Full Circle

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photo : yum9me (Flickr.com)

NOUVELLE SÉRIE !

STRATÉGIE DE SAUVEGARDE - PARTIE 1

VOS SAUVEGARDES SONT-ELLES SÛRES, SÉCURISÉES ET FIABLES ?

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LE MAGAZINE INDÉPENDANT DE LA COMMUNAUTÉ UBUNTU LINUX

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ÉDITORIAL

Bienvenue dans ce nouveau numéro du Full Circle !

Encore une nouvelle série de tutoriels. Pour vous ce mois-ci, la stratégie de sauvegarde. Dans celle-ci, la première de plusieurs parties, Allan traite la question d'où mettre vos sauvegardes physiques. Dans les numéros suivants, il parlera des applications de sauvegarde (comme Deja-Dup qui sera inclus en standard dans Ubuntu 11.10), et, bien sûr, l'enregistrement de vos données dans les « nuages ».

Je veux prendre un instant pour envoyer un message spécial de félicitations à toute l'équipe de traduction italienne. Ils ont expédié la traduction des numéro précédents en italien en un rien de temps et ils sont la première (et jusqu'à présent la seule) équipe de traduction qui a traduit chacun des numéros du FCM !

Je veux aussi vous remercier, vous, les lecteurs, pour avoir intensifié vos envois de mails à propos de ma dernière idée pour le FCM. Si vous n'êtes pas dans la liste de diffusion (retournez sur **fullcirclemagazine.org** et inscrivez-vous pour être informés des nouveaux numéros et recevoir des mails exclusifs), laissez-moi vous mettre au courant : mon idée est de démarrer une nouvelle rubrique dans le FCM où je prendrais une fonctionnalité de Windows et je montrerais l'équivalent dans *buntu. Je dis *buntu car je veux montrer comment les choses sont faites dans Gnome, KDE, LXDE et XFCE. On m'a envoyé plein de bonnes idées et cette nouveauté commencera donc dans le numéro 54. Je veux également remercier tous ceux d'entre vous qui m'ont proposé leur aide sur cette idée. J'aimerais pouvoir tous vous prendre, mais je n'ai besoin que de deux personnes que j'ai déjà contactées. Si votre offre d'aide pour cette nouvelle rubrique n'a pas été acceptée, ***ne soyez pas tristes,*** commencez à écrire ! Écrivez sur ce que vous faites avec votre *buntu, car cela aidera quelqu'un d'autre. Plus c'est original, mieux c'est. Si vous l'utilisez pour la science ou la médecine, dites-nous quelle application vous utilisez et comment elle vous aide.

Amitiés, et gardez le contact.
Ronnie
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Ce magazine a été créé avec :

Le Podcast Full Circle

Toutes les deux semaines, chaque épisode couvre toutes les dernières informations concernant Ubuntu, les opinions, les critiques, les interviews et les retours d'utilisateurs. Le Side-Pod est une nouveauté, c'est un court podcast supplémentaire (irrégulier) en marge du podcast principal. On y parle de technologie en général et de choses qui ne concernent pas uniquement Ubuntu et qui n'ont pas leur place dans le podcast principal.

Vos animateurs :
Robin Catling
Ed Hewitt
Dave Wilkins

http://fullcirclemagazine.org

Ubuntu Store s'ouvre aux développeurs d'applis

Canonical a lancé son site pour les développeurs d'applis dans une tentative de persuader ceux-ci de porter leur application sous Ubuntu Linux. La Logithèque d'Ubuntu est l'« app store » de Canonical pour sa populaire distribution Linux Ubuntu, offrant à la fois des applications gratuites et payantes. Les Linuxiens aguerris y reconnaîtront l'interface graphique de Dselect, mais Canonical a mis pas mal de travail dans sa Logithèque pour non seulement générer des flux de trésorerie, mais aussi pour rendre Ubuntu plus facile à utiliser.

Steve George, vice-président du développement commercial de Canonical a dit :

« Le site des développeurs Ubuntu a pour but d'aider à augmenter la visibilité d'Ubuntu dans les projets de développement d'applis. Nous voulons fournir aux développeurs une plateforme où la création d'applications et leur distribution à des millions d'utilisateurs seront facilités. »

Source : theinquirer.net

Un client Windows pour Ubuntu One

En regardant le marché actuel des lieux de stockage dans les « nuages », vous vous apercevrez que quelques-uns des services les plus florissants ont un point en commun : il fonctionnent partout. Regardez Dropbox, par exemple, qui a des clients sur tous les principaux systèmes d'exploitation pour ordinateurs de bureau ainsi que des applis pour iOS et Android.

Canonical devrait avoir le même service multiplateformes s'il veut qu'Ubuntu One survive et se développe et admettre que ses utilisateurs sont très divers et n'utilisent pas Ubuntu exclusivement. Dans cet esprit, ils ont lancé un client Windows pleinement fonctionnel pour ce service.

Source : geek.com

GNOME 3.2 est sorti

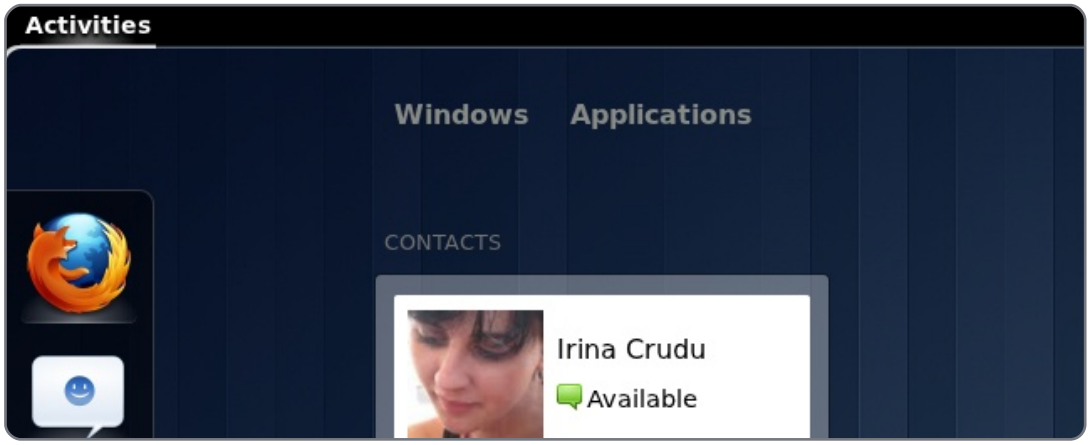
La version finale de GNOME 3.2 vient de sortir, car, « depuis la dernière ver-sion, 3.0, environ 1 270 personnes ont fait à peu près 38 500 modifications dans GNOME ».

Quoi de neuf dans GNOME 3.2 ?

- La prévisualisation chic et perfectionnée de vos fichiers dans Nautilus.
- Les comptes en ligne peuvent être utilisés automatiquement par Documents, Contacts, Empathy, Evolution, etc.
- Application Web (la capacité de « Sauver comme Appli Web » une page web dans Epiphany et la visualiser dans une fenêtre séparée).
- Contacts est un endroit centralisé pour enregistrer ses contacts en ligne ou dans Evolution et Empathy.
- Documents vous aidera à trouver, organiser et voir vos documents.
- Gestion des couleurs vous permet de calibrer les appareils de manière à assurer que les couleurs affichées sont fidèles.
- Un nouvel écran de connexion dans GNOME-Shell.
- Un sélecteur de polices redéfini

et bien plus encore…

Source : iloveubuntu.net



Le Message du jour

Note sur l'article précédent : Gord Campbell a été bien sympathique de me rappeler que, bien que le chinois puisse être écrit verticalement, il semble que ce n'est pas aussi courant que je le pensais.

