Full Circle

THE INDEPENDENT MAGAZINE FOR THE UBUNTU LINUX COMMUNITY

ISSUE #44 - December 2010

QUAKE LIVE - ONE YEAR ON

A Retrospective Look At Id Software's Browser FPS

Full Circle

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EDITORIAL

Welcome to the last issue of Full Circle.

Well, the last of 2010 that is! Firstly, before anyone panics, Lucas's virtualization series will return next month. He's been busy beavering away on University work. Well, that's what he told me anyway. Why University work comes first, I've no idea.

This month, we have more of the usual goodness. Greg's Python series continues, we have an article about creating backups with Wubi, which is very different from the usual ways, and Robin explains link shortening and how you can incorporate it into your own site.

If you've ever seen those fancy screenshots with the CPU, memory or networking stats on the desktop, and wondered how to do it, Lucas will explain the basics of how it's done using *Conky* in this month's Command & Conquer article.

Last month's Top 5 caused a flurry of emails with people chipping in their tuppence worth. Lots of you seem to love *SpiderOak*. It's something I've not used, but will certainly look into with a view to writing a review, or How-To, using it. Unless one of you SpiderOak users out there wants to write it up first. If so, drop me an email at the address below.

Don't forget to check out the podcast too. As I write this (mid-December) Robin is putting the finishing touches to a new episode with a new side-pod just freshly uploaded to the site. See http://fullcirclemagazine.org for some OGG/MP3 audio goodness.

And remember, if you have any articles for FCM please email them to articles@fullcirclemagazine.org as our backlog of articles is dwindling!

All the best for 2011, and keep in touch!
Ronnie
ronnie@fullcirclemagazine.org

This magazine was created using :

Full Circle Podcast

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

Hosts:
Robin Catling
Ed Hewitt
Dave Wilkins

http://fullcirclemagazine.org

Russia's latest five-year plan calls for switch to Linux

Russian Prime Minister Vladimir Putin [has] signed an executive order calling for Russia's government to switch from proprietary operating systems such as Windows to Linux, starting in 2Q [the second quarter of] 2012. The switch is part of a five-year plan to transition to free software by 2015.

Russia has a large installation of Windows users. Many, if not most, of the Windows installations in Russia are pirated. Yet the move should still prove to be a major financial setback for Microsoft, especially in regard to less pirated server versions, suggests the story.

Putin's executive order ... affects all Russian federal agencies and any organizations funded by the federal budget.

In addition, the executive order calls for the establishment of a repository for Linux distros and other free operating systems by the second quarter of 2012. By this same deadline, a pilot program will be implemented using Linux and other free software in government and fiscal institutions. The program will be concluded in the third quarter of 2014.

Source: desktoplinux.com

Here's the Final Numbers on the Humble Indie Bundle #2

The second Humble Indie Bundle sale is officially over, and it's safe to say that it was a success in every conceivable way.

The Humble Indie Bundle 2 has been making headlines for the past few days, for a number of different reasons. It came to Steam. It surpassed the amount of money raised by the previous bundle. The original Bundle was included as a part of the deal. Now, the final amount of money the sale raised has been revealed.

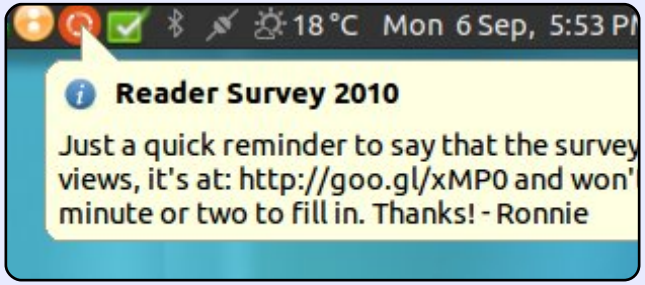
The sale managed to raise $1.8 million. The bundle itself was purchased a total of 232,849 times, and the average price paid was $7.83. Linux users paid the highest amount per purchase, shelling out an average of $13.76. Mac users paid an average of $9.26, Windows users' average was $6.67. The Bundle's homepage also tracked the largest purchases and the highest amount paid for it was $6,132.96 (for a while, notch - the guy behind Minecraft - held that spot with his $2,000 purchase).

At the moment, there's no news on how the money was split up between the various groups involved. When asked about how much money was sent to the EFF, Jeff Rosen of Wolfire stated that the final numbers were still being tallied.

Source: escapistmagazine.com

Full Circle Notifier - Beta Release!

Our very own Robert Clipsham (mrmonday) has released the first beta of the **Full Circle Notifier**, a small application that sits in your system tray and will not only announce issue/podcast releases, but can be set to automatically download them for you too! Several people are creating various distro packages of FCN. For more info, see the FCN Google Group: http://goo.gl/4Ob4



COMMAND & CONQUER

Written by Lucas Westermann

Lately, I've seen a large influx of intriguing Conky setups in the Arch Linux forums, which gave me the idea of sharing a few tips and tricks I use for all my setups. I will be covering only one specific trick this month, but I will be giving you some extra things to work with. First off, for those of you who don't know what Conky is, it's a text-based system monitor, which can be displayed on your desktop, piped into dzen (popular in some tiling window managers), or have it floated as a panel on its own.

By default, Conky has a lot of options (from displaying the time and date, to memory or hard-disk usage). However, it does not offer a way to display the number of updates available for your machine – which is understandable since there are so many packaging formats and systems out there. So here's where another feature of Conky comes into play – being able to execute custom scripts and have their output displayed in Conky itself. There are two variations of this command – one with a refresh interval (what we'll need for the update checker), and a single-run execute (useful if the script itself refreshes). All these settings are controlled from the file .Conkyrc within your home folder. To start you off, here's a basic .Conkyrc I use (I've stripped it of all custom scripts – since I don't plan on sharing them all): http://fullcirclemagazine.pastebin.com/jMDg9kzG

> **I've taken the liberty of commenting all the options for Conky...**

As you can see, I've taken the liberty of commenting all the options for Conky, and you may also notice that Updates: displays nothing at the moment. I'll be explaining how I came up with the script for that, and showing you how to implement it in just a second. First, I want to preface it by saying that the example command isn't the shortest (you can do the same with sed and some regular expressions), but it's the most readable example that I can think of. If you want to practice some regex, feel free to replace grep and cut with sed. As for the script, here it is:

```
#!/bin/bash

updateChecker=`apt-get -s upgrade|grep upgraded,|cut --delimiter=" " -f1`

echo "$updateChecker";
```

Now, how I came up with the command (what's in "updateChecker") is quite simple. I ran:

```
apt-get -s upgrade
```

and looked at the output, then found the line with the number of updates and found a unique word within that line, and then re-ran the command while piping it into "|grep upgraded,". Once I was certain it gave me the right line, I simply took that line, cut it into fields (delimited, meaning separated, by spaces), and displayed the first field ("-f1"), since that was the number I wanted. I then re-ran the whole command, made sure it returned the number properly, copied it to the bash script, and wrote the echo line to return it. If you wanted to have it as a less Conky-specific script, you could just add "Updates:" (without the quotes) to the echo line (before $updateChecker), and delete the word "Updates:" from the .Conkyrc file. As for implementing it in Conky, all you need to do is adjust the update line to this:

```
${font DejaVuSans:bold:size=8}Updates:$font ${execi 300 /path/to/script}
```

Where, of course, /path/to/script is the actual path, and the script is set to executable. To make the script executable:

```
chmod +x /path/to/script
```

My last check is always running the script from the terminal to make sure it works right, but in this case you can safely skip that step (Conky will let you see if it's

working right, after all!).

Hopefully, this has shown some new users that the command-line isn't just ugly black and white text, but can add something to your graphical setup as well. For any of you who are interested in a Bash script that removes extra kernels (while leaving the 2 most recent), have a look below at the "further scripting" section. If you found this useful and/or interesting, I'd be happy to share some more scripts in the next few months. And as always, if you have any corrections, questions, or suggestions, you can send me an email at lswest34@gmail.com. Keep in mind that "C&C" or "FCM" should appear in the subject line, so I don't overlook it.

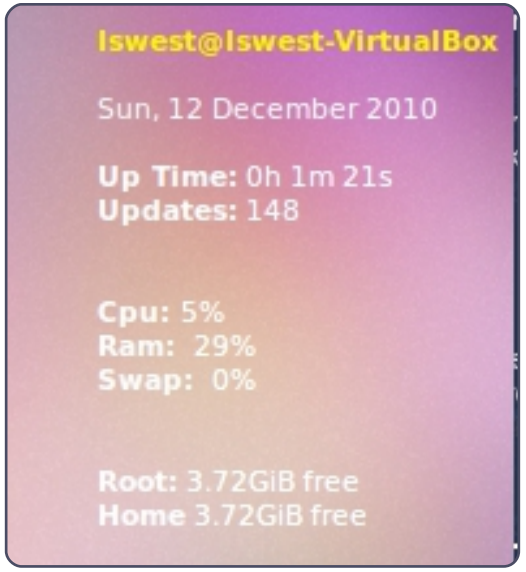
Further Scripting

If anyone is wondering why I would have a kernel manager, it was written for an Ubuntu/Windows dual-boot computer, where Windows was the default grub option, meaning any kernel updates screwed up defaults. Instead of teaching the new user how to update Grub2, I simply set up a symbolic link on the desktop for the script that they needed to run when the list got longer.

My "kernel manager" - for anyone who might find it interesting (can also be adapted into a Conky script to display number of installed kernels): http://fullcirclemagazine.pastebin.com/0JzTHjJ1

The program is pretty well commented, but here's the gist of what it does:

- Checks the folders in /usr/src and counts how many linux kernel folders there are.
- It then stores the actual names in another variable.
- If there are 4 (or fewer) folders, echo "nothing to do.", and exit.
- Otherwise ($folders > 4) display how many kernels need to be deleted, show which ones exactly are being deleted (for security's sake).
- Once the user has read this, ask if it should continue.
- If the input is "y" then remove the kernels, and wait 3 seconds to ensure all output is done.
- Wait until the user hits enter to quit (otherwise any error messages get lost).
- If none of the if-statements apply, let the user know there was an error.



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.

Full Circle Podcast

In this episode, Narwhals, Wayland and… I almost forgot, Amnesia!

In episode #14:

* **Review**: Issue #43 of FCM
* **News**: Ubuntu 11.04 Alpha1, Wayland, System 76, Android 2.3, Fee-paying Games in Ubuntu Software Centre, Flash 10.2 Beta.
* **Gaming**: Humble Indie Bundle #2 and Amnesia

File Sizes:
OGG 42.5Mb
mp3 34.9Mb

Runtime: 1hr 18min 58seconds
Released: 19th Dec. 2010

http://fullcirclemagazine.org/

Program In Python - Part 18

Last time, we created a very simple client/server system. This time, we are going to extend it a bit. The server is a tic-tac-toe (or naughts and crosses) board and checker. The client portion acts as the input/output.

We'll start by using the same server code as last time, and modifying it as we go. If you didn't save the code from then, go to http://fullcirclemagazine.pastebin.com/UhquVK4N, get the source code for this time, and follow along. The first change comes in the __init__ routine where we initialize two new variables, self.player and self.gameboard. The gameboard is a simple list of lists or a basic array. We can access it as follows (more visual than just the flat list). This list will hold our data. There are three possible entries per cell. “-” means the cell is empty. “X” means the cell is occupied by player 1 and “O” means the cell is occupied by player 2. The grid looks like this when put in two dimensions:

```
[0][0] | [0][1] | [0][2]
[1][0] | [1][1] | [1][2]
[2][0] | [2][1] | [2][2]
```

So starting with the server code from last month, in the routine __init__ routine, add the following lines:

```
# The next three lines are new...
    self.player = 1

    self.gameboard = [['-','-','-'],['-','-','-'],['-','-','-']]

    self.run()
```

The run, listen, and servCmd routines have no changes, so we'll concentrate on the changes to the procCmd routine next.

