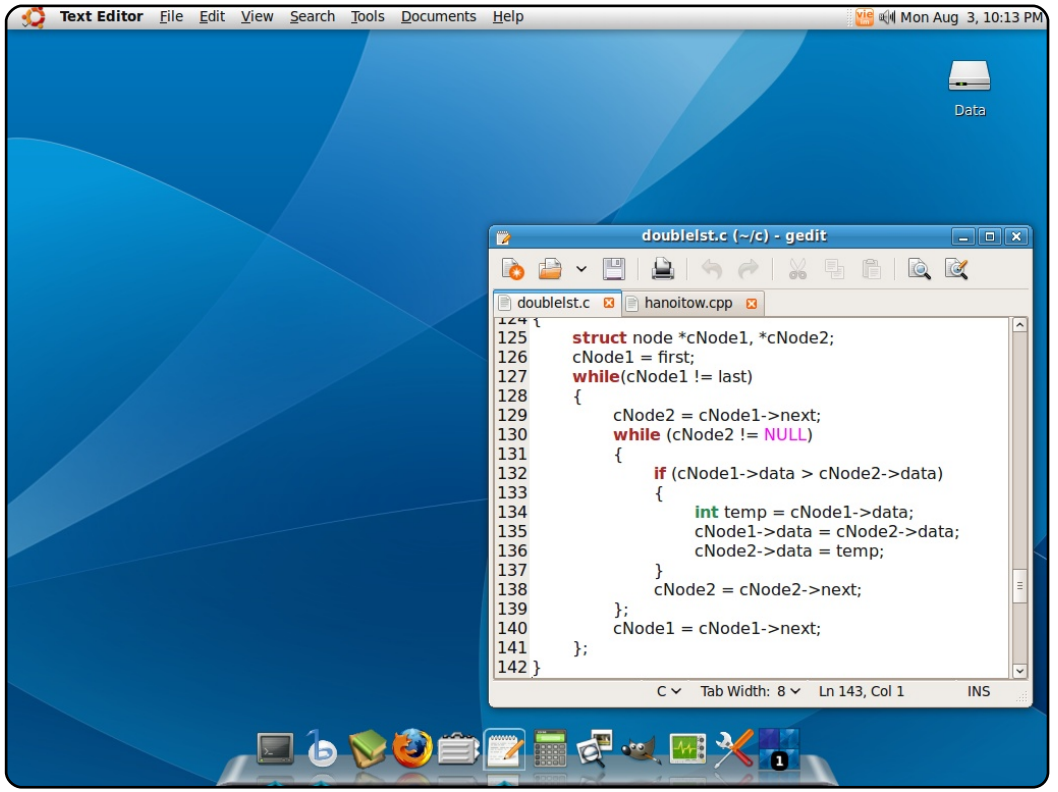


I run Ubuntu Jaunty on a Dell Inspiron Laptop that was my fiancé's, but I basically took it over (she now has a netbook with Ubuntu Netbook Remix). It has an Intel Pentium Dual Core processor, with 2 GB RAM, and a 320 GB hard drive (upgrade). Ubuntu runs perfectly on it. It ran Vista until I discovered Intrepid Ibex last year. Currently, I have a customized theme based on Dark Ice. I made my own wallpapers, first with Paint.NET on Windows, now with GIMP. I use the Guake Terminal for easy command-line access, and Songbird for my tunes. To make space, I ditched the bottom panel and installed AWN.

Ravel López

This is a screenshot of my laptop running Ubuntu Jaunty on an Acer Aspire 5630. It has 1G of RAM, yet it works great. I'm using AWN from PPA, and screenlets - Circle Clock, Disk Space (lower left) and Impulse (the beats from music running on Exaile - the circle with bars on the lower right). I wish I knew who to thank for my wallpaper.