Si vous, les lecteurs de Command & Conquer, êtes comme moi, vous avez probablement incité une ou deux connaissances à essayer Linux. Mon premier objectif, et le plus important, est toujours de faire en sorte que le système d'exploitation soit aussi stable que possible, pour que, de cette façon, l'utilisateur n'ait plus besoin de galérer (afin de couper court à toute remarque sur le fait que Windows ait moins de problèmes). Une fois cela fait, je donne aux utilisateurs un bref descriptif de certains trucs dont ils doivent être conscients - cette liste dépend généralement de la distribution que j'ai installée. Cela dit, la dernière installation que j'ai faite était celle d'ArchLinux sur un netbook (après avoir décidé que Chakra n'aurait pas fait l'affaire). Peu de temps après, KDM [Ndt : le gestionnaire d'affichage de KDE] ne démarrait plus correctement au niveau 5 de démarrage, laissant l'utilisateur avec un écran tty [Ndt : une sorte de terminal]. C'est généralement dans un de ces moments que l'utilisateur n'aura aucune idée de ce qu'il convient de faire, ce qui me fait une belle transition à l'article d'aujourd'hui, le Message du Jour (motd). Le Message du Jour est un fichier système qui s'affiche au moment du login, situé dans /etc/motd et /etc/motd.tail. Il y a aussi un paquet update-motd pour Ubuntu, dont le but est d'offrir plus d'options. Il est utilisé habituellement par les administrateurs de serveurs pour afficher les conditions d'utilisation ou des informations d'aide (salles, numéros de téléphones, e-mails…). Puisque c'est un fichier texte, absolument tout peut y figurer. Je pensais qu'il serait très utile d'examiner ce que vous pouvez mettre dans votre Message du Jour, afin que, si votre utilisateur doit se connecter dans un shell tty, il (ou elle) ne soit pas complètement perdu(e).

À propos des fichiers

Pour Ubuntu Server (et probablement pour Ubuntu Desktop), vous devez éditer /etc/motd.tail et /etc/motd, pour que le fichier .tail n'écrase pas le fichier /etc/motd après un redémarrage. Pour les récentes versions d'Ubuntu, les fichiers peuvent se trouver dans /etc/update-motd.d/. Ça doit être le résultat du paquet update-motd, mais les fichiers sont clairement nommés et devraient être assez faciles à modifier.

Commandes utiles

La première chose que j'ai faite était d'ajouter une liste de commandes qui permettront de se débrouiller dans le shell (cd, cat, vim/nano, pwd, etc.) et une brève explication de chaque commande. Après cela, vous pouvez vouloir donner des commandes spécifiques au système (ex: si vous avez configuré un client mail en ligne de commande, comment y accéder) ; toutefois, cela dépend entièrement du système.

Emplacements importants

Vous pouvez aussi inclure une liste de fichiers/répertoires importants, là où l'utilisateur peut trouver soit des pages d'aide ou des manuels, soit un fichier avec plus de commandes ou un fichier contenant des contacts (si ce n'est pas déjà inclus dans le MotD).

> **Le Message du Jour est un fichier système qui s'affiche au moment du login,...**

Problèmes et solutions

Je listerais aussi un ou deux des correctifs les plus courants (comme comment redémarrer le Xserver ou le gestionnaire de connexion) afin de sortir l'utilisateur du shell tty. Si vous sentez que l'utilisateur serait capable de le faire, vous pouvez aussi expliquer comment récupérer des informations de débogage ou des fichiers de log, qu'il vous enverrait ensuite.

Monter des périphériques

Si l'utilisateur doit vous envoyer des fichiers de log ou doit sauvegarder un fichier (ou restaurer une

> **Si quelqu'un utilise son Message du Jour de façon intéressante ou unique, n'hésitez pas à m'en parler...**

sauvegarde), il serait extrêmement utile pour lui de brancher à l'ordinateur quelque chose comme un lecteur externe. Puisque hal ou udev gèrent en général cette fonction, elle peut le cas échéant continuer à fonctionner dans le shell tty, bien que je trouve cela plutôt invraisemblable. Je listerais donc quelques commandes (en les nommant de façon explicite, comme « USB » (généralement en FAT32), « disque dur externe » (habituellement NTFS ou ext3/ext4) ou, même, des périphériques particuliers si vous connaissez le matériel). Je ne vous conseille pas d'ajouter ces informations supplémentaires à moins que ce ne soit extrêmement important ou si l'utilisateur vit dans un lieu où vous, ou quelqu'un d'autre à l'aise dans Linux, ne peut intervenir facilement et aider, en personne ou via SSH.

Information de contact

Si vous utilisez ceci en tant qu'administrateur pour une société ou pour quelqu'un que vous ne connaissez pas bien, j'inclurais un numéro de téléphone, une adresse mail et peut-être un site web où ils peuvent vous contacter.

Ainsi, tous les points que j'inclurais d'habitude dans un Message du Jour ont été traités, mais ce n'est en aucune manière une liste exhaustive. Si quelqu'un utilise son Message du Jour de façon intéressante ou unique, n'hésitez pas à m'en parler à lswest34@gmail.com. Si, moi aussi, je les trouve intéressants, j'en constituerai une autre liste pour l'article du mois prochain. Comme toujours, des suggestions ou des questions sont aussi les bienvenues. Les mails que vous m'envoyez devraient avoir « C&C » ou « FCM » dans la case Objet, pour qu'ils soient triés correctement.

Lucas a appris tout ce qu'il sait en endommageant régulièrement son système et en n'ayant alors plus d'autre choix que de trouver un moyen de le réparer. Vous pouvez lui écrire à : lswest34@gmail.com.

Server Circle est un nouveau site de questions et réponses géré par des experts en technologie.

Les utilisateurs de tout niveau peuvent poser gratuitement des questions techniques en rapport avec les serveurs. Ils recevront des réponses de la part d'experts de confiance notés par la communauté.

À la longue, vous pouvez gagner des points de réputation, et même des récompenses financières, en contribuant par vos réponses aux questions posées par d'autres personnes.

http://www.servercircle.com

N.B. Server Circle n'est ni affilié avec, ni approuvé par, le magazine Full Circle.

Programmer en Python - Partie 27

Écrit par Greg Walters

If you've ever waited in line to buy a movie ticket, you've been in a queue. If you've ever had to wait in traffic at rush hour, you've been in a queue. If you've ever waited in a government office with one of those little tickets that says you're number 98, and the sign says "Now serving number 42," you've been in a queue.

In the world of computers, queues are common. As a user, most times, you don't have to think about them. They are invisible to the user. But if you ever have to deal with realtime events, you will eventually have to deal with them. It's just data of one type or another, waiting in line for its turn to be processed. Once it's in the queue, it's there until it gets accessed, and then it's gone. You can't get the value of the next data item unless you pull it out of the queue. You can't, for example, get the value of the 15th item in the queue. You have to access the other 14 items first. Once it's accessed, it's out of the queue. It's gone, and unless you save it to a long-term variable, there's no way to get the data back.

There are multiple types of queues. The most common ones are FIFO (First In, First Out), LIFO (Last In, First Out), Priority, and Ring. We'll talk about ring queues another time.

FIFO queues are what we see in everyday life. All of the examples I listed above are FIFO queues. The first person in the line gets handled first, moves on, then everyone moves up one spot in the line. In a FIFO buffer, there is (within reason) no limit to the number of items it can hold. They just stack up in order. As an item is handled, it is pulled out (or dequeued) of the queue, and everything moves closer to the front of the queue by one position.