In last time's article, the server waited for a command from the client, then sent it to the os.popen routine. This time, we will parse the command sent in. In this case, we have three separate commands we will listen for. They are 'Start', 'Move', and 'GOODBYE'. When we receive the 'Start' command, the server should initialize the game board to all “-” and then send a “print out” of the board to the client.

The 'Move' command is a compound command, in that it contains the command, and the position that the player wants to move to. For example, 'Move A3'. We parse the command to get three parts, the 'move' command itself, and the the row and column. Finally the 'GOODBYE' command simply resets the game board for another game.

So, we receive the command from the client in the procCmd routine. We then check the command to see what we are supposed to do. Within the procCmd routine, find the 5th line down, and, after the line that says “if self.processingloop:”, remove the rest of that set of code. Now we'll set up the commands as we laid the out. Here's the code for the Start command:

```
if self.processingloop:
  if cmd == 'Start':
    self.InitGameBoard()
    self.PrintGameBoard(1)
```

Next, let's look at the Move portion of the routine (shown below). We first check the first four characters of the passed-in command to see if they match 'Move'. If they match, we then pull the rest of the string starting at position 5 (since things are 0 based), and assign that to a variable named position. We then check to see if the first character is either an 'A', 'B', or 'C'. These represent the row that the client has sent. We then take the integer value of the next character and that's our column:

```
if cmd[:4] == 'Move':
print "MOVE COMMAND"
position = cmd[5:]
if position[0] == 'A':
    row = 0
elif position[0] == 'B':
    row = 1

elif position[0] == 'C':
    row = 2
else:
    self.cli.send('Invalid position')
    return
col = int(position[1])-1
```

Next, we make a quick check to verify that the row position is within the allowable positions:

```
if row < 0 or row > 2:

   self.cli.send('Invalid
position')

   return
```

Finally, we verify that the position is empty ('-'), and, if the current player is number 1, we put an "X" otherwise we put a "O". We then call the PrintGameBoard routine with a "0" parameter:

```
if self.gameboard[row][col]
== '-':

    if self.player == 1:

       self.gameboard[row][co
l] = "X"

else:

       self.gameboard[row][co
l] = "O"

self.PrintGameBoard(0)
```

That finishes the changes to the procCmd routine. Next we have the "initialize the game board" routine. All it does is to set each position to a "-", which the move logic uses to verify that a space is empty:

```
def InitGameBoard(self):

   self.gameboard = [['-','-
','-'],['-','-','-'],['-','-
','-']]
```

The PrintGameBoard routine (below) prints the game board, calls the checkwin routine, and sets the player number. We build a large string to send to the client so it only has to enter the listen routine once per move. The firsttime parameter is included to send the pretty print of the gameboard when the client first connects or resets the game:

```
def PrintGameBoard(self,firsttime):
    #Print the header row
    outp = ('   1   2   3') + chr(13) + chr(10)
    outp += (" A {0} | {1} | {2}".format(self.gameboard[0][0],self.gameboard[0][1],self.gameboard[0][2])) + chr(13)+chr(10)
    outp += ('  ------------')+ chr(13)+chr(10)
    outp += (" B {0} | {1} | {2}".format(self.gameboard[1][0],self.gameboard[1][1],self.gameboard[1][2]))+ chr(13)+chr(10)
    outp += ('  ------------')+ chr(13)+chr(10)
    outp += (" C {0} | {1} | {2}".format(self.gameboard[2][0],self.gameboard[2][1],self.gameboard[2][2]))+ chr(13)+chr(10)
    outp += ('  ------------')+ chr(13)+chr(10)
```

Next, we check to see if the firsttime parameter is set to 0 or 1 (below). Only if firsttime is set to 0, we check to see if the current player has won, and, if so, add the 'Player X WINS!' text to the output string. If the current player did not win, we then add the "Enter move..." text to the output string. Finally we send the string out to the client with the cli.send routine:

```
if firsttime == 0:
            if self.player == 1:
                ret = self.checkwin("X")
            else:
                ret = self.checkwin("O")
            if ret == True:
                if self.player == 1:
                    outp += "Player 1 WINS!"
                else:
                    outp += "Player 2 WINS!"
            else:
                if self.player == 1:
                    self.player = 2
                else:
                    self.player = 1
                outp += ('Enter move for player %s' %
self.player)
        self.cli.send(outp)
```

Finally, on the next page, we have the server check for a win routine. We have already set the player to either an "X" or "O", so we start by using a simple for loop. If we find a win, we return True from the routine. Our for variable 'C' represents each row in our list of lists. First, we will check each Row for a horizontal win:

```
First, we will check each Row for a horizontal win:
   def checkwin(self,player):
        #loop through rows and columns
        for c in range(0,3):
        #check for horizontal line
            if self.gameboard[c][0] == player and
self.gameboard[c][1] == player and self.gameboard[c][2] ==
player:
              print "*********\n\n%s wins\n\n*********" %
player
              playerwin = True
              return playerwin

Next, we check each Column for a win:
            #check for vertical line
            elif self.gameboard[0][c] == player and
self.gameboard[1][c] == player and self.gameboard[2][c] ==
player:
              print "** %s wins **" % player
              playerwin = True
              return playerwin

Now we check for the diagonal win from left to right...
            #check for diagonal win (left to right)
            elif self.gameboard[0][0] == player and
self.gameboard[1][1] == player and self.gameboard[2][2] ==
player:
              print "** %s wins **" % player
              playerwin = True
              return playerwin

Then from right to left...
            #check for diagonal win (right to left)
            elif self.gameboard[0][2] == player and
self.gameboard[1][1] == player and self.gameboard[2][0] ==
player:
              print "** %s wins **" % player
              playerwin = True
              return playerwin

Finally, if there is no win, we return false:
        else:
            playerwin = False
            return playerwin
```

The Client

Once again, we start with the simple routine that we had last time. The changes start right after the call to conn.makeConnection. We send a Start, various Moves, and finally a Goodbye command. The biggest thing to remember here is that you must send a command, then get a response before sending another command. Think of it as a polite conversation. Make your statement, listen for a response, then make another statement, listen for a response, and so on. In this sample we use raw_input simply so you can see what is going on:

```
if __name__ == '__main__':
    conn =
CmdLine('localhost')
    conn.makeConnection()
    conn.sendCmd('Start')
    conn.getResults()
    conn.sendCmd('Move A3')
    conn.getResults()
    r = raw_input("Press
Enter")
    conn.sendCmd('Move B2')
    conn.getResults()
    r = raw_input("Press
Enter")
```

Continue the sendCmd, getResults, raw_input routine set with the following commands (you already have the code for the A3 and B2 moves), C1, A1, C3, B3, C2, then end with a GOODBYE command.

Moving Forward

So, here is your "homework" assignment. In the client app, remove the hard coded move commands, and use raw_input() to prompt for and get moves from the player(s) in the form of "A3" or "B2", then prepend the command "Move" before sending it to the server.

Next time, we'll modify our server to actually play the other player.

Server and Client Full Source Code can be found at http://fullcirclemagazine.pastebin.com/UhquVK4N or at http://thedesignatedgeek.com

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.

Backup With Wubi

Written by Chris Binnie

Fear not virtualization fans, Lucas's series will continue from next month.

Like many people, over the years I've used my Ubuntu desktop for all sorts of things. I look after some Ubuntu Servers as part of my job, and I find that there's nothing easier than trying out an application or a new configuration on my desktop before deploying it on a Server - to avoid any mishaps along the way. Aside from work-related changes to my desktop, I'm a fan of Compiz, and occasionally push my graphics card to its limits to see if it can handle the latest aesthetic effects that Gnome offers, and, as a result, I break my desktop configuration fairly frequently. The last time was with some daring configuration changes to Grub2 which led to an unbootable system.

Although Apt is very good at removing any packages that I've added which are no longer wanted (apt-get autoremove, for example), occasionally I will purposely install a new configuration with the intent of breaking the existing set up, one could say effectively turning my desktop into a Development Server.

Of course, on a Server in a Data Centre, an unbootable system is a real headache usually - but not on my desktop thanks to an elegant piece of software: Wubi (http://wubi-installer.org). According to their site: "Wubi is an officially supported Ubuntu installer for Windows users that can bring you to the Linux world with a single click."

Most technical people whom I've spoken to have certainly heard of Wubi, but I doubt many have used it for the purposes that I do.

Wubi uses loop disks: flat files which can contain an entire operating system like a block device usually would. These are commonly used for ISO images on CDs and floppy disks. In simple terms, on a machine with a Windows OS already installed, Wubi adds an option to the boot menu and then refers to its loop disk as if it were a separate drive on the desktop machine. Wubi quite rightly shouts about introducing Windows users to Linux - without the need to change their machine at all. It's a great selling point; if you don't want the installation any longer, then Wubi removes the entry in the Window's boot menu, and deletes the loop disk; no formatting, no partitioning, and at a low level nothing has changed whatsoever once Wubi is removed. How clever. I unreservedly love its simplicity.

This is what originally attracted me to Wubi. I wanted to extol the virtues of Linux to a relative who had a precious Window's installation, and, being that they were somewhat fickle, I didn't want to go the whole hog with a dual-boot installation in case they changed their minds.

Some of the magic behind the Wubi installation is that it's exactly the same as installing a regular version of Ubuntu - something that I was very sceptical about initially, worrying about compatibility and performance.

Loop disks aren't without some disadvantages, but in my experience, with backups in hand, they're relatively innocuous in the grand scheme of things. Firstly, if there's a power failure or someone powers down your machine without warning, then it's harder to recover the filesystem on a loop disk; fsck will struggle on regardless but not always with the same welcome results as a physical-disk installation. Apparently, installing Wubi to a dedicated disk partition can help power-failure recovery. Secondly, Hibernation isn't supported, which may mildly irritate some users with laptops. Thirdly, it's important to defragment your Window's hard-drive partition containing the Wubi install to keep disk performance as fast as possible.

If you've spent endless hours customising your Wubi installation, then you're also free to turn it into

a standard physical-disk installation, with the help of some handy tools which are readily available.

By doffing my cap at the portability of loop disks, I can back up my entire desktop in about ninety seconds to a separate hard drive on my machine. This means I can lose a hard drive entirely due to a hardware failure, I can (accidentally) leave a security hole open and unpatched, and have my computer compromised by an attacker, recover from a software bug that seizes up my machine, or break something unintentionally which leads to an unusable system. I'm sure you can appreciate the myriad of reasons why computers break.

It's almost as if you've turned your Ubuntu installation into a Virtual Machine of sorts (in the sense that it's a disk image). I would be the first to agree that the method I use isn't the most graceful, but I'm an advocate of keeping things as simple as I can so that they're easy to fix in the future without re-reading screeds of man pages.

The portability of my entire Operating System means I can back it up to a removable drive and take it to another physical machine, or I can store a copy of it in the cloud with a decent Internet connection.

Separate from this possibly, unexpected application of Wubi, it's also packed with lots more features: http://wiki.ubuntu.com/WubiGuide

During the speedy installation process (inside Windows), you can specify how large the loop disk should be, and although it's not entirely painless (back up your installation first!), there's also a single line command to resize your installation, which can come in handy.

Additionally, it's easy to mount loop disks to copy files from inside them, and again it's straightforward to access your Windows files, as you would hope, using:

```
mount -o loop myloop.disk /mnt
```

I tend to find that keeping my loop disk sized around 6.5GB makes copying the backup images much faster, and the spare space adequately copes with new package updates (the initial installation using only a few GB) and even version upgrades. Mounting a separate drive away from your installation's loop disk is as simple as mount /dev/sdX /mnt, and this ultimately means that you have access to as much disk space as your hardware can offer. My original Wubi installations were 15GB to 20GB in size, but, of course, by making them smaller you can backup your Ubuntu desktop to a DVD or a USB memory stick much more easily.

One massive plus for me is that I don't need to power down my machine to effect realtime backups of my entire system. Coming from a Server background, I'm used to booting into Single User Mode or off an alternative boot media to duplicate a disk using tools like dd, but in this case Wubi copies the loop disk beautifully without any interruption.