Alexandre Jesus



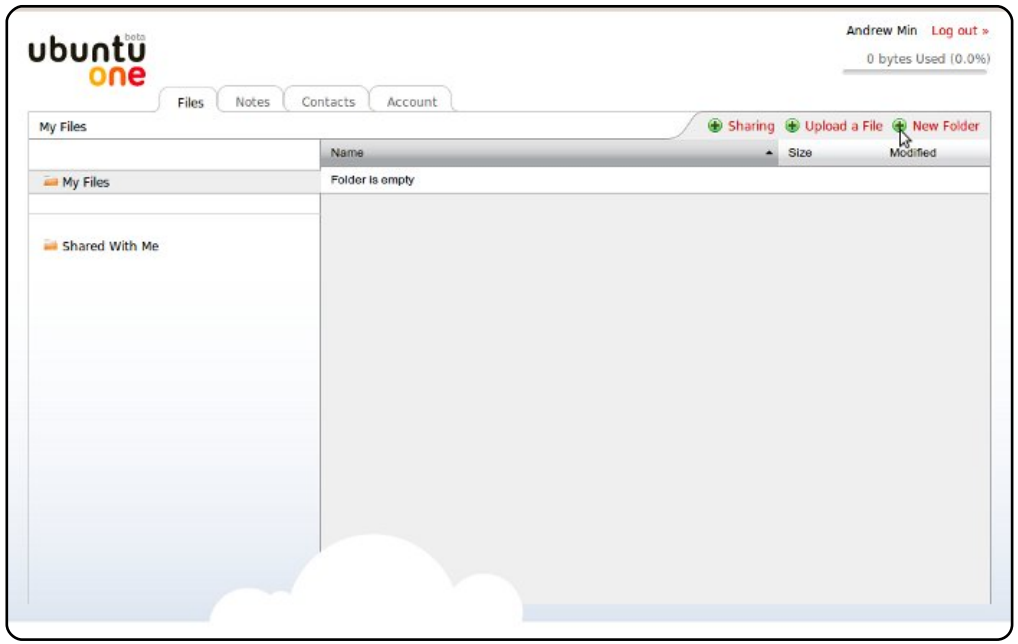
I like Linux, and I love Apple, but I don't have enough money to get a Mac. So, I make my Ubuntu look like a Mac with GnomeGlobal Menu and Cairo-dock. My wallpaper is Aquarius from Gnome-look. I want my Ubuntu to keep the Human style. Therefore I've changed only the title's color to blue (RGB 67 180 255). I'm learning C/C++. I'd like to develop something for all platforms, especially open source.

My PC specs: Intel P4 3.0cGhz, RAM 512, nVidia Geforce 6200 128MB. It's made from various parts: Intel, Gigabyte, Kingmax, ASUS...

Ha Thanh Tuan

Ubuntu One

https://one.ubuntu.com/

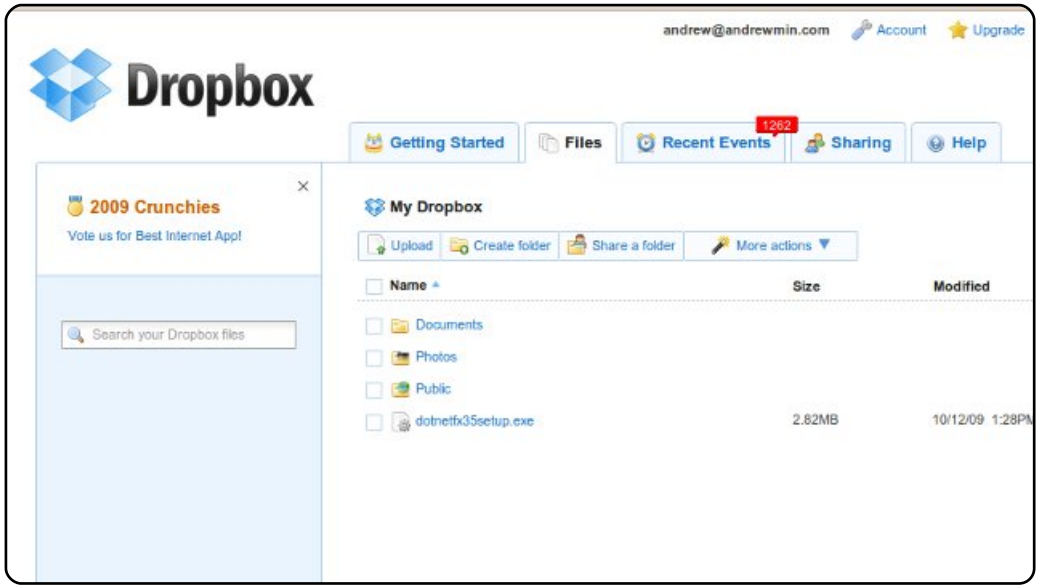


Ubuntu One is one of the newest members of the Canonical family. It's similar in feature and intent to the storage feature in Apple's MobileMe. Just drop the correct file or folder into the Ubuntu One folder, and watch everything automagically sync up. Ubuntu One currently supports up to 2 GB, with a paid plan of 50 GB (at $10/month). The downside, of course, is that your data HAS to be on Ubuntu's servers, rather than your own.