LIFO Queues are less common in life, but there are still real-world examples. The one that comes to mind most quickly is a stack of dishes in your kitchen cabinet. When the dishes are washed and dryed, they get stacked in the cabinet. The last one in on the stack is the first one that comes out to be used. All the rest have to wait, maybe for days, to be used. It's a good thing that the movie ticket queue is FIFO, isn't it? Like the FIFO queue, within reason, there is no limit to the size of a LIFO queue. The first item in the queue has to wait as newer items are pulled out of the buffer (plates pulled off the stack) until it's the only one left.

Priority queues are a bit harder for many people to imagine right off the bat. Think of a company that has one printer. Everyone uses that one printer. The print jobs are handled by department priority. Payroll has a higher priority (and thankfully so) than say, you, a programmer. You have a higher priority (and thankfully so) than the receptionist. So in short, the data that has a higher priority gets handled, and gets out of the queue, before data that has a lower priority.

FIFO

FIFO queues are easy to visualize in terms of data. A python list is an easy mental representation. Consider this list...

```
[1,2,3,4,5,6,7,8,9,10]
```

There are 10 items in the list. As a list, you access them by index.

> **Il existe plusieurs types de files d'attente. Les plus courantes sont FIFO (First In, First Out), LIFO (Last In, First Out), Priority et Ring.**

However, in a queue, you can't access the items by index. You have to deal with the next one in the line and the list isn't static. It's VERY dynamic. As we request the next item in the queue, it gets removed. So using the example above, you request one item from the queue. It returns the first item (1) and the queue then looks like this.

```
[2,3,4,5,6,7,8,9,10]
```

Request two more and you get 2, then 3, returned, and then the queue looks like this.

```
[4,5,6,7,8,9,10]
```

I'm sure you get the idea. Python provides a simple library, surprisingly enough, called Queue, that works

sommaire ^

```
import Queue
fifo = Queue.Queue()
for i in range(5):
    fifo.put(i)

while not fifo.empty():
    print fifo.get()
```

well for small-to-medium sized queues, up to about 500 items. Above is a simple example to show it.

In this example, we initialize the queue (fifo = Queue.Queue()) then put the numbers 0 through 4 into our queue (fifo.put(i)). We then use the internal method .get() to pull items off the queue until the queue is empty, .empty(). What is returned is 0,1,2,3,4. You can also set the maximum number of items that the queue can handle by initializing it with the size of the queue like this.

```
fifo = Queue.Queue(300)
```

Once the maximum number of items have been loaded, the Queue blocks any additional entries going into the queue. This has a side effect of making the program look like it's "locked" up, though. The easiest way to get around this is to use the Queue.full() check (above right).

In this case, the queue is set for a maximum of 12 items. As we put

```
import Queue

fifo = Queue.Queue(12)
for i in range(13):
    if not fifo.full():
        fifo.put(i)

while not fifo.empty():
    print fifo.get()
```

items into the queue, we start with '0' and get up to '11'. When we hit number 12, though, the buffer is already full. Since we check to see if the buffer is full before we try to put the item in, the last item is simply discarded.

There are other options, but they can cause other side-effects, and we will address this in a future article. So, for the majority of the time, the bottom line is either use a queue with no limit or make sure you have more space in your queue than you will need.

LIFO

The Queue library also supports LIFO queues. We'll use the above list as a visual example. Setting up our queue, it looks like this:

```
[1,2,3,4,5,6,7,8,9,10]
```

Pulling three items from the queue, it then looks like this:

```
[1,2,3,4,5,6,7]
```

Remember that in a LIFO queue, items are removed in a LAST-in FIRST-out order. Here's the simple example modified for a LIFO queue:

When we run it, we get "4,3,2,1,0".

```
import Queue
lifo = Queue.LifoQueue()
for i in range(5):
    lifo.put(i)
while not lifo.empty():
    print lifo.get()
```

As with the FIFO queue, you have the ability to set the size of the queue, and you can use the .full() check.

PRIORITY

While it's not often used, a Priority queue can sometimes be helpful. It's pretty much the same as the other queue structures, but we need to pass a tuple that holds both the priority and the data. Here's an example using the Queue library:

First, we initialize the queue. Then we put four items into the queue. Notice we use the format (priority, data) to put our data. The library sorts

```
pq = Queue.PriorityQueue()
pq.put((3,'Medium 1'))
pq.put((4,'Medium 2'))
pq.put((10,'Low'))
pq.put((1,'high'))

while not pq.empty():
    nex = pq.get()
    print nex
    print nex[1]
```

our data in a ascending order based on the priority value. When we pull the data, it comes back as a tuple, just like we put it in. You can address by index the data. What we get back is...

In our first two examples, we simply printed the data that comes out of our queue. That's fine for these examples, but in real-world programming, you probably need to

```
(1, 'high')
high
(3, 'Medium')
Medium
(4, 'Medium')
Medium
(10, 'Low')
Low
```

do something with that information as soon as it comes out of the queue, otherwise it's lost. When we use the 'print fifo.get', we send the data to the terminal and then it's destroyed. Just something to keep in mind.

Now let's use some of what we've already learned about tkinter to create a queue demo program. This demo will have two frames. The first will contain (to the user) three buttons. One for a FIFO queue, one for a LIFO queue, and one for a PRIORITY queue. The second frame will contain an entry widget, two buttons, one for adding to the queue, and one for pulling from the queue, and three labels, one showing when the queue is empty, one showing when the queue is full, and one to display what has been pulled from the queue. We'll also be writing some code to automatically center the window within the screen. Above left is the beginning of the code.

Here we have our imports and the beginning of our class. As before, we create the __init__ routine with the DefineVars, BuildWidgets, and PlaceWidgets routines. We also have a routine called ShowStatus (above right) which will... well, show the status of our queue.

```
import sys
from Tkinter import *
import ttk
import tkMessageBox
import Queue

class QueueTest:
    def __init__(self,master = None):
        self.DefineVars()
        f = self.BuildWidgets(master)
        self.PlaceWidgets(f)
        self.ShowStatus()
```

```
    def DefineVars(self):
        self.QueueType = ''
        self.FullStatus = StringVar()
        self.EmptyStatus = StringVar()
        self.Item = StringVar()
        self.Output = StringVar()
        # Define the queues
        self.fifo = Queue.Queue(10)
        self.lifo = Queue.LifoQueue(10)
        self.pq = Queue.PriorityQueue(10)
        self.obj = self.fifo
```

We now create our DefineVars routine. We have four StringVar() objects, an empty variable called QueueType, and three queue objects - one for each of the types of queues that we are going to play with. We have set the maximum size of the queues at 10 for the purposes of the demo. We also have created an object called obj, and assigned it to the FIFO queue. When we select a queue type from the buttons, we will set this object to the queue that we want. This way, the queue is maintained when we switch to another queue type (code is on previous page, bottom right).

Here we start the widget definitions. We create our first frame, the three buttons, and their bindings. Notice we are using the same routine to handle the binding callback. Each button sends a value to the callback

```
    def BuildWidgets(self,master):
        # Define our widgets
        frame = Frame(master)
        self.f1 = Frame(frame,
            relief = SUNKEN,
            borderwidth=2,
            width = 300,
            padx = 3,
            pady = 3
        )
        self.btnFifo = Button(self.f1,
            text = "FIFO"
        )
        self.btnFifo.bind('<ButtonRelease-1>',
            lambda e: self.btnMain(1)
        )
        self.btnLifo = Button(self.f1,
            text = "LIFO"
        )
        self.btnLifo.bind('<ButtonRelease-1>',
            lambda e: self.btnMain(2)
        )
        self.btnPriority = Button(self.f1,
            text = "PRIORITY"
        )
        self.btnPriority.bind('<ButtonRelease-1>',
            lambda e: self.btnMain(3)
        )
```

outine to denote which button was clicked. We could just as easily have created a dedicated routine for each button. However, since all three buttons are dealing with a common task, I thought it would be good to work them as a group (code shown right).