My first few backups were definitely crude and quick - but a little laborious. I would simply click the "File System" label on the left-hand side inside the Nautilus File Browser followed by clicking the host directory. Once inside that directory, you can see an Ubuntu directory which (without the bootloader files) contains your entire Operating System, with the largest file being the root.disk file inside the disks directory - which is the loop disk. To backup your OS, you can simply drag that ubuntu directory to any other disk with enough space outside of the "File System" label. Once it's copied, it's a good idea to rename the directory to something like ubuntu_10.09.10, so you can differentiate between backup versions.

With time, I put a simple script together which counted how many seconds the process took (mostly because I wanted to see if my desktop's hardware was behaving), mounted my backup drive before it began, and then renamed the backup's name after it had finished. The script I use is very simple and you could add something like a progress indicator if you were using older, slower hardware, and wanted to see how long the backup was going to take. As mentioned, ninety seconds on my fast desktop is barely worth blinking at for such an important

operation. Once a week, I'll backup to the cloud (thankfully my Internet's connection upload speed is adequate to move 6.5GB overnight), and every now and again I'll duplicate the backup to another hard drive inside my desktop machine too.

To automate the backups, the innards of the script are as follows:

```
# Change the filename to
today's date and time

filename="`date +%d.%m.%y-
%H.%M`"

# Mount the second hard
drive, and don't give errors
if it's already mounted

sudo mount /dev/sdb2
/media/SECOND > /dev/null
2>&1

# Copy the ubuntu directory
to the second drive

sudo cp -R /host/ubuntu
/media/SECOND/Wubi/ubuntu_$fi
lename

# Make sure the user chris
can drag and drop these
files and not just root

sudo chown -R chris:chris
/media/SECOND/Wubi/ubuntu_$fi
lename
```

To restore a backup, there are at least three very quick options. You could boot off something like an Ubuntu Live CD, and then simply navigate to your files, rename your broken Ubuntu directory to ubuntu_broken, and then copy your backup directory, for example, ubuntu_10.09.10, to that directory, and rename it to ubuntu again. If you didn't want to do that, you could just edit your bootloader, Grub or LILO for example, to point at your backup's location on a drive. I find that booting into the Window's installation and then shuffling the backup file around is the easiest solution for my purposes, and it takes only five minutes to restore my Ubuntu OS from backup.

If I ever lost my computer entirely for whatever reason, then as long as the hardware wasn't radically different, my Wubi installation should be compatible with a new machine once Windows had been installed. The only caveat I can think of is during Wubi's initial installation, it writes a couple of files to the Window's root partition, and to keep things completely future-proof, it's worth taking a copy of these. You might want to copy them inside each Ubuntu backup directory, whereas I tend to keep just one copy for each desktop I install Wubi on. The files are very small and called wubildr.mbr and wubildr.

When Wubi runs on ancient and arcane Window's versions, using from as little as 256MB of RAM and a smartphone-equivalent CPU that's just 1GHz, then it's hard to dismiss its usefulness for all sorts of purposes.

Ideas & Writers Wanted

We've created Full Circle project and team pages on LaunchPad. The idea being that non-writers can go to the project page, click 'Answers' at the top of the page, and leave your article ideas, but **please be specific with your idea!** Don't just put 'server article', please specify what the server should do!

Readers who fancy writing an article, but aren't sure what to write about, can register on the Full Circle team page, then assign article ideas to themselves, and get writing! We do ask that **if you can't get the article written within several weeks (a month at most) that you reopen the question** to let someone else grab the idea.

Project page, **for ideas**:
https://launchpad.net/fullcircle
Team page **for writers**:
https://launchpad.net/~fullcircle

Link Shortening

Owing to the weird and slightly random enclosures the current version of Wordpress throws into the Full Circle Podcast posts, I've had to resort to some link shortening in order not to mess up the Atom feed for the show.

Why Link Shortening?

A link shortener is simply a character-string generator creating unique web-links within the parent domain; this is backed by a translation table which re-directs you from the shortened link to the original long link. You might use a link shortener for several reasons:

- Makes it easier to sms-txt or to IM web-links.
- Keep web-links within character-count limits of Twitter and other social media.
- Prevent conventional web addresses contaminating your content management system or breaking your web pages.

Thanks to Rob K, our sysadmin, I introduce to you a free and open-source link-shortening script, powered by Phurl.

"Phurl is a free, clever, and easy to use PHP URL shortening system. In just 5 minutes, you can get your very own URL shortener set up and working. The script comes packed with a ton of features which you won't find in other scripts... Since the script was started in 2007, our developers have constantly worked to improve and amend the script, fixing any bugs as soon as we can."

You'll need a server on which to run it and store the translation table for your shortened links to persist.

Phurl Features

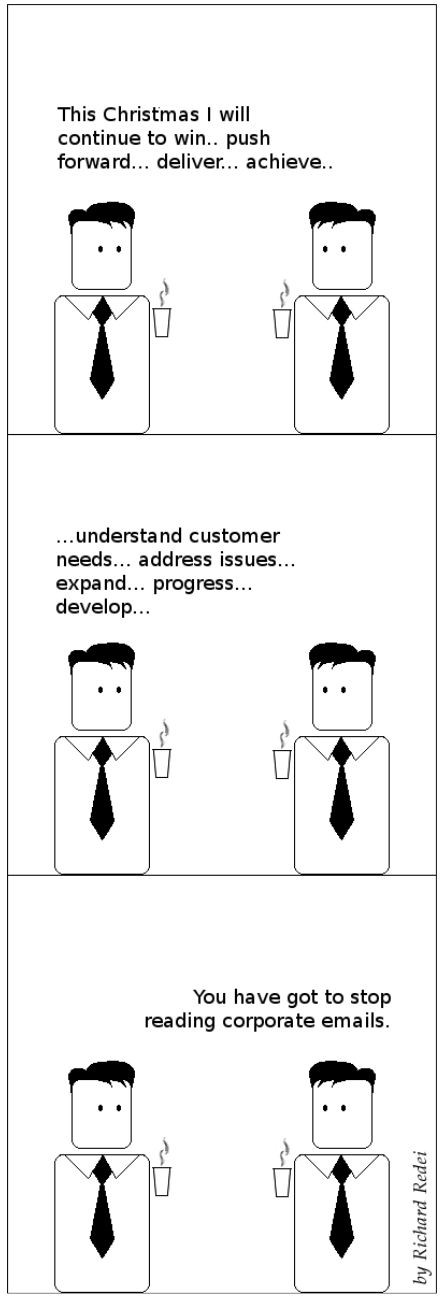
- Simple, easy and neat interface.
- Basic admin panel to view, search for, and delete shortened URLs.
- Captcha-code protected to prevent spammers.
- Shorten URLs using an alias generated by the script, or enter a custom alias.
- Browser Bookmarklets included for one-click shortening.

Other Link shorteners are available...

In news sites, you will often see neatly shortened links at the bottom of news stories, belonging to service domains such as TinyURL, bit.ly, and others.

Trouble is...

For those chasing Search Engine Optimisation (SEO) coverage, page rank, and profit, shortening a link to a random but unique short string will actually take away the SEO keyword benefits found within the link address text, both from search engines and human readers.



Write For Full Circle Magazine

Guidelines

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

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

Writing

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

Images

Images should be JPG with low compression.

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

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

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

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

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

Non-English Writers

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

REVIEWS

Games/Applications

When reviewing games/applications please state clearly:

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

Hardware

When reviewing hardware please state clearly:

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

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

Laptop :

Compaq Armada 100S with 64MB RAM (http://goo.gl/gl3mU)

Distro :

Slitaz 2.0 (http://mirror.slitaz.org/iso/2.0/flavors/)
Slitaz for low memory is called: ***slitaz-loram.iso***

First of all, I booted the laptop with the Slitaz Live CD and ran the standard installation.

Wireless

The USB wireless device was listed as:

```
USB Wireless Adapter (TL-WN620G)
```

To get it working, I downloaded *tazndis* from: http://ftp.nluug.nl/pub/os/Linux/distr/slitaz/packages/cooking/

The tazndis file is a replacement for ndiswrapper and has a GUI. It doesn't have all the options that ndiswrapper has though. Next, I installed the .inf (Windows setup) files with tazndis (it has a very good help file).

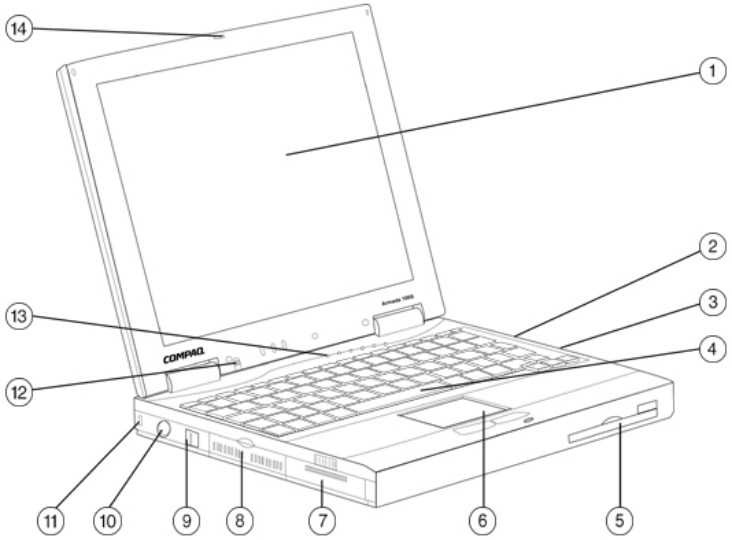
Note : For all the above, and due to lack of a LAN card in the laptop, the installation was done by USB flash drive with another computer. I was downloading from the Slitaz site and installing the dependencies one by one.

Conclusion

The laptop works fine and now has a wireless Internet connection. The only problem is with the browser. I had Midori, which is quite slow for most of the pages I tried (that's why I've ordered an additional 128MB RAM). Dillo, on the other hand, is fast, but it has lots of compatibility problems with many pages. I also tried Lynx. It was as fast as a bullet, but with no graphics.

Next Target

A Compaq Contura Aero laptop with only 4MB RAM. I'm going to try Minix3, muLinux, BasicLinux and some other floppy based distros. Actually, for this machine, I'm definitely going to buy a memory extension (16MB) to reach 20MB. Then I can make some progress. I hope!



1. 12.1-inch HPA, 12.1-inch TFT or 13.3-inch TFT Color Display
2. CD-ROM
3. Infrared Transceiver
4. Keyboard
5. 1.44-MB Disk Drive
6. TouchPad
7. Battery Bay
8. PC Card slot
9. Integrated RJ-11 Jack, 56K V.90 modem
10. Power Switch
11. Cable lockslot
12. Microphone
13. LED indicator Lights
14. Display Latch

MY STORY

Written by Praveen Kumar Singh

I am doing a B.E (Bachelor of Engineering Degree), and I'm in my final year. I've been using Ubuntu for the last 10 months. My Ubuntu story started one day in my class when one of my friends, Gautam, turned to me and asked *"Have you heard about Ubuntu?"* My first question was *"what is that?"* Then he told me that it is a Linux OS, which he installed yesterday; it's free, and you can download it. At that time, I knew only that Linux is an operating system. Fortunately, I was living in a hostel with a very good net speed, so it was easy to download a 700MB software image. I installed it under Windows, because I didn't understand the different installation options. I was excited about the appearance of Ubuntu. I restarted my laptop and was just amazed to see the look of Ubuntu. So simple and so amazing!

Now, although I had no guides, there was Gautam - but he had also just installed Ubuntu and no one locally was working on Ubuntu. I believe Google is the best teacher in the world. So, to avail myself of the best teacher, I had to connect to the net on Ubuntu - but I didn't know how. So, I switched to Windows and started to look for some tutorials, and eventually I found some videos on YouTube, and successfully implemented their contents. I used Ubuntu every day and tried to learn new things about it. I managed to get some books from my college library, and started to read about commands from the books, and from Google also. I had to manage between my studies and reading about Ubuntu, because Unix or Linux were not in my course. But it was fun to do some new things every day. One day I was thinking, *"how to run C programmes in Linux?"*, and when I searched for this I found Full Circle magazine, which mentioned this in one of their issues. I read the whole magazine and was very impressed. I downloaded all issues and read them one by one. I got to know a lot of things.