To install Ubuntu One, use the `***ubuntuone-client***` package.

Dropbox

https://www.dropbox.com/

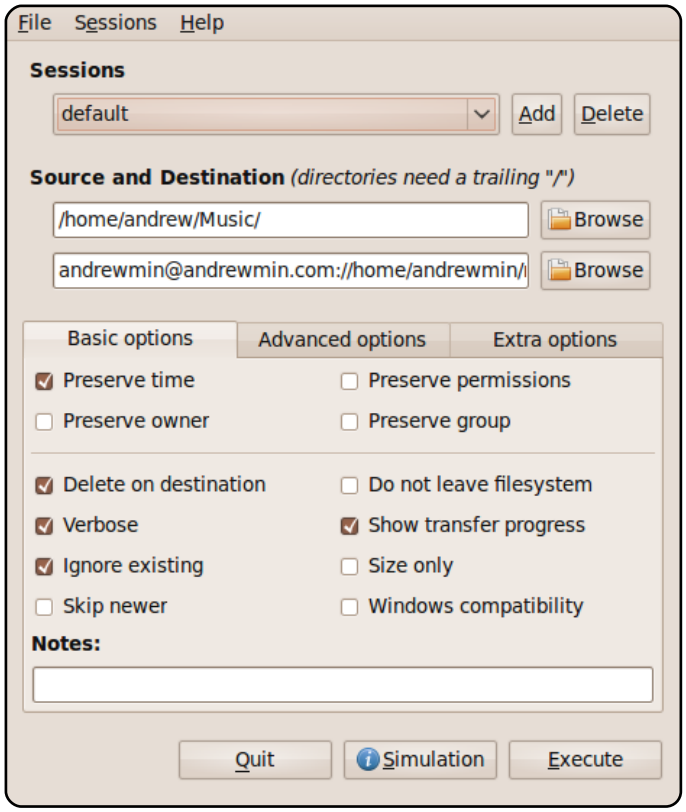


Dropbox is a powerful cross-platform file synchronization service. Dropbox and Ubuntu One are fairly similar in functionality, but the more mature Dropbox sports some more robust features, including support for symlinks, more storage options, and a MUCH nicer Web interface. Additionally, it's cross-platform (you can use it on Windows, OS X, and even the iPhone), and has a ton of plugins. Like Ubuntu One, it lacks support for third party options, meaning that all your data is stuck on Dropbox's server.