Next (below right), we set up the second frame, the entry widget, and the two buttons. The only thing here that is out of the ordinary is the binding for the entry widget. Here we bind the self.AddToQueue routine to the <Return> key. This way, the user doesn't have to use the mouse to add the data. They can just enter the data into the entry widget, and press <Return> if they want to.

Here (next page, bottom) is the last three widget definitions. All three are labels. We set the textvariable attribute to the variables we defined earlier. If you remember, when that variable changes, so does the text in the label. We also do something a bit different on the lblData label. We will use a different font to make it stand out when we display the data pulled from the queue. Remember that we have to return the frame object so it can be used in the PlaceWidget routine.

This (next page, middle) is the beginning of the PlaceWidgets routine. Notice here that we put five empty labels at the very top of the root window. I'm doing this to set spacing. This is an easy way to "cheat" and make your window placement much easier. We then set the first frame, then another "cheater" label, then the three buttons.

Here we place the second frame, another "cheater" label, and the rest of our widgets.

```
def Quit(self):
    sys.exit()
```

Next we have our "standard" quit routine which simply calls sys.exit() (above right).

Now our main button callback routine, btnMain. Remember we are sending in (through the p1 parameter) which button was clicked. We use the self.QueueType variable as a reference to which queue type we are dealing with, then we assign self.obj to the proper queue, and finally change the title of our root window to display the queue type we are using. After that, we print the queue type to the terminal window (you don't really have to do that), and

```
self.f2 = Frame(frame,
    relief = SUNKEN,
    borderwidth=2,
    width = 300,
    padx = 3,
    pady = 3
)
self.txtAdd = Entry(self.f2,
    width=5,
    textvar=self.Item
)
self.txtAdd.bind('<Return>',self.AddToQueue)
self.btnAdd = Button(self.f2,
    text='Add to Queue',
    padx = 3,
    pady = 3
)
self.btnAdd.bind('<ButtonRelease-1>',self.AddToQueue)
self.btnGet = Button(self.f2,
    text='Get Next Item',
    padx = 3,
    pady = 3
)
self.btnGet.bind('<ButtonRelease-1>',self.GetFromQueue)
```

```
    self.lblEmpty = Label(self.f2,
        textvariable=self.EmptyStatus,
        relief=FLAT
    )
    self.lblFull = Label(self.f2,
        textvariable=self.FullStatus,
        relief=FLAT
    )
    self.lblData = Label(self.f2,
        textvariable=self.Output,
        relief = FLAT,
        font=("Helvetica", 16),
        padx = 5
    )

    return frame
```

call the ShowStatus routine. Next (following page, top right) we'll make the ShowStatus routine.

As you can see, it's pretty simple. We set the label variables to their proper state so they display if the queue we are using is either full, empty, or somewhere in between.

The AddToQueue routine (next page, bottom right) is also fairly straight-forward. We get the data from the entry box using the .get() function. We then check to see if the current queue type is a priority queue. If so, we need to make sure it's in the correct format. We do that by checking for the presence of a comma. If it isn't, we complain to the user via an error message box. If everything seems correct, we then check to see if the queue that we are currently using is full. Remember, if the queue is full, the put routine is blocked and the program will hang. If everything is fine, we add the item to the queue and update the status.

The GetFromQueue routine (middle right) is even easier. We check to see if the queue is empty so as not to run into a blocking issue, and, if not, we pull the data from the queue, show the data, and update the status.

```
def btnMain(self,p1):
    if p1 == 1:
        self.QueueType = 'FIFO'
        self.obj = self.fifo
        root.title('Queue Tests - FIFO')
    elif p1 == 2:
        self.QueueType = 'LIFO'
        self.obj = self.lifo
        root.title('Queue Tests - LIFO')
    elif p1 == 3:
        self.QueueType = 'PRIORITY'
        self.obj = self.pq
        root.title('Queue Tests - Priority')

    print self.QueueType
    self.ShowStatus()
```

```
self.f2.grid(column = 0,row = 2,sticky='nsew',columnspan=5,padx = 5, pady = 5)
l = Label(self.f2,text='',width = 15,anchor = 'e').grid(column = 0, row = 0)
self.txtAdd.grid(column=1,row=0)
self.btnAdd.grid(column=2,row=0)
self.btnGet.grid(column=3,row=0)
self.lblEmpty.grid(column=2,row=1)
self.lblFull.grid(column=3,row = 1)
self.lblData.grid(column = 4,row = 0)
```

```
def PlaceWidgets(self, master):
    frame = master
    # Place the widgets
    frame.grid(column = 0, row = 0)
    l = Label(frame,text='',relief=FLAT,width = 15, anchor = 'e').grid(column = 0, row = 0)
    l = Label(frame,text='',relief=FLAT,width = 15, anchor = 'e').grid(column = 1, row = 0)
    l = Label(frame,text='',relief=FLAT,width = 15, anchor = 'e').grid(column = 2, row = 0)
    l = Label(frame,text='',relief=FLAT,width = 15, anchor = 'e').grid(column = 3, row = 0)
    l = Label(frame,text='',relief=FLAT,width = 15, anchor = 'e').grid(column = 4, row = 0)

    self.f1.grid(column = 0,row = 1,sticky='nsew',columnspan=5,padx = 5,pady = 5)
    l = Label(self.f1,text='',width = 25,anchor = 'e').grid(column = 0, row = 0)
    self.btnFifo.grid(column = 1,row = 0,padx = 4)
    self.btnLifo.grid(column = 2,row = 0,padx = 4)
    self.btnPriority.grid(column = 3, row = 0, padx = 4)
```

We are getting to the end of our application. Here is the center window routine (above left). We first get the screen width and screen height of the screen we are on. We then get the width and height of the root window by using the winfo_reqwidth() and winfo_reqheight() routines built into tkinter. These routines, when called at the right time, will return the width and height of the root window based on the widget placement. If you call it too early, you'll get data, but it won't be what you really need. We then subtract the required window width from the screen width, and divide it by two, and do the same thing for the height information. We then use that information to set the geometry call. In MOST instances, this works wonderfully. However, there might be times that you need to set the required width and height by hand.

```
if __name__ == '__main__':
    def Center(window):
        # Get the width and height of the screen
        sw = window.winfo_screenwidth()
        sh = window.winfo_screenheight()
        # Get the width and height of the window
        rw = window.winfo_reqwidth()
        rh = window.winfo_reqheight()
        xc = (sw-rw)/2
        yc = (sh-rh)/2
        window.geometry("%dx%d+%d+%d"%(rw,rh,xc,yc))
        window.deiconify()
```

Finally, we instantiate the root window, set the base title, instantiate the QueueTest class. We then call root.after, which waits x number of milliseconds (in this case 3) after the root window is instantiated, and then calls the Center routine. This way, the root window has been completely set up and is ready to go, so we can get the root window width and height. You might have to tweak the delay time a bit. Some machines are much faster than others. 3 works fine on my machine, your mileage may vary. Last but not least, we call the root window mainloop to get the application to run.