After this, I told some of my friends about Ubuntu, and some of them also installed it - actually one of my friends (Tarun) became a core Ubuntu user. Now, I have a friend with whom I can share my thoughts on Ubuntu. We are also running a blog - www.tricksfind.blogspot.com, where we put all the Ubuntu tricks which we've learned. I think it is a good way to compile your tricks and learning. Just a few days ago, our college held a seminar on Linux - so that we could spread some knowledge of Linux, and the benefits of using it. In our final year we also have to complete a major project, and we have decided to make a project which is based on Linux - that is why we have chosen to convert Linux in Hindi (a native language of India). We have done some research on it, and we hope to implement it. If you have some ideas, then you can send me an e-mail at c2praveen30jun@gmail.com. Currently, I am working on how to create Debian packages. I found a nice tutorial with the help of a buddy on IRC. I got to know how to connect to IRC from the article given in Full Circle magazine. I also wanted to contribute to Full Circle, and that is why I have decided to translate the magazine to Hindi with my translation team. I hope that soon all the readers from India will be able to see Full Circle in their native language.

One thing I want to say - if you also want to learn Linux, just start it; do not wait for any guides. Join the forums like ubuntuforums.org; you can learn a lot from others. Make mistakes, face the problems, and then look for the answers. Do not treat your OS as restricted software - you are free to explore it. It is open source, so make yourself also open. I have seen a movie named Antitrust, where it is said about open source that knowledge belongs to humans. So, always remember it!

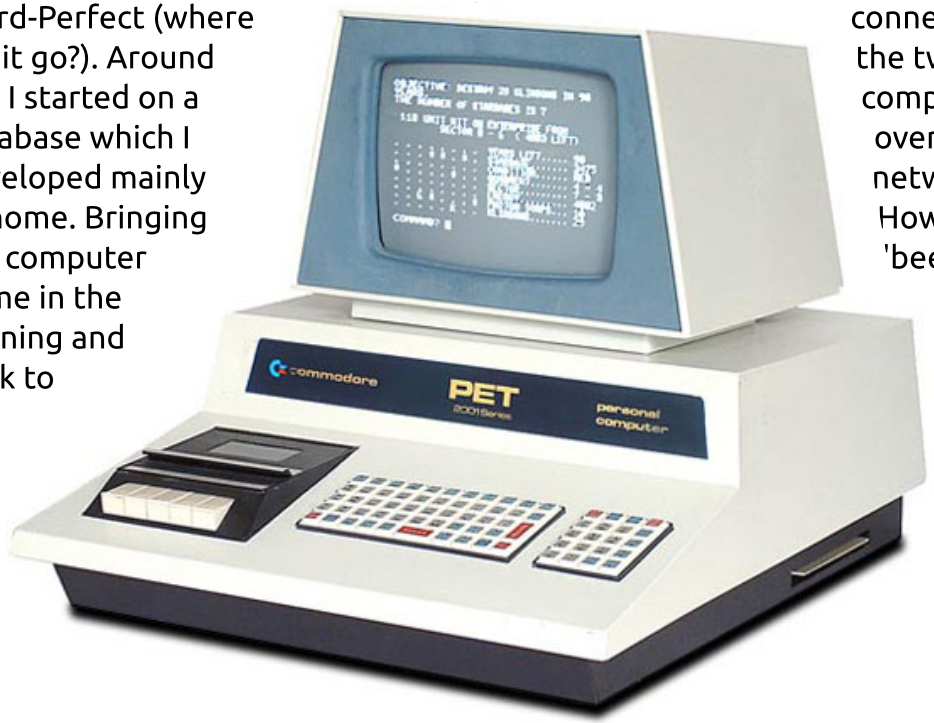
MY STORY

Written by Jan Mussche

The first computers I experimented with were Commodore PET computers, soon followed by the 32K CBM (Commodore Business Machines). This was in the early 80s. Around '86, I got the first (and only) company PC on my desk. It was an IBM clone with two 5-1/4" disk-drives, a monochrome monitor, and no hard disk at all. I used it mainly to write user manuals for the computer systems our company built - systems for controlling machines, mainly milling machines.

I booted the computer with a DOS 3.3 disk in one drive, and, in the other one, a disk with the text editor Wordstar. On the same disk, which could hold 360KB, I also saved the complete manual. Imagine that, one floppy disk with software and data!

Two years later, I received a 286 computer with 2 monitors: one monochrome Hercules screen and one EGA screen. This computer had a 20MB hard-disk which I could not fill - it was too big. The two monitors were for a CAD program to develop the layout of printed circuit-boards. On the Hercules screen I would see all the menus, and on the EGA screen the graphical layout. Beautiful. I can't remember if I also used a 386, but I do know I have used a 486 (with a 487 co-processor) for a longer period of time. In that time, I used Windows 3.11, and later Windows 95 - still with the text editor Wordstar, and later Word-Perfect (where did it go?). Around '98, I started on a database which I developed mainly at home. Bringing the computer home in the evening and back to the office was not realistic, so I got the first Pentium the company bought, running with a 75MHz processor. The database was made with Access, and, as soon as it was running like I wanted it to, I wanted to expand it with a second computer placed in the warehouse. My colleagues could then input the changes in stock very easily.



I made a third database. Now came the tricky part. I had to connect the two computers over a network. How the 'beep' do I do that? With the Pentium I had at home, I had a dial-up Internet connection of 56kbps. So I learned from what I found on the net, memorized it, and at the office I tried to copy it. I was so happy when I saw the contents of the warehouse PC while looking at the screen of my office computer for the first time. It worked!

I got more and more interested in computers, still sticking with Windows. Somewhere in 1999, for the first time, I bought my own computer, with Windows 98 on it. The Internet connection became faster (ADSL), and so it was easier to get more and more software. Not completely legal, but having to pay for all of that was impossible.

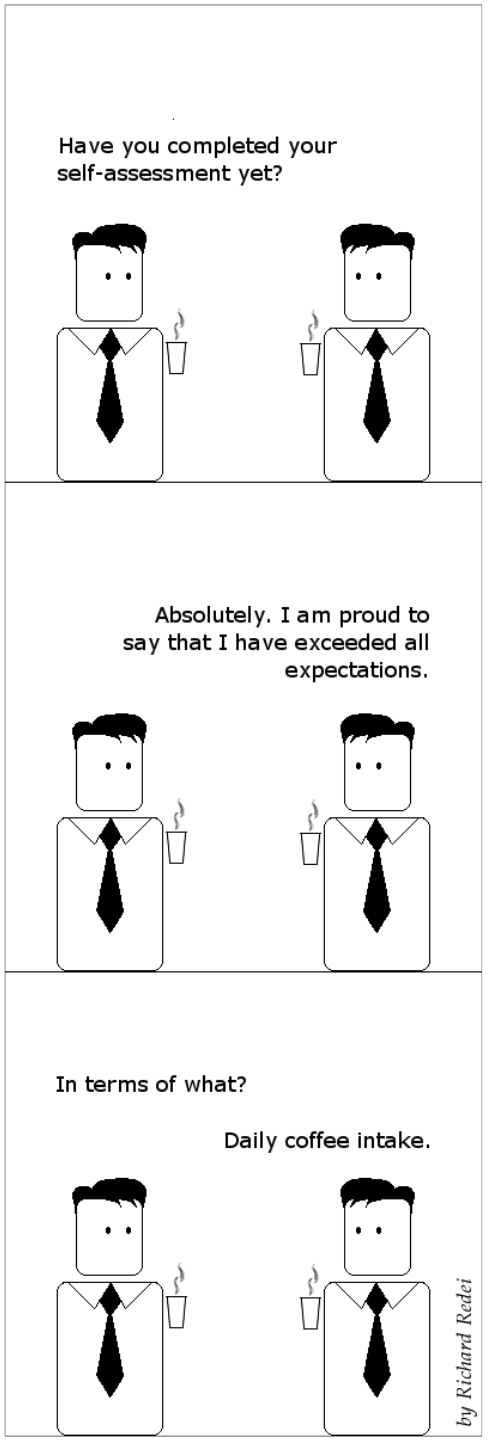
It was then that I learned there was also another system (Linux) which was free, and it got my attention right away. I experimented with a couple of its distributions a bit - Red Hat's Fedora and OpenSuse - and had no clue what I was doing. So it was back to Windows. The newest

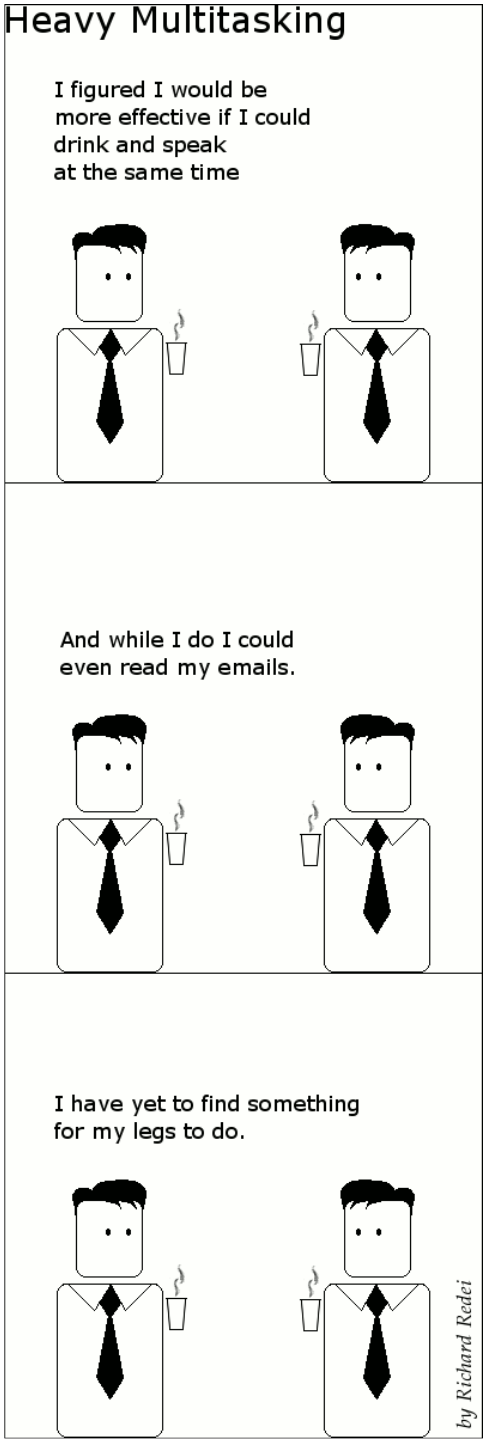
computer had XP pre-installed and that worked.

Somehow the idea of using Linux persisted, and it was in 2008 that I installed Hardy Heron side-by-side on my XP computer. I like something different. Hardy worked out of the box, and I learned a lot from it. When Intrepid came, I stayed with Hardy because of the many negative things I read on the Ubuntu forums about it. True or not - I don't know. Also, Hardy was (is) an LTS version making support last a long time. Like so many others, I could not resist making the jump to Jaunty in April 2009. Maybe too soon - because the new release also had some things which did not work immediately. But I managed to get things working with the help of the great forums. By that time, the dual boot was gone and it was only Linux from then on. Karmic was skipped again, but, in April 2010, I did install Lucid. I must say I was not happy with a couple of things (and still am not). Why a change was made from Grub-1 to Grub-2 is something I still don't understand. And then, of course, the fact that the min-max-close buttons were moved to the left side of the screen. Well - not for me. I still have them where they belong: on the right side! I am so used to having them there that I don't want to change. That's what makes Linux so great: the opportunity to choose what and how you want it. There is only one Windows with little or no choice, but there are so many Linux variations to choose from and to configure the way you want them.