To install Dropbox, use the package at https://www.dropbox.com/install

Grsync

http://www.opbyte.it/grsync/

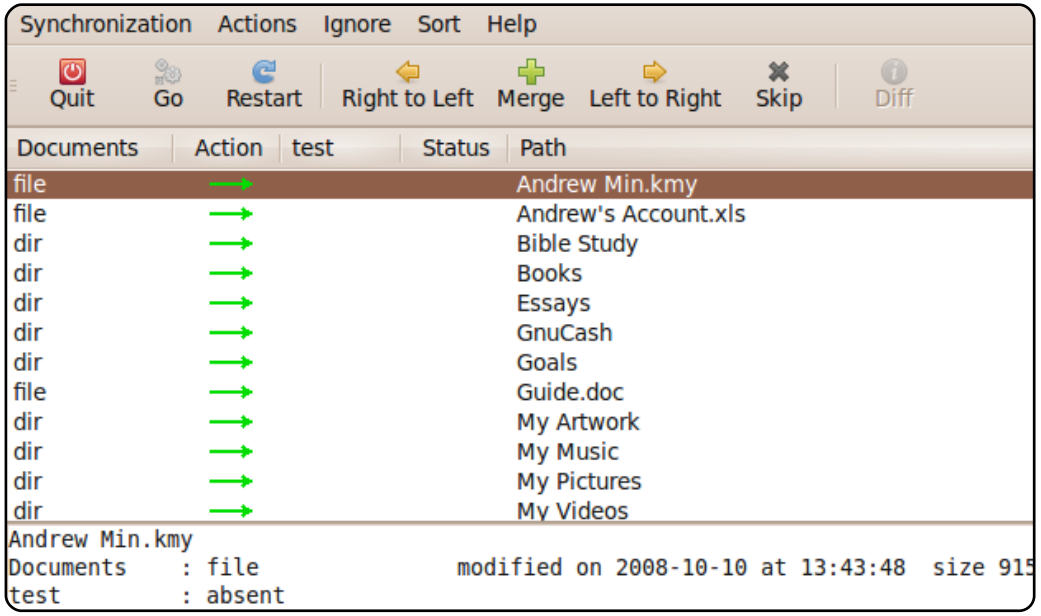


Grsync is a GTK+ frontend to the well known rsync synchronization utility. It supports saved sessions, most rsync functions (delete, verbose, ignore-existing, update, and so on), and executing commands before and after rsync begins. It also includes a handy simulation tool, so you can make sure you're not deleting crucial data before you begin. The one feature it is missing out of the box is SSH; however, there's a handy howto over at http://url.fullcirclemagazine.org/118bb3 that works just fine.

To install Grsync, use the `***grsync***` package in the `universe` repository.

Unison

http://www.cis.upenn.edu/~bcpierce/unison/

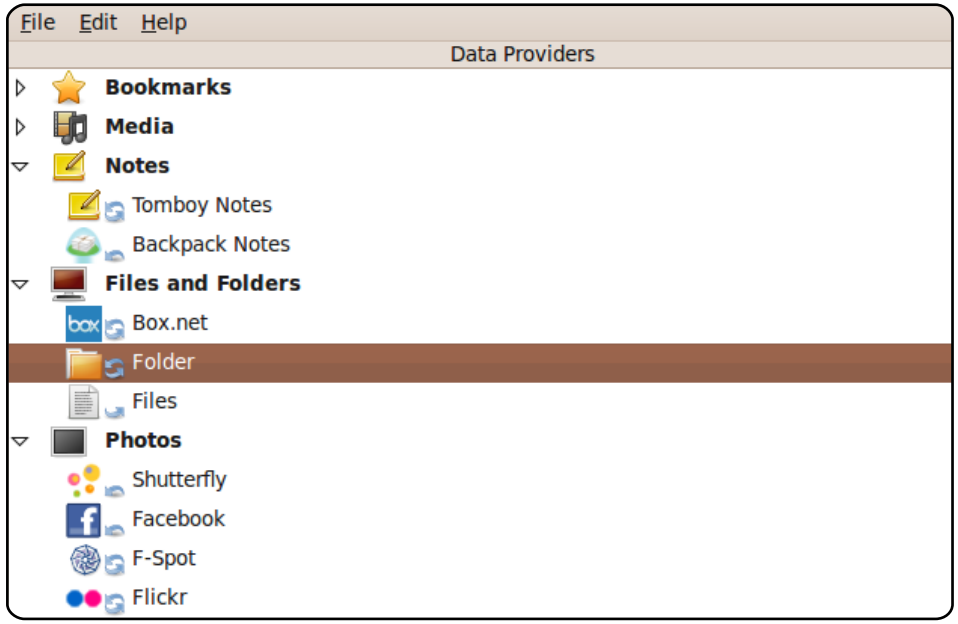


If you don't like Grsync but still enjoy the flexibility of self-hosting (as well as the power of rsync), try out **Unison**. It has most of the same features as Grsync, but, unlike Grsync, it supports SSH, RSH, sockets, and other network-based features through the GUI. The main issue is that Unison sometimes hangs up with large files, especially over the internet; the standard rsync, in comparison, handles large files just fine. The other main downside is that it's not quite as user-friendly as Grsync, but if you're not afraid to get your hands dirty, Unison is a great tool.

To install Unison, use the `***unison***` package in the `universe` repository.

Conduit

http://live.gnome.org/Conduit



One of the coolest synchronization programs around is **Conduit**. It's a Gnome project created with the purpose of syncing anything with anything. So, you can sync your photos to Facebook, Tomboy to Backpack, and folders to folders. You can also sync across computers and to external media, like iPods and hard drives. It takes some getting used to (it's pretty dissimilar to anything I've ever used before, so the interface feels kind of weird), but once you get used to it Conduit is an incredibly powerful tool.

To install Conduit, use the `***conduit***` package in the `universe` repository.

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