As you play with the queues, notice that if you put some data in one queue (let's say the FIFO queue) then switch to another queue (let's say the LIFO queue), the data that was put into the FIFO queue is still there and waiting

```
    def ShowStatus(self):
        # Check for Empty
        if self.obj.empty() == True:
            self.EmptyStatus.set('Empty')
        else:
            self.EmptyStatus.set('')
        # Check for Full
        if self.obj.full() == True:
            self.FullStatus.set('FULL')
        else:
            self.FullStatus.set('')
```

```
    def GetFromQueue(self,p1):
        self.Output.set('')
        if not self.obj.empty():
            temp = self.obj.get()
            self.Output.set("Pulled
{0}".format(temp))
        self.ShowStatus()
```

```
    def AddToQueue(self,p1):
        temp = self.Item.get()
        if self.QueueType == 'PRIORITY':
            commapos = temp.find(',')
            if commapos == -1:
                print "ERROR"
                tkMessageBox.showerror('Queue Demo',
                    'Priority entry must be in
format\r(priority,data)')
            else:
                self.obj.put(self.Item.get())
        elif not self.obj.full():
            self.obj.put(self.Item.get())
        self.Item.set('')
```

for you. You can completely or partially fill all three queues, then start playing with them.

```
root = Tk()
root.title('Queue Tests - FIFO')
demo = QueueTest(root)
root.after(3,Center,root)
root.mainloop()
```

Well, that's it for this time. Have fun with your queues. The QueueTest code can be found at http://pastebin.com/5BBUiDce.

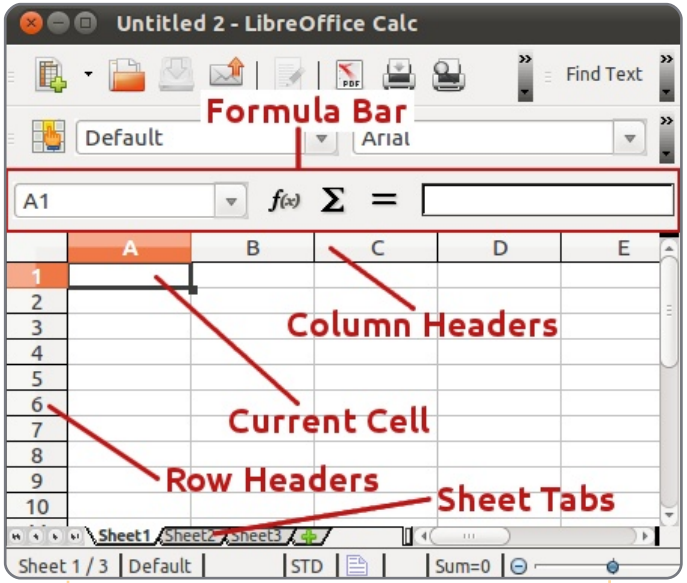
Greg Walters est propriétaire de RainyDay Solutions LLC, une société de consultants à Aurora au Colorado, et programme depuis 1972. Il aime faire la cuisine, marcher, la musique et passer du temps avec sa famille. Son site web est www.thedesignatedgeek.com.

LibreOffice - Partie 8

Écrit par Elmer Perry

Calc est le module tableur ou feuille de calcul de LibreOffice ; il est compatible avec Excel de Microsoft. Nous avons déjà vu une façon d'utiliser Calc quand, dans mon dernier article, nous avons créé notre base de données primitive, mais Calc peut faire beaucoup plus que la collecte de données. Comme son nom l'indique, Calc peut faire des calculs avec de très nombreuses fonctions intégrées au programme. Cela veut dire que nous ne sommes pas obligés de calculer la somme des entrées dans une colonne à la main ; nous pouvons insérer une formule qui fera l'addition à notre place. Calc vous permet de créer un scénario « Et si… » et jouer avec les chiffres dans votre classeur.

Avant de commencer la construction de notre classeur budget, vous avez besoin de connaître certaines choses sur comment un fichier, parfois appelé un classeur dans Calc, fonctionne. Chaque fichier peut contenir plusieurs feuilles de calcul différentes. Dans un nouveau classeur, vous avez par défaut trois feuilles de calcul, appelées Feuille1, Feuille2 et Feuille3. Leur nom figure sur des onglets en bas de la fenêtre. Chaque feuille est composée de cellules individuelles, identifiées par la lettre de leur colonne et le numéro de leur ligne. Par exemple, la première cellule en haut et à gauche est A1, la première colonne, la première ligne. Chaque feuille peut avoir jusqu'à 1 024 colonnes et 1 048 576 lignes.



La disposition d'une fenêtre Calc est quelque peu différente de celle d'une fenêtre Writer. Il y a toujours une barre standard et une barre de formatage, mais en dessous de celle-ci, vous verrez la barre de formule. Cette barre est votre amie quand vous travaillez dans Calc. La case tout à fait à gauche indique le nom de la cellule actuelle. Il vous dit quelle cellule, ou groupe de cellules, est sélectionné à un moment donné. Les trois icônes immédiatement à droite de cette case sont l'assistant fonctions, le bouton somme et le bouton fonction. Encore à droite, vous verrez la ligne de saisie que vous devez utiliser pour modifier le contenu d'une cellule.

En haut de la feuille, vous avez les en-têtes de colonne (A, B, C…) et, le long du côté gauche, les en-têtes de ligne (1, 2, 3…). Les colonnes et les lignes sont matérialisées sur la feuille par des lignes gris clair. Cette grille sera utile lors de la conception de votre feuille de calcul.

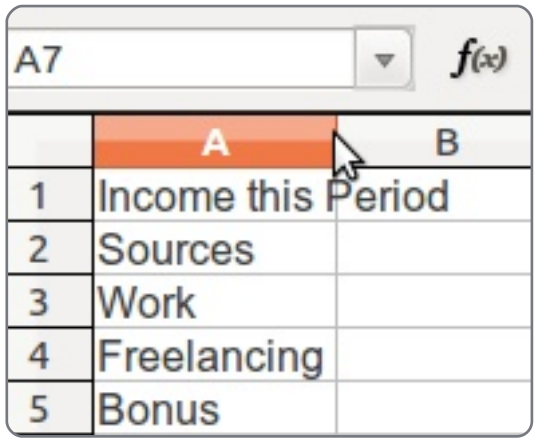
Il y a plusieurs façons de saisir des données dans une cellule. Vous pouvez cliquer dessus et commencer à taper. Quand vous avez terminé, appuyez sur Entrée et vous vous retrouverez dans la cellule en dessous. Vous pouvez aussi cliquer sur une cellule et entrer les données dans la ligne de saisie de la barre de formule. Cette méthode a un inconvénient que j'expliquerai dans une minute, mais, parfois, c'est la meilleure façon de modifier le contenu d'une cellule. Vous pouvez aussi l'éditer dans la cellule, en double-cliquant dessus, ce qui vous met en mode édition. Modifier une cellule dans ce mode est similaire à son édition dans la barre de formule.