I also have an old laptop sitting on my desk. I use it for experiments with other operating systems. At the moment, I use Ultimate Edition on it, making it pretty slow. It's a Celeron, 1.4GHz with 512MB ram and 40GB disk.

On our third computer my wife still uses Windows, but, slowly but surely, I am changing the programs she is using to open-source versions: e-mail is handled by Thunderbird, office work is done by OpenOffice.org, and the web-browser is Firefox. Soon, I will install either Ubuntu or Mint on it. Then, the only Windows in this house are the ones you look through to see what the neighbors are doing!





Unetbootin

Your first question may be *'why do I need this?'*

Answer: when you need to create some bootable media for utility use – say a system rescue on a sick PC or just to try out a new or updated distribution without installing to the hard drive. You don't need to remember a complex set of command-line instructions as this is a convenient graphical user interface to do the job for you.

'But surely, I've got Startup Disk Creator in Ubuntu, I don't need another boot utility?'

Unetbootin does much more. And don't call me Shirley (in memoriam, Leslie Neilsen, RIP).

I see two advantages over Startup Disk Creator:

- Startup Disk Creator only creates media to boot whatever ISO images or CDs you have in your possession
- It doesn't work reliably

Unetbootin is available from Synaptic or Software Center. It's a small install which should be added to your System Tools menu group. Fire it up and you get a single control panel as illustrated.

The top half I call the 'outreach' utility. It allows you to select and download the image for a number of Linux distros on the fly. Need a copy of System Rescue CD for diagnostic purposes? Fancy a go at the current Kubuntu with KDE 4.5? This program goes and fetches them for you.

The bottom half is for the convenience of the 'home-bake' enthusiast; point it at a CD or ISO image you already have, that's straightforward. There's also a Custom option where you can specify a kernel version and bootloader config. If you don't know what that means, there's a research project for you, else don't bother. You'll need to be a mid-level kernel hacker to get the most out of this, but if you are, I can see this is a useful labour-saving option.

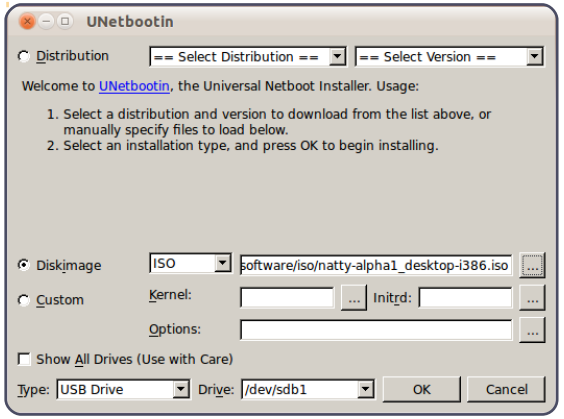
Last of all you specify the target media for your boot image – the 'Show All Drives' option is rightly labelled “use with care” as this tool will let you zap your primary bootable hard drive if you're daft enough to tell it. USB thumb-drives come top of the list, but you could just as easily make an external drive bootable or burn optical media.

The good, the bad and the downright ugly

I like this. It's easy, it's quick – a 1GB USB key is ready in under a minute – it appears to be more reliable and consistent than the Ubuntu equivalent. The list of downloadable ISOs covers the majority of current main distro versions, but not on the cutting edge; Ubuntu 11.04 Alpha I had to fetch myself. As it's one of those over-size ISOs that won't fit a CD but happily goes on a USB stick, this was a fast and simple way to get going. And by way of example, the version of 11.04 written by Startup Disk Creator doesn't always boot, but my Unetbootin version does.

It's not perfect however. Various third-party tests have shown that Unetbootin doesn't always manage to download the full distribution, and when it does, not every combination of PC hardware will allow a boot from a Unetbootin-written image. Don't forget the BIOS settings must allow USB, optical media and secondary drive booting if that's what you're asking.

And please, don't accidentally hose your primary hard disk with this thing; you're still the driver at the wheel.



MOTU INTERVIEW

Supplied by http://behindthecircle.org/

Michał Zając

Age: 16
Location: Lubin, Poland
IRC Nick: Quintasan or Quintasan|Szel

How long have you used Linux, and what was your first distro?
How long? Kind of hard to remember, maybe three years. My first distro was Ubuntu, then very soon I switched to Kubuntu, and, after a few months, I found myself using Gentoo, but I discovered it was a waste of time and I switched back to Kubuntu.

How long have you been using Ubuntu?
I would say I have been using Kubuntu for two years. I was curious how Linux works, and, after googling and visiting some sites, I thought Ubuntu would be a good choice, but I didn't like GNOME, and so Kubuntu was an obvious choice for me back then.

When did you get involved with the MOTU team and how?
At first, I used to translate apps but serious contributions started somewhere in the Jaunty cycle. My first "contribution" was importing upstream patches to fix issues with Qt 4.5 and KDE 4.1.

What helped you learn packaging and how Ubuntu teams work?
Packaging? I have learned it The Hard Way, instead of reading the awesome wiki we have I started meddling with debian/ dir, and poked guys on IRC each time when some Strange Error popped out . Guys on #kubuntu-devel and #ubuntu-motu were very helpful, and I managed to grasp the basics of packaging, patching, and the whole review process within two hours.

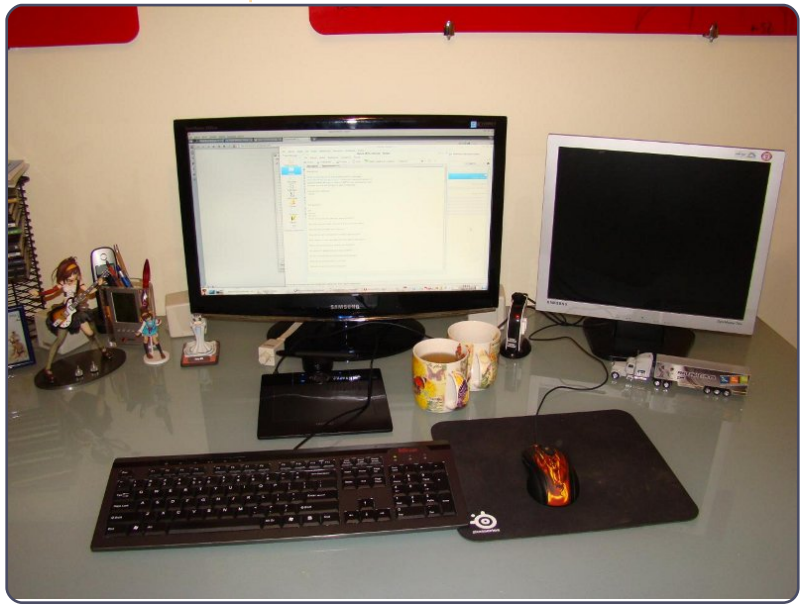
What's your favorite part of working with the MOTU?
Everything. But if I had to choose just one thing, it would be when users drop into the IRC channel and thank developers for their hard work (+100 to motivation).

Any advice for people wanting to help out MOTU?
Don't be shy, - join us on #ubuntu-motu, and ask how you can help. We don't bite, and can provide you with assistance if you run into problems on your MOTU adventure.

Are you involved with any local Linux/Ubuntu groups?
The Ubuntu Polish LoCo. You can find me on our IRC channel (#ubuntu-pl)

What are you going to focus on in Lucid?
Of course working with Kubuntu Ninjas (ssssh, we don't actually exist!) to bring you new and shiny KDE SC releases. I'm the new maintainer of Project Neon (nightly builds of KDE SC and Amarok), so I will also concentrate on that. I'd also like to tidy the needs-packaging list a bit so we have a clear list of things we really need to have in the repositories.

What do you do in your other spare time?
So, I learn Japanese by myself since there are no courses here in Lubin or somewhere nearby. I also love skateboarding and watching anime. I've recently started learning C++, so I study it very often too.

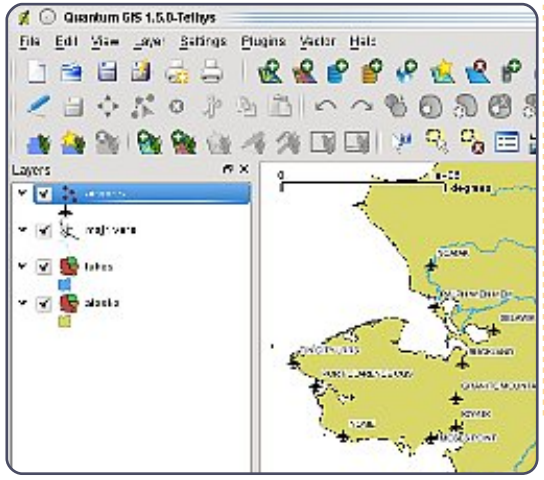


LETTERS

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.

Correction

In your November "My Story", by Jesee Avilés, he makes one terrible mistake. QGIS (below) is a Geographical Information System, not a 2D CAD application. Although for many people, they could be the same they are radically different. In a GIS you can create, store, and display data in a variety of coordinate systems. Some could argue that a CAD can handle data that essentially has a coordinate system. That is partially true since a CAD system does not know how to handle data of contiguous UTM zones, for instance. Another difference is that data in a GIS has an attribute table that allows you to play in many different ways with your data. The differences could go on and on, my point is that you must check more thoroughly these kind of articles. I personally live in a Windows world, but I use Ubuntu for some special projects. I use QGIS to introduce my students (B.A. in Archeology) to cartography and digital cartography. QGIS, being multi-platform, allows me to expand my audience (many of my students use Mac or some flavor of Linux) and, being open source, problems with violating DRM don't exist.



Gerardo Jimenez Delgado

MORE CLI!

In FCM42, Chris Burmajster pleads for "even less CLI". Though on first sight one might agree with this, I really do sympathise with this, but when you consider this more closely this is not what we want. A GUI can only scratch the surface of the most often used capabilities of Linux. If we want to put all the capability of Linux, in a GUI, that GUI would get so big and complicated, that no one would be able to find even the most common button to accomplish anything. So his plea for a "simple GUI in which one can do anything" is just completely impossible. Sorry about that.

If people move from Windows to Ubuntu, the advantage they get first is a safe and more reliable system, in which most things they want to do can be done using the GUI, which is simple, I do agree with that. The real strength of Linux is in the command line, and anyone who can use a keyboard to type some characters can profit from even the most simple commands, of which it is not really necessary to learn that many. There is nothing complicated in using simple commands such as cd, ls, mv, cp, except for a psychological barrier maybe. The power is that one can vary these commands in many tens or hundreds of ways, and that is daunting if you want to know them all, which no one does, or needs to. One can use 'man' to know all that one needs. Man is short for "manual" (handbook on the hard disk), and is also a command. If one chooses not to use the CLI, then just don't use it, but please do not ask for a magnificent OS as Linux to be Window-ized from its real power.

Jaap Woldringh

More Backup Ideas, Less Excuses

All the highlighted backup solutions Mr. Mins offered [in FCM#43] are very good. Dropbox and Clonezilla are especially good tools. Unless you are limited to one desktop device, there are other options as well. My Linux gateway box is provisioned with an extra hard drive just for backups. Under that scenario you then have two additional options:
* Rsync - an old stalwart that 'just works' when a little configuration is applied to it.

* Unison - my tool of choice when it comes to data syncing. One of its most useful attributes is that it is cross platform and syncs data with great efficiency.

John McGinnis

I just read FCM#43, and in the "Backup Ideas" it really missed spideroak: http://www.spideroak.com.

It has great Ubuntu (and other Linux) support, and the client is very configurable. They also have a zero-knowledge approach, meaning that the Spideroak company and employees cannot find your password or decrypt your data. That gives me real peace of mind.

I am sorry that I don't have time to write a review myself - but please take a look. The 2GB accounts are free, and if you want more data there is 100GB for 100 USD.

I am not affiliated to Spideroak in any other way than being a satisfied customer.

John Jaarsveld

Ronnie says: *Spideroak certainly seems popular, as Paddy Landau also mentioned it in an email. Thanks for letting us know about it folks!*

Grep Or Not To Grep

I noticed the answer to this question:

*Why doesn't the command: ls | grep *zip do what I want?*

and wanted to provide an alternate reply: The reason is that * means that the preceding character repeats 0 or more times and you haven't specified a character, so it returns empty. The solutions are:

```
ls | grep .*zip
```

(. signified a single character except newline)

or forget grep and use:

```
ls *.zip
```

Gautham Pai

Business Proposal For You

Good Day. I am Khaldoon Khalifa, the director in charge of Auditing and Accounting section of OCBC Bank. I have a Business Proposal of $2,300,000.00 USD for you to handle with me from my bank. I will need you to assist me in executing this Business Project from Malaysia to your country. If interested, please Kindly Contact me on my private email which is (<snip!>) for more information.

Sincerely,
Mr. Khaldoon Khalifa

Ronnie says: *Not **another** multi-million dollar business offer! But I do feel smug knowing that several thousand people have just read the spam email I received.*

UBUNTU WOMEN

Written by Silvia Bindelli and Flavia Weisghizzi

Just a couple of months ago, Italy reached a great goal related to the women in the free and libre open-source movement with the founding of a new group, donne@softwarelibero.it ("donne" is Italian for "women"), which includes women and men active in different open-source projects.

The story of this group is intimately connected to the Ubuntu Women project.

Flavia Weisghizzi and Silvia Bindelli, both members of the Ubuntu Women Team, met in 2009, and talked about problems they had in tech, and opportunities the Ubuntu community gave them. They concluded that, to encourage the participation of women in the Ubuntu project, they should start with those nearest to themselves.

Many people in Italy feel uncomfortable talking in a foreign language due to lack of confidence in their language skills, so to start writing to an English mailing list or in an IRC channel could be felt as a further barrier to participation.

This is the reason why, in concert with the Ubuntu Women Team, and after discussing with other members of the Italian LoCo Team, they decided to create a localization of the Ubuntu Women Team, which is mainly built around a mailing list in Italian, where they translate to Italian the main news from the International team, and add news about local events and initiatives.

Some months later, DUCC-IT (Debian Ubuntu Community Conference Italy) was held, which gathered together people from both communities, and which was attended by, among others, Stefano Zacchiroli, current Debian Project Leader. During this Conference, Silvia and Flavia met Italian women from the Debian Project and discussed with them the reasons for the low participation of women in free software projects. From this, and from the discussion with the audience, the idea of an Italian group gathering together women involved in free software was raised.

Immediately, some women from the Fedora project offered to participate in such a network, and notwithstanding distribution differences, they all sat at the same table.

The project was born with a mailing list and launched during the last Linux Day in many Italian cities. A joint press release was written, and published on blogs, social networks, and some magazines.

Currently, there is a Wiki page of the project at http://www.fsugitalia.org/donne and also an IRC Channel (#donne-softwarelibero) on freenode.net network.

Some voices have asked about the reasons for such an effort, but data about feminine involvement in open source are incontrovertible: it seems that less than 5% of those working in FLOSS are women, and that makes women a large minority in the software libre world.

The aim of this group, which is completely independent from every single distribution or project, is to become a place where women (and men, of course) who contribute to different free-software projects, can meet, discuss, and encourage the participation of women, through talks, events, conferences, and whatever kind of marketing and promotion initiatives can be undertaken. Moreover, an important item in our ToDo list is to train and sponsor some speakers coming from different experiences, to talk about themselves, and present their own examples to show that women have much to give, and need only be brave enough to try.

Quake Live: One Year On

News

- In the next few weeks we'll see the release of **BEEP** and **Atom Zombie Smasher** onto Linux.
- It's back again! Pay what you want for 5 indie games: **Braid, Cortex Command, Machinarium, Osmos**, and **Revenge Of The Titan**. All will be reviewed in upcoming issues of FCM!
- **Trine** and the upcoming **Trine 2** will be released to Linux.

Quake Live has been available on Linux for over a year now, and a lot has changed since its launch. Since my review in Issue 29, I want to look back at changes made to the game, at how the community has grown, and convince a few of you to get back into Quake Live - or try it for the first time!

For the people who do not know what Quake Live is, or have never played it, it's a free-to-play version of Quake 3 - developed by the same people, id software, which has been updated and improved. They have kept the same great Quake 3 content (maps, models, gameplay, weapons) and added modern gaming features such as a matchmaking system, achievements, stats and friends' list. It's available on Windows, Mac and Linux.

Shortly after Quake Live's Linux release in August 2009, id software pushed out small updates every few weeks, which included bug fixes and balancing changes. This is usually the norm for free-to-play games, but many wanted some new content. From the start, id software offered 20+ maps across 5 game modes, there was plenty of content to start with, and plenty of servers and players to play against. During Quake Live's first year, we knew that there would be a subscription service arriving for the game.

Finally, exactly one year after Quake Live launched, the subscription service was out. The free-to-play side of Quake Live is still available, supported by ads and with the same great content Quake Live released with. The subscription service has two tiers, Premium and Pro, priced at £1.59 p/m and £3.18 p/m, respectively. These subscription services add new maps and game modes, no ads, creating your own clan, and more stats available to you after each game. Even though these services offer great value for the money, they have been slow to be adopted by the entire Quake Live community. Many Premium servers with the new maps and game modes are almost empty. Currently, the real benefit to subscribing is getting rid of adverts. I believe the reason for the slow adoption is that most people are still happy to play for free, while some people who do want to pay prefer PayPal, which id software still has to add as a payment option. If you are considering upgrading to a subscription service, I would recommend Premium, since Pro offers not a lot more than Premium.

Feature Comparison	STANDARD	PREMIUM	PRO
Access to Standard QUAKE LIVE arenas	✔	✔	✔
Access to Standard QUAKE LIVE game modes	✔	✔	✔
Over 40 different character models to choose from	✔	✔	✔
Practice and compete against automated bot players	✔	✔	✔
Skill matching to find your best challenge	✔	✔	✔
Rich career statistics	✔	✔	✔
Play on your choice of game servers all around the world	✔	✔	✔
Integrated internet chat with friends and competitors	✔	✔	✔
Customer Support	Forums Only	Full Support	Full Support
Join Clans	Up to 1	Up to 5	Up to 10
Extended Match History	28 Days	6 Months	1 Year
Access to QUAKE LIVE Premium arenas		✔	✔
An all new Freeze Tag game mode		✔	✔
Exclusive Awards		✔	✔
Create your own Clan		✔	✔
Regular content updates		✔	✔
Bypass pre-game advertisements		✔	✔
Bypass the site queue		✔	✔
Ability to start your own matches, specifying location, game type and exactly who you want to join			✔
Invite up to 3 friends with Standard level memberships to play with you on premium content			✔

Id software's support for the game has been pretty good over the year it has been around. The

promised content updates have been pretty good since the subscription service was released. These content updates are out every few weeks and still come with bug fixing and balancing. Now there are new maps, achievements, new server options, and general improvements to the game. Each weekend, there is the DevPick event, which is where a few servers are changed to have a new map rotation and gameplay tweaks on that server such as low gravity or faster reload. Quake Live has a growing community on the official forums, which the developers do get involved in, mainly commenting on the suggestions and support threads.

When I first wrote my review of Quake Live, one of my concerns for the future of the game was the pro scene. Quake 3 is regarded as the best game in the series, and has been adopted by the pro scene, and has been used in the E-Sports Leagues for many years. I was worried that Quake Live would be ignored by the pro and die-hard Quake players, and that they would carry on playing Quake 3, but I was wrong. Quake Live has been a big hit in this space, mainly thanks to its on-going support by id software and being a very balanced game, retaining all the great gameplay features of Quake 3. Quake Live has been used in tournaments such as QuakeCon, Intel Extreme Masters, ESL, and Dreamhack.

There are plenty of Quake clones on Linux, and you can even play Quake 1 to 4 natively, so why should you play Quake Live. For starters, it's based on the best version of Quake - Quake 3 - and has been updated and improved with new features. It still has all the great maps, weapons, and gameplay tweaks of Quake 3, but now with modern gaming enhancements. The graphics have been given some improvements, with updated textures and support for HDR and anti-aliasing. It has a very comprehensive stats feature, giving you detailed stats on each match you have played. "Achievements" has been a favourite new addition to gaming, since Microsoft added it to their Xbox platform. Quake Live has a similar system. A built-in clan system is a must-have feature for many online shooters, and Quake Live has one of the best implementations I've seen. The friends list and profile pages add a more social side to Quake Live. Moreover, Quake Live is the only game id software still actively supports, releasing updates every few weeks. More maps have been added to Quake Live than to Quake 3, including official Quake maps from the previous games and famous modders maps.

Quake Live is one of the best online shooters on Linux, thanks to a very polished and comprehensive shooter. It is a free-to-play, so if you're an avid FPS fan, just give it a go. I guarantee you will not be disappointed. Quake Live has had an excellent first year, surpassing my expectations. I am sure Quake Live has an excellent future, thanks to id's support and the sheer size of the community.

Q&A

Compiled by Gord Campbell

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

Q I have a printer attached to another computer on my network running Ubuntu. I've "shared" the printer, but I can't see it over the network.

A To add a printer from a Linux share, you must set the printer as sharable AND set the printer server settings to Publish, and grant any controls that are required.

Q How can I minimize the number of updates I need to apply after installing Ubuntu?

A There is a daily build for Ubuntu 10.10 which contains all updates: http://cdimage.ubuntu.com/daily/current/

Q When the computer wakes up from sleep, I don't want it to ask for a password.

A Go to System>Preferences>Screensaver. Uncheck "Lock screen when screen saver activates." Also, in System>Preferences>Power Management, uncheck "Lock on suspend key."

Q How can I find a wireless-n adapter that works in Ubuntu?

A Pick an adapter from an online retailer's site, then check it at:

http://linux-wless.passys.nl

Q I recently installed 64-bit Ubuntu Maverick. I have been trying to mount my HDX-1000 media server, but I keep getting *"mount.nfs access denied by server while mounting ...".*

A (Thanks to ***xeddog*** in Ubuntu Forums) I found a list of all the different parameters that can be specified on an entry in the fstab, and added "nfsvers=3", so the line now reads:

```
HDX-Server1:/share
/media/HDX-Server1 nfs
rw,rsize=8192,wsize=8192,intr
,nfsvers=3
```

Q I would like to upgrade to Ubuntu 10.10, but the release notes say, "the new Xorg 1.9 available in Maverick is not compatible with nVidia based chipsets that use the (nvidia-96) and (nvidia-173) drivers."

A (From Launchpad) "You can update your system with unsupported packages from this untrusted PPA by adding ***ppa:dajhorn/nvidia-96*** to your system's Software Sources." The 96.43.19 driver is reported to work well with Maverick.

Q I just installed 10.04 on a three-year-old computer to use as a media streamer for a new 60" flat panel. It displays nicely but comes up off-center to the left.

A The TV's menus include an "auto adjustment," which centers the display.

Q Can I close my laptop but still keep it running?

A Preferences/Power Management has a setting for what to do when the lid is closed. Set it to "blank screen."

Q When I try to adjust the volume on my computer, using the volume control on the panel, or the volume buttons on my keyboard, it changes the quality of the sound but not the volume.

A I fixed it, first a command:

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

then in the text file:

```
options snd-hda-intel model=gateway-m4
```

Save and reboot. Then I installed the pulseaudio-equalizer.

Q My webcam worked in 10.04, but, when I upgraded to 10.10, the kernel modules changed and the driver no longer worked.

A Download the gspca-2.11.3.tar.gz tarball from the following gspca web site: http://moinejf.free.fr/

You might need to install build-essential using Synaptic.

Untar the file, then follow the readme instructions from the tarball:

Open a terminal, and cd to the directory where the make file is. Then:

```
make
```

```
sudo make install
```

Reboot to load the new modules. Run Cheese to confirm that it works.