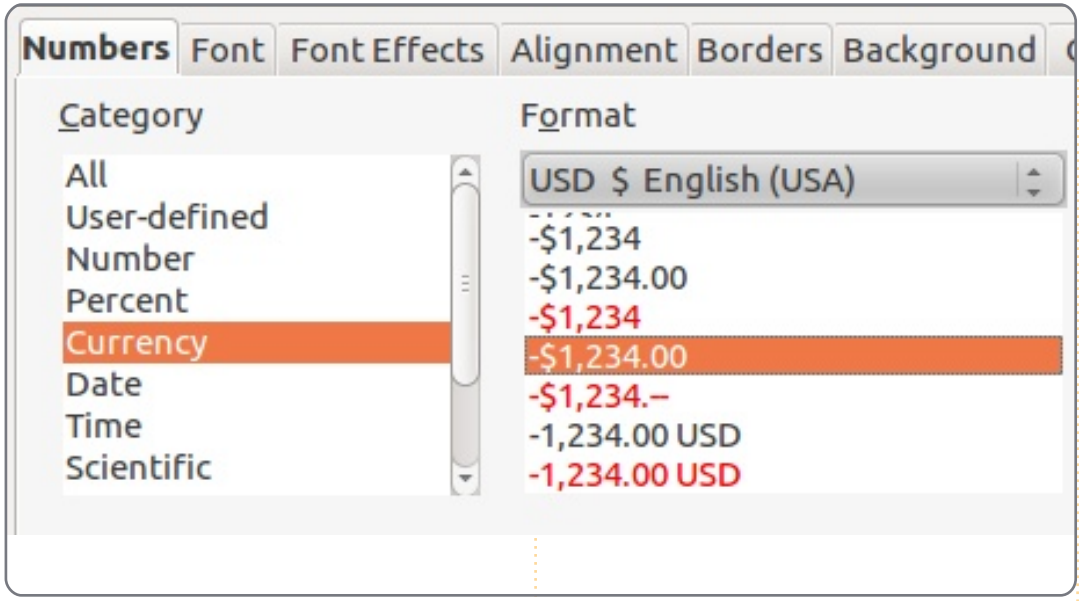
La navigation à l'intérieur de votre feuille peut se faire à la souris : il suffit de cliquer sur la cellule que vous souhaitez. Cependant, puisque vos doigts sont souvent déjà sur le clavier, les raccourcis clavier fonctionnent mieux. La touche de tabulation (Tab) vous met dans la cellule immédiatement à droite de celle où vous vous trouviez. Maj+Tab vous met dans la cellule immédiatement à gauche. Appuyez sur Entrée et vous serez dans la cellule en dessous de celle ou vous étiez et, avec Maj+Entrée, vous serez au-dessus. Si vous n'êtes pas en mode édition, ni en train d'utiliser la ligne de saisie, les touches fléchées vous déplaceront dans la direction de la

flèche. Les touches fléchées sont désactivées pour la navigation si vous êtes dans la ligne de saisie ou en mode édition pour vous permettre de bouger à l'intérieur du contenu.

Cela étant, avec ces quelques outils à votre disposition, nous allons construire la première section de notre feuille de calcul Budget. Ouvrez un nouveau fichier Calc. Cliquez sur l'endroit vierge et gris à gauche de l'en-tête de colonne et au-dessus de l'en-tête de la première ligne. Vous sélectionnerez ainsi toute la feuille. Dans la barre de formatage, réglez la police à une jolie police sans-serif comme Arial et la taille de la police à 12 points. en faisant ceci, nous venons de régler la police et la taille de police par défaut pour la feuille entière.

Dans la cellule A1, entrez le texte « Revenu pour cette période » et appuyez sur Entrée. Pour le moment, ne

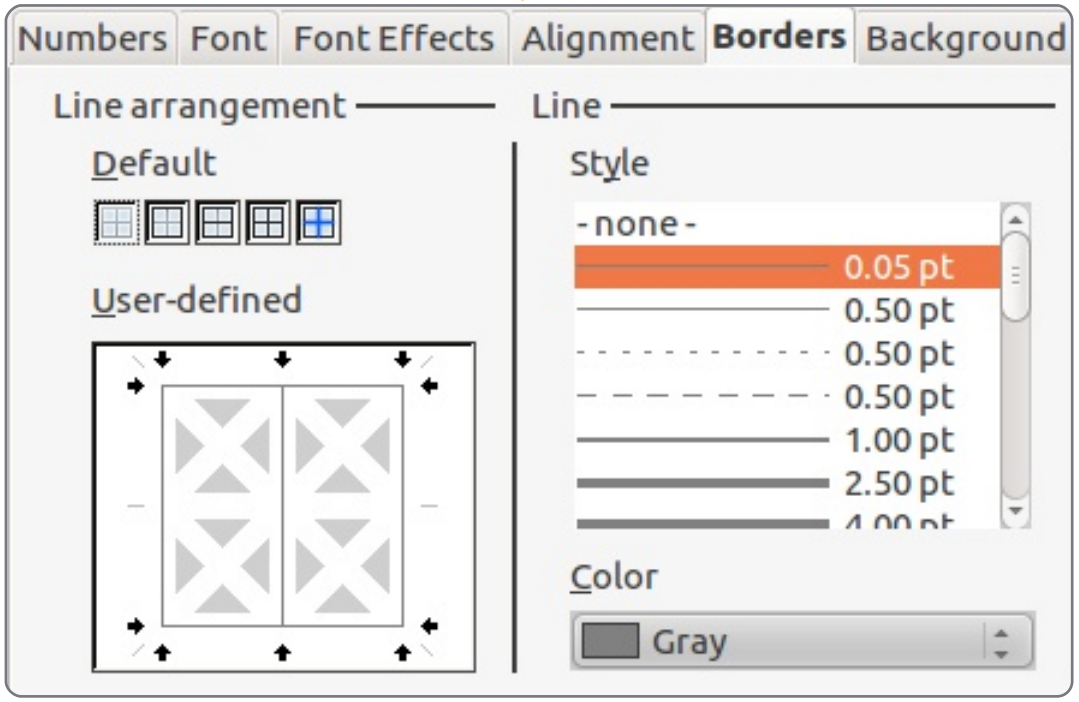




vous inquiétez pas si le texte dépasse les limites de la cellule. On va remédier à cela dans un instant. Sur la deuxième ligne de la colonne A, tapez « Sources ». Toujours dans la colonne A, sur les lignes suivantes, tapez vos différentes sortes de revenu comme, par exemple Salaire, Free-lance, Prime. J'ai l'habitude d'ajouter un « Divers » pour les trucs qui ne correspondent aux autres catégories, comme gagner le gros lot ou démissionner.

Maintenant, certaines de vos sources de revenu dépasseront peut-être de leurs cellules. Nous pouvons ajuster la largeur de la colonne en cliquant entre les en-têtes de cellule pour A et B et en déplaçant la bordure. La cellule A1 ne nous intéresse toujours pas. À ce stade, le dépassement du texte dans A1 est OK ; il s'agit ici de vous assurer que toutes vos sources de revenu se trouvent bien à l'intérieur des limites de la colonne.

Placez-vous en cellule B2. Tapez « Montant ». Appuyez sur Entrée. En descendant la colonne B, tapez un montant pour chacune des sources de revenu. Vous remarquerez que, par défaut, les nombres ne sont pas formatés. Nous allons les faire ressembler à des montants en monnaie. Nous les changerons tous en même temps. Vous pouvez sélectionner toutes les cellules contenant des nombres en cliquant avec le bouton de gauche de la souris et en glissant vers le bas jusqu'à ce que tous les nombres soient mis en surbrillance. Vous pou-



vez aussi cliquer sur la première cellule, appuyer sur la touche Maj en la tenant enfoncée et cliquer sur la dernière. En vous servant du clavier, utilisez Maj avec les touches fléchées. Format > Cellules > Nombres. Choisissez la catégorie Monétaire. Dans le menu déroulant au-dessus de la boîte format, sélectionnez la monnaie de votre pays. Sélectionnez un format monétaire dans la boîte des formats. C'est vraiment à vous de choisir. Étant donné que vous ne devriez jamais avoir un chiffre négatif dans les cellules de vos revenus, vous n'avez pas besoin de vous préoccuper trop des formats pour les nombres négatifs.

Nous allons maintenant nous occuper du contenu de la cellule A1 qui continue dans B1. Puisque ce texte est le titre de la section, nous voulons qu'il couvre la largeur de la section. La solution est de fusionner les cellules. mettez les cellules A1 et B1 en surbrillance, puis Format > Fusionner les cellules > Centrer les cellules. Nous allons beaucoup nous servir de Fusionner les cellules et il deviendra sans doute l'une des fonctionnalités de formatage que vous préférez. Malheureusement, il n'y a pas de raccourci clavier. Vous pouvez en créer un dans Outils > Personnaliser… > Clavier, mais assurez-vous de ne pas choisir un raccourci clavier pour une fonctionnalité usuelle ou prédéfinie.