Q I have Ubuntu 10.10, but cannot access an XP workgroup or machine. I can ping in both directions from Ubuntu to XP and vice versa. When I try to open the Windows Workgroup I get the following error:
Unable to mount location. Failed to retrieve share list from server.

A "Unicasting" was turned on in the router, when unchecked everything works.

Q I just put 10.10 on my friend's laptop. During the install, I by-passed the bit where one might add a log-in password during bootup because I just wanted her to try it out as easily as possible. Now she is loving it, I think it might be sensible to add a log in screen to the boot up. How?

A Go to System > Administration > Login Screen and disable automatic login.

Q I have an external USB hard disk. I erase several gigabytes from it, but clicking over the properties option from the HD, the available space doesn't appear. I did a manual erase from recycle and System Volume Information directories, but the problem is still there.

A Those are Windows artifacts. Open the external drive in Nautilus, right-click on the Trash icon and select Empty Trash.

Q With Ubuntu 10.10, I can't play DVDs.

A Open accessories/terminal, and paste this in:

```
sudo /usr/share/doc/libdvdread4/install-css.sh
```

If the file is not found, use synaptic to install libdvdread4 and try the command again. Then reboot, and you should be able to play DVDs.

Q How can I play .swf files in Firefox?

A Use the Flash-Aid FF addon:

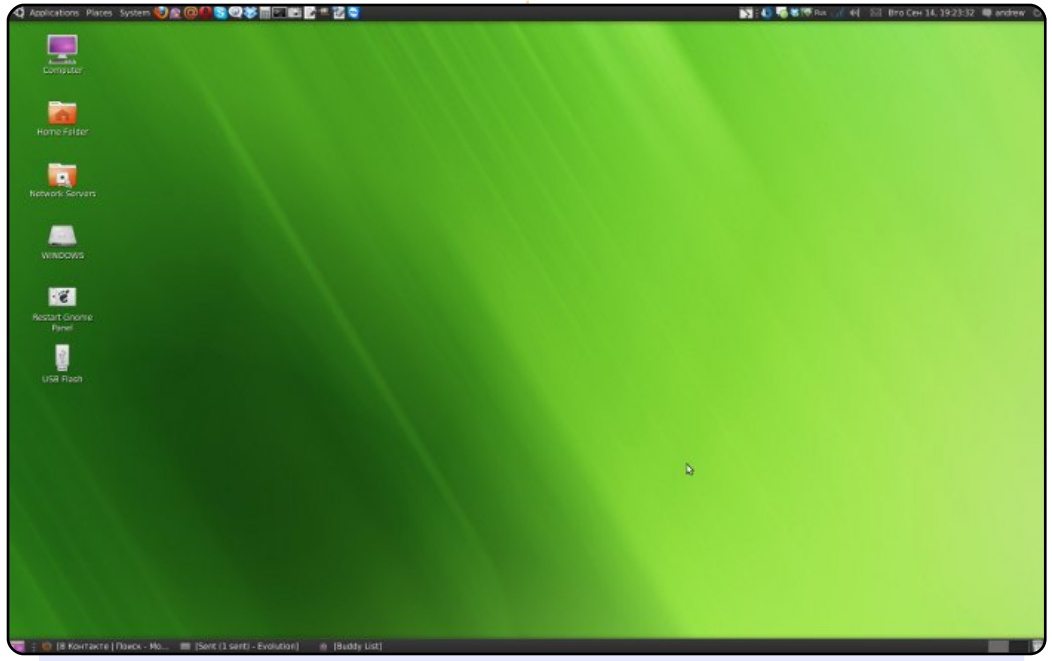
https://addons.mozilla.org/en-US/firefox/addon/161939/

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 1440x900 desktop on Ubuntu 10.04. I use AWN and Conky to have an interactive desktop - with my weather stats and CPU stats published in the top right. Whenever I get new e-mails on my Gmail account, the number of e-mails, who they are from, and the subjects are displayed in the gmail letter on the right. Also, my twitter feed of whom I follow is displayed in the virtual iPad on the bottom right. Whenever I am listening to Last.fm via Rhythmbox, the album cover, song title, artist, and album are displayed in the virtual iPod on the top left. The theme is the Woody theme with Balanzan icons.

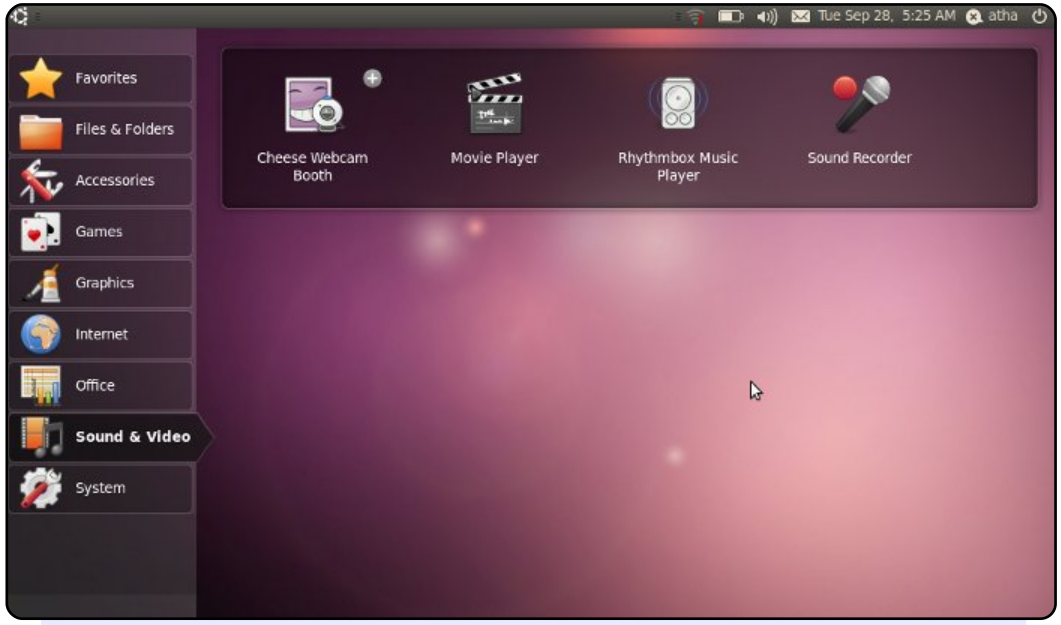
Christoph Roesch



My name is Andrew, I am 13. This is my Ubuntu Lucid desktop. I use the English language (I am learning it, but my native languages are Russian and Ukrainian), and New Wave as the default theme. Unfortunately, my printer doesn't work with Ubuntu. So, I use Windows as an alternative system for printing and games.

Computer Configuration:
Intel Pentium 4 (CPU 3.20 GHz)
Operating memory (RAM): 512MB
Hard Drive Disk (HDD): 160GB
Graphics Card: nVIDIA GeForce 9500GT (512 MB)

Andrew Bida

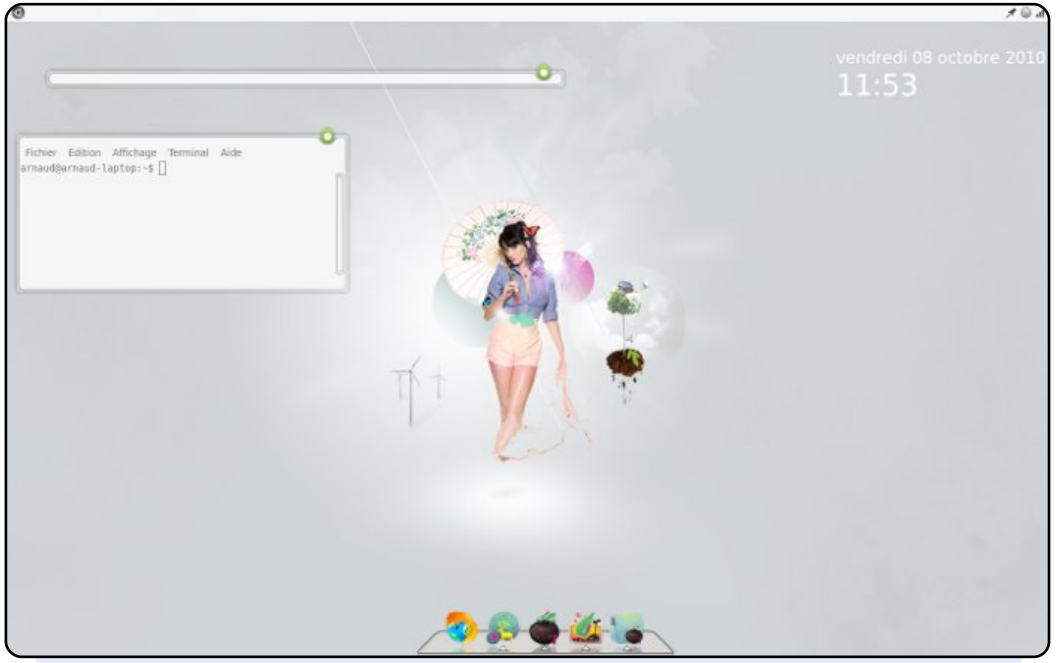


I've been using Linux since 2000, with many distros such as Red Hat, Mandrake (now Mandriva), and many versions of Ubuntu.

Here is a screenshot of my Ubuntu Netbook desktop; it's installed on my Acer Aspire One D255 Netbook with specs: Intel Atom N550 Processor (with dual core) and 1GB RAM

Greetings from Batam, Indonesia!

Athailah



This is my Ubuntu 10.04 running on my Acer Aspire 7730G. I have customized my desktop thanks to the websites Gaia (www.gaia10.us) and Artescritorio (artescritorio.com).

This is my desktop's configuration:
-Wallpaper : Mother Nature
-Icons : Faenza
-Dock AWN : Gaia Icons
-Conky : Simple configuration (only for the date and time)
-Theme : GAIA Sprout

Software and hardware specifications:
-Intel Core Duo processor T5800 - 2 GHZ
-NVIDIA GeForce 9600M GS TurboCache
-4 GB DDR2

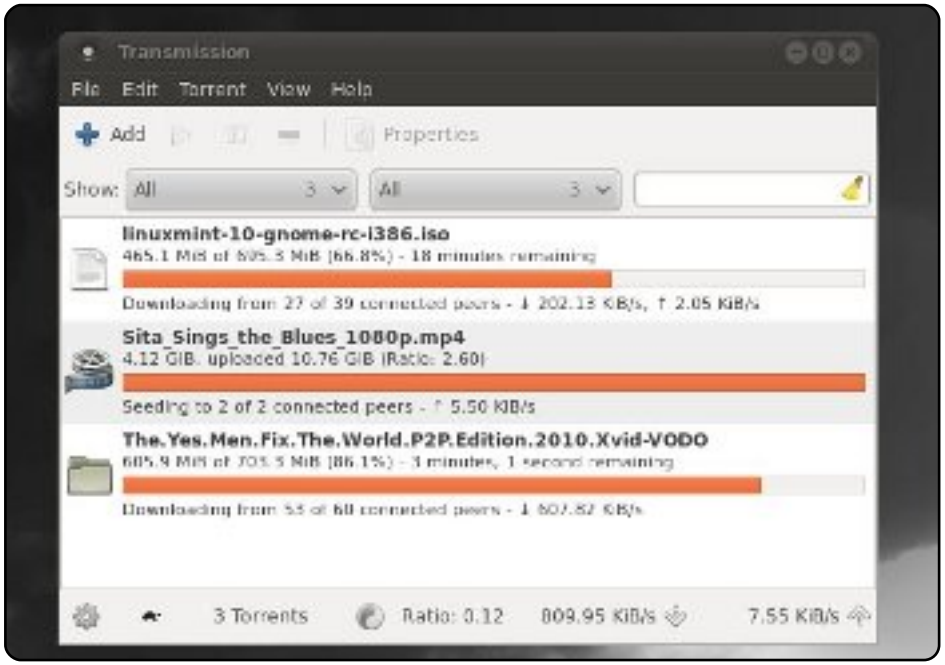
Arnaud Chen-yen-su

Transmission

Site: http://www.transmissionbt.com/

One of the best known open-source torrent clients is Transmission. That's partially because of its compatibility (it sports both a GTK and Qt GUI), partially because of its speed and light footprint, and partially because of its straight-forward interface. As the developers note, "we've set the defaults to 'Just Work'." It also supports a variety of third-party addons, and includes even a headless curses-based version.