Maintenant, donnons-lui l'apparence d'un en-tête, en réglant la police en gras, Format > Cellules > onglet Police. Sous Style, choisissez gras. Rajoutons une bordure autour pour le démarquer un peu plus du reste. Cliquez sur l'onglet Bordures. Sous Par défaut, cliquez sur la deuxième case, Définir les quatre bordures. Laissez Style tel quel, mais modifiez la couleur en Gris. Cliquez sur OK.

Pour ce qui concerne nos en-têtes Source et Montant, nous voulons les démarquer aussi, mais d'une façon différente pour les différentier de l'en-tête de section. Sélectionner les deux cellules qui contiennent Source et Montant. Format > Cellules > onglet Police. Sélectionnez gras à nouveau. Cliquez sur l'onglet Bordures. Cette fois-ci, nous ne voulons qu'une bordure entre les deux cellules. Dans la case Défini par l'utilisateur, cliquez entre les deux boîtes grises qui contiennent un X blanc. Vous verrez une ligne entre les deux. Modifiez la couleur en gris. Sous l'onglet Alignement, réglez l'alignement horizontal en centre et le vertical en milieu. Sous l'onglet Arrière-plan choisissez un bleu clair ((Bleu 8) pour la couleur de l'arrière-plan. Cliquez sur OK.

On pourrait mettre une bordure autour des sources de revenu, mais cela peut parfois devenir difficile à lire. À la place, nous allons changer la couleur de l'arrière-plan des lignes paires. Commencez avec la deuxième source, sélectionnez et le nom et le

	A	B
1	Income this Period	
2	Sources	Amount
3	Work	$1,079.00
4	Freelancing	$200.00
5	Bonus	$50.00
6	Misc	$5,000.00
7		

montant. Format > Cellules > onglet Arrière-plan. Choisissez un gris clair pour l'arrière-plan. J'ai choisi Gris 10 %. Cliquez sur OK et faites la même chose pour toutes les lignes paires.

Ce serait bien d'avoir un séparateur entre la source et le montant et une bordure autour de la liste complète. Cliquez sur la première source, en appuyant sur Maj, cliquez sur le dernier montant. Ainsi toutes les sources et tous les montants seront mis en surbrillance. Format > Cellules > onglet Bordures. Sous Par défaut choisissez la deuxième case, Ne définir que la bordure extérieure. Vous remarquerez que la case Défini par l'utilisateur a changé. Il y a maintenant quatre carrés gris contenant des X blancs. Cliquez entre les deux carrés du dessus. Vous obtiendrez ainsi une ligne verticale entre les cellules. Un clic au milieu créerait une ligne verticale et une ligne horizontale, ce que nous ne voulons pas. Changez la couleur en gris et Cliquez sur OK.

Et voilà : la section Revenu de notre Feuille de calcul est terminée. Dans le prochain article, nous allons continuer notre feuille de calcul budget en ajoutant la section Actifs. Et nous allons examiner la façon de demander à la Feuille de calcul de faire des maths pour nous au moyen de la fonction Somme.

Elmer Perry dont les passe-temps incluent le web design, la programmation, et l'écriture, est pasteur pour les enfants à Asheville en Caroline du Nord. Son site web est eeperry.wordpress.com

Écrit par Allan J. Smithie

Stratégie de sauvegarde - Partie 1

There's nothing worse than the thought of data loss to an habitual geek, particularly if that geek happens to be a hoarder of bits going back a couple of decades. We're all inexorably going digital; music, photo albums, correspondence; all so convenient, all so ephemeral.

It's not good for one's state of mind to know that hard disks fail; gravity, electric surge, malware, and human stupidity all take their toll. What's needed is a safety net; a backup strategy. Oh, look, I just happen to have one...

What to Backup

Don't panic over software. Program loss is merely an inconvenience, since programs can be replaced easily, particularly Open Source programs; much easier than grubbing around for License/Activation Keys for proprietary software.

Data loss, however, is the real tragedy. Data can be priceless and literally irreplaceable.

What data files to backup, then?

Photos, documents, spreadsheets, calendars, email (mailboxes or individual messages). Music, too, if, like me, you have an old library ripped from quarter-inch tape.

Critically, you need to know where everything is stored. Key to this is a detailed inventory, starting with a system-wide search based on the file types (extensions). Don't assume you or your dearest save things to the folders that you should use. Run that search, note where everything is. Do the housekeeping, and tidy up. Rationalise. De-duplicate. Know what's vital and current. Empty the trash. Include memory sticks and external hard drives in that inventory.

You won't want system cache or temporary files, swap files, or page files, as you can rarely extract anything useful from them, and they fill up with junk anyway. If there is anything you need to keep from your cache, copy it out to a more secure location.

You will need to know the types of files (usually described by the file extension, such as .odt, .pdf, .mpeg, .mp3, .mp4) in order to better specify your inclusions and exclusions when you backup.

Any databases (.dbf, .db) may have additional backup conditions to cope with locked or open files, records and indexes. Think of your vital club membership, mailing list, video index; all the backups can be rendered useless if you backup while they're in a locked (edited) state. Best close them and the applications that use the data while you backup.

Where Are the Files/Data for Backup?

The local (internal) hard disk is the number one stop, followed by external drives, network (server) drives, NAS, SAN, and peer-to-peer connected machines. USB 'flash' memory sticks are excellent for holding the latest 'sneaker-net' copies of documents, closely followed by external USB or Firewire hard drives. I have 'temporary' and intermediate copies of data duplicated across several devices already. Mobile phones and PDA's; iPhone, iPad, or synced files from Blackberry? Make a list of all the different types of data and devices you need to backup.

Version Control

How volatile is your data? High priority or critical information can change regularly. Are you going to want to backup each version? There may be a need for generations of backups, for audit trails and inspections, company or government data retention policies, or plain old work-in-progress, so you can back out a generation of changes should things go wrong. You should plan your generations of data to best use the storage available, so decide what's the best frequency to take copies, and how long to retain them. There's a whole discipline in IT administration built around backup, versioning and retention. You can go read.

Backup Destination

The safest data storage plan goes something like this:

- local machine disk (original or master copy)
- network storage disk (common or shared copy).

Note that in these days of network computing, this may actually be your master. While you may have RAID (Redundant Array of Inexpensive Disk) which is more robust, don't rely on it. It's still electrons stored as bits on mechanically spun magnetic platters.

- offline storage. This was commonly tape, but could be anything loaded on request - tape, disk caddy, mini-disc, optical re-writeable disk, or logical volume mount.
- off-site storage. This could be physical media - say a set of imaged disks which are caddied, your digital tapes or data-DVD's.
- Remote cloud storage, or on-line backup.

For maximum peace of mind, you should be looking to hold at least three copies of data on a selection of different media types: local, off-site, and cloud.

Local backup does not include the working copy on your PC. Get an external drive for convenience. Keep it somewhere safe, out of site, away from the PC. Use it as a deliberate and planned local backup.

On-premises backups would ideally go into a fire-proof safe.

Off-site means not at your home or office where the PC normally lives. If nothing else, swap between two external hard drives, and always keep one at your mother's house. Maybe have a reciprocal arrangement with your best mate. I know of professional people who use a safety deposit box at the bank.

This provides physical persistence of data, but consider privacy and whether you need encryption for data security. If your off-site backup gets burgled, will that harm you if the data gets into the wrong hands? Family photos? No. My lawyer friend's legal briefs? Yes. That's why he encrypts his backups. This is another whole topic.