Transmission comes pre-installed with Ubuntu. Everyone else can use the ***transmission*** package in the universe repositories.

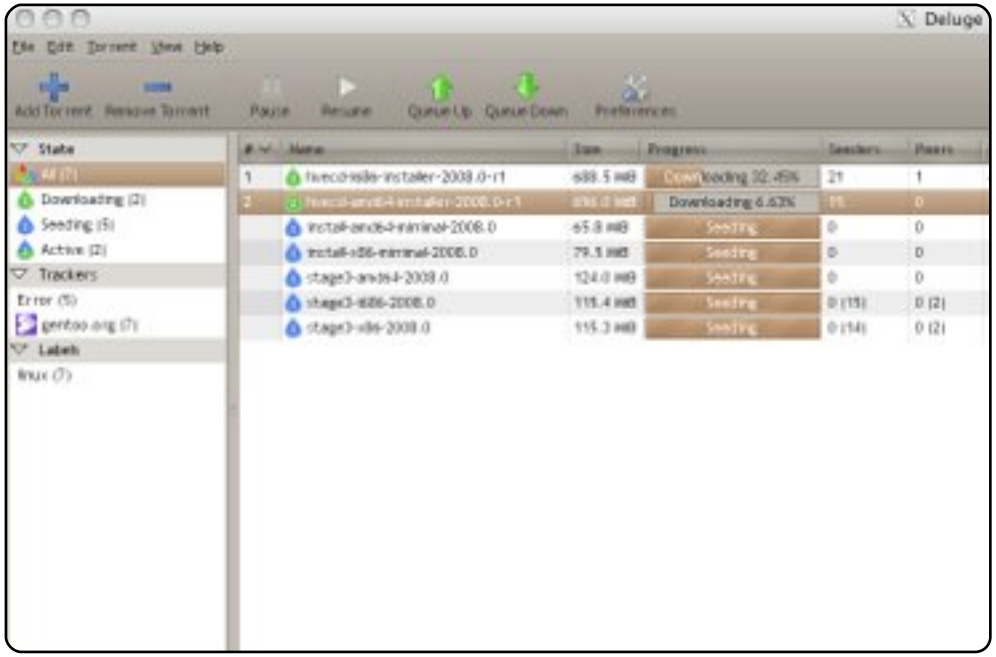


Deluge

Site: http://qbittorrent.sourceforge.net/

One of the best-known alternatives to Transmission is the libtorrent-based Deluge. While much faster, it also utilizes more resources: one researcher concluded that Deluge used twice the amount of memory to go twice as fast (see http://url.fullcirclemagazine.org/f37031). It supports a variety of plugins and features, and also includes a web and terminal-based interface. And it looks great.

To install Deluge, use the ***deluge*** package in the universe repositories.

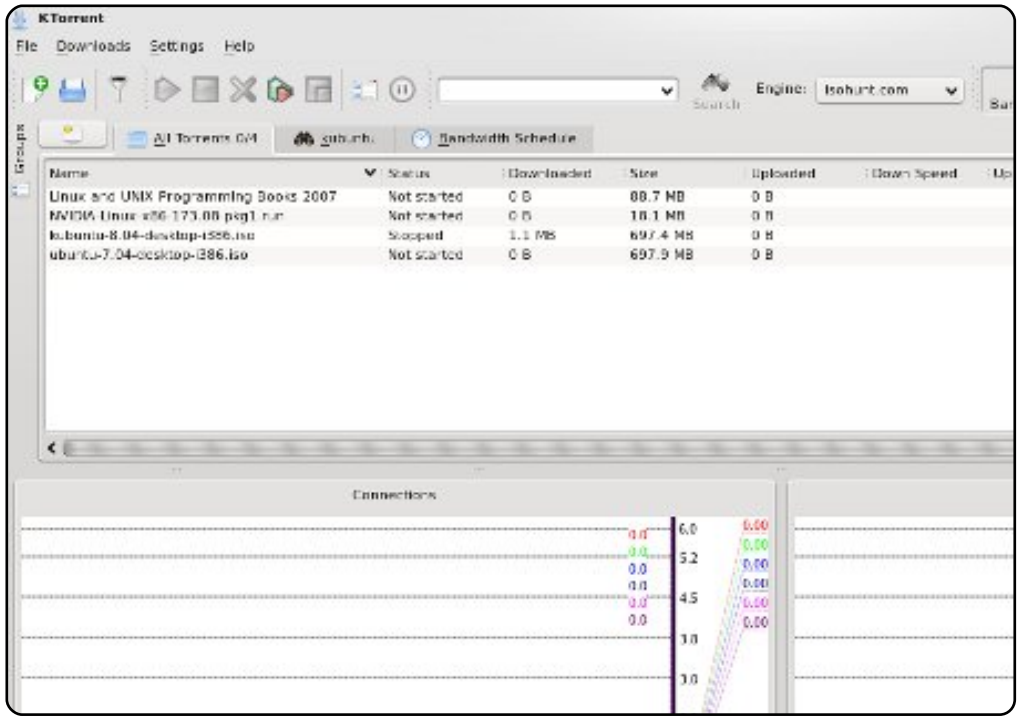


KTorrent

Site: http://ktorrent.org/

If you're a KDE user, your first stop should definitely be KTorrent. Like many KDE apps, it's got a lot of integration with the rest of the desktop environment (including Kross scripting support and built-in audio/video previews). It also comes with standard torrent features like queues, bandwidth limits, and proxies. The plugins are really what set it apart, though: KTorrent supports a wide variety of plugins, including web control, a search engine, a UPnP port forwarder and, of course, an IP blocker.

KTorrent comes installed for Kubuntu users. Everyone else can install it using the ***ktorrent*** package.

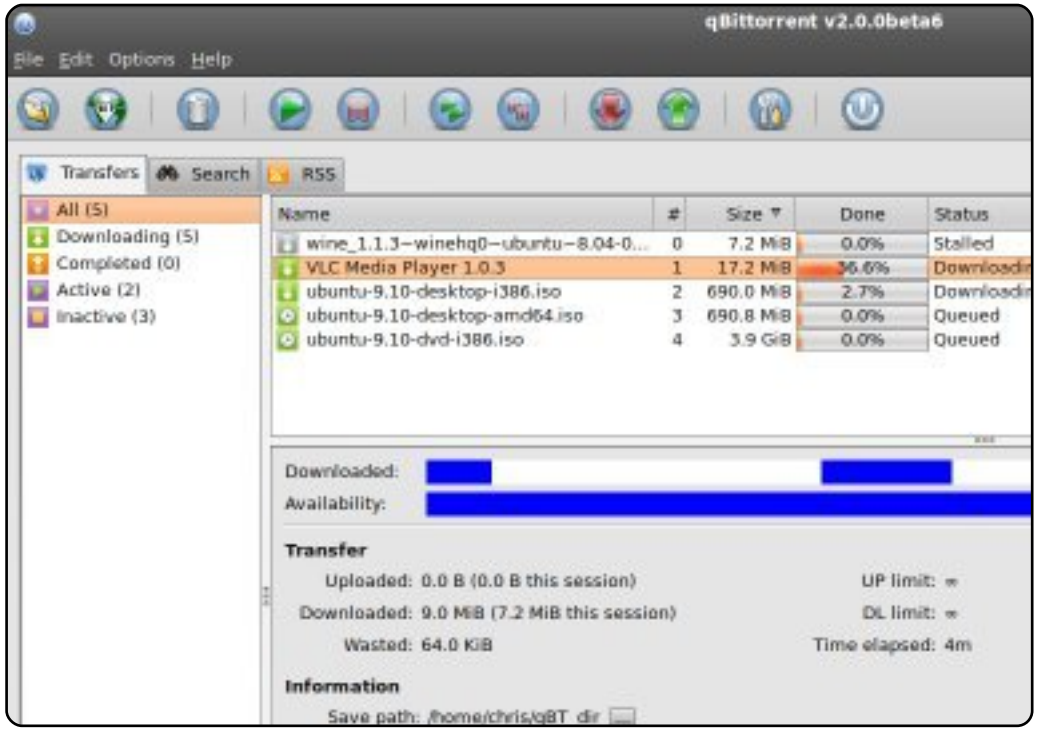


qBittorrent

Site: http://qbittorrent.sourceforge.net/

If you don't like KTorrent, or prefer vanilla Qt applications, give Christopher Dumez's qBittorrent a try. It's modeled after the popular uTorrent and, like its godfather, it sports a clean, minimalist interface. Within that interface, qBittorrent hides a variety of features, including a web interface, IP filter, RSS parser, and programmable search engine function for searching torrent websites.

You can install qBittorrent using the ***qbittorrent*** package in the universe repostiories.

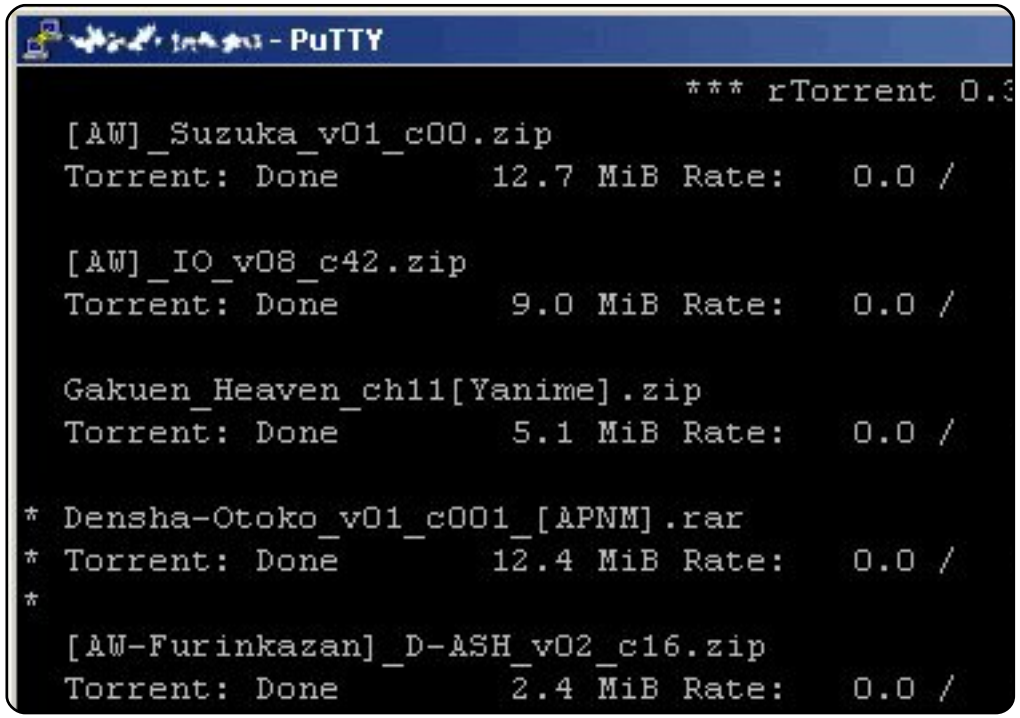


rTorrent

Site: http://libtorrent.rakshasa.no/

If you want to be hard-core (or just want a really fast terminal without them fancy GUIs), try out rTorrent. It's created by the developers of libtorrent, which most of the other projects on this list are powered by. And, like most terminal apps developed by power-users, it's got a long laundry list of features and advanced performance tweaks. If you're a fan of ncurses, you'll probably be using rTorrent.

To install rTorrent, use the ***rtorrent*** package in the universe repositories.



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Questions for Q&A should go to: questions@fullcirclemagazine.org

Desktop screens should be emailed to: misc@fullcirclemagazine.org

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

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