Embed Backing-up into your life

This means a program with a scheduler, or a script triggering the backup application to copy your data onto something other than the device where the master copy lives.

Move External Backups Off-site

The value of your backup holds for as long as it stays intact and proof against fire, flood, theft, earthquake, subsidence, and so on. Once you make a backup, remember to move it off-site to your alternate location. Don't leave it on the bookcase, on top of the fridge or under the desk. That's not a useful backup. This is why online or cloud storage is so attractive.

Online backup and storage is now a practical reality for most computer users and there are lots of providers in the industry of cloud storage. Disk space is cheap, bandwidth is available and it automatically migrates off your premises. The best cloud storage services have encryption built in.

Testing

Finally: test your backup with a partial restore from ALL sources. Just because a backup exists, doesn't mean it is usable. Tapes and DVD's decay, disks fail, software doesn't always write with integrity . Test them before you need them in an emergency.

Restoration is always a challenge owing to the volume of data and the length of time it takes. It has to be done to verify the integrity of your backup. If you never rehearse a full restoration, you need to establish what a colleague calls a 'degree of confidence.' The partial restore gives you that confidence that it will work in extremis. Otherwise you're just guessing. How confident are you in your guesses in other areas of life? Exactly.

Ubuntu pour le business et l'éducation - P.2

Écrit par Jesse Avilés

Last issue, I started talking about the needs of a home office or small business that runs on Ubuntu. To have a reference starting point, I described a fictional environmental company of five people, and a mixture of desktops and laptops, and some hardware requirements. Now that we have our hardware set up, we move to the software necessary for our needs. The business will run Ubuntu 10.04 because the long-term release provides a known long-time support for the OS.

To determine the needs of the company, let's start by evaluating the workflow. This is a big word that means "the steps taken to achieve a goal". Look at the second page of this magazine. You will see logos for LibreOffice, GIMP, Scribus, and Creative Commons. LibreOffice is used to manage the text that will be in the articles. GIMP is used to resize and retouch the pictures, while Scribus gets the text, images, flow, and pdf creation managed. Creative Commons provides the license of the resulting work.

The workflow can be defined very broadly or narrowly. We will broadly define our workflow as follows:

1, Market the company to potential clients.
2. Client calls, gives the details of a project, and asks for a proposal (cost estimate).
3. The proposal is researched, prepared, and sent by email.
4. Client accepts the proposal. Initial paperwork is completed.
5. Field work is performed. Samples and pictures are taken, and field notes and drawings are written. Samples are delivered to a lab.
6. The lab report and fields notes are evaluated, the pictures resized, and the report written and sent to the Client.
7. Invoice and payments are processed (from Client and subcontractors).
8. Records are archived.

From this workflow, we see that we need the following types of software:

- Desktop and web-based publishing (workflow 1)
- Office productivity (workflow 3, 6)
- Email and contact management (workflow 1, 2, 3, 4, 6, 7)
- Accounting (workflow 4, 5, 7)
- Image manipulation, CAD, GIS, Scanning (workflow 1, 5, 6, 7, 8)
- Records management (workflow 3, 4, 6, 7, 8)

Now that the software needed is known, the first area to check is the Ubuntu repository and then the web. The software can be open-source, and it could have no cost or it could be commercial. Remember that a free (all the meanings you want) alternative is not always available. If it is not in the repositories, it should be packaged as a deb and should need as few external dependencies as possible. You can also check the Ubuntu list of certified software at http://webapps.ubuntu.com/partners/certified-software/ for software that will work. These guidelines will help to minimize problems encountered.

Desktop and web-based publishing

Flyers, business cards, brochures and web pages fall in this category. When you meet someone, business cards are exchanged. If you are at an industry show or at a potential client meeting, you bring brochures and flyers with you. All of these have contact information, email and web address.

If you have used MS Publisher, Adobe Frame Maker or Quark Express before, you know that the precise placement of elements in a page is a must for printed publications. On Ubuntu, you will use Scribus (http://www.scribus.net). Scribus is desktop publishing software (DPS). Its precise placement and color management make it one of the best free and open DPS tools around. Scribus, and DPS tools in general, are not word processors. Take your time to learn Scribus. Check the first eight issues of FullCircle for a tutorial on it. Once you have the hang of it, your paper publications will come out as the best you have seen.

Scribus will also be useful in creating forms to collect data on the field. It can create exports directly to pdf if you want to take it to a professional print shop. One thing about the pdf is that if you try to extract text from it, it may not come out really nice. Extracted text may have spaces within words, and every

line is a new line. Use Writer to export a page with a couple of paragraphs to pdf and do the same with Scribus. You will see what I mean. Scribus is also an excellent tool to create pdf forms. Its main drawback is that multi-line boxes have too much space between lines making it look awkward. Also, there is no option to let the user save a filled pdf. Scribus can also use vector (Inkscape, http://inkscape.org) and raster (GIMP, http://www.gimp.org) images. You can use Inkscape to create the logo of your company and various clip arts. The upside of creating your logo as a vector image, is that you can scale it without losing resolution.

Web-based publishing is another thing. MS Publisher can create a web page of your document. It may do the work, but the code is horrible and tailored to use IE hacks. The repositories have Bluefish (http://bluefish.openoffice.nl/index.html) and Kompozer (http://www.kompozer.net). Both are web-page creation tools, but Bluefish is only for hand coders. With both, you can create html, PHP, javascript, or any combination of them. Bluefish development is active while Kompozer is more slow. If you plan to go this way, ensure that you use a strict DTD (document type definition), and forget about table layouts. Strict DTD html and CSS layouts will give you the least headaches because you will be following a strict recipe - the presentation is handled by CSS, and the information is handled by the html markup. When you tire of the way your website looks, you just change the CSS. When you need to update the information, you go to the html source. Your web page may not look exactly the same across browsers but even if you use hacks you are not assured that it will. Also, if you later hire someone to manage your website, a strict DTD is easier to maintain and read by a different person.

Also remember that there are many people accessing the web through smartphones, and others who print your info. It's a good idea to offer a screen, print and mobile css rule for each. Remember that each medium is unique, and that you do not need to make all of them look the same. Open up Firefox Preferences, and look at the Content tab. The Advanced option of the Font & Colors section will show the font size and font used for web pages that do not offer any special rule for font display. If you have not changed it, the font will say serif, and the font size says 16 pt. If you open up the same page in print preview, the font may be too large. A CSS rule may leave the screen font at 1 em, but set the print size to 12 pt. A mobile rule may leave the same font size, but hide all images by default, or use alternate, smaller images. That way, your web page will automagically serve different users without you doing any special java or ajax magic.

Another tool you can use is Drupal (http://www.drupal.org). Drupal provides several templates, and handles all the coding for you. There are hosting companies that offer a Drupal setup to their clients. You will just have to add your text to the Drupal-ready templates. Check out http://drupal.org/hosting to find the host that is suitable for you.

Office productivity

This is the software group that most people will be familiar with. Ubuntu supplies OpenOffice as the default office productivity suite. OpenOffice is similar to MSOffice, enough so that most people will need only little training on it. The benefits of using OpenOffice come from being able to open MSOffice files, and having a full featured office productivity application. Not only do have you a word processor, spreadsheet, and presentation software, but you also get flowchart and diagramming via Draw, and database applications via Base (which is not in the default installation in Ubuntu). To get the full suite, open the Software Center and download OpenOffice.org Office Suite, or just install OpenOffice.org Base to get the database. The full installation will give you some legacy and mobile device filters.

OpenOffice is able to match MSOffice, so you should not have any reservations about it. One thing to remember is that OpenOffice is a tool to create Open Document Format (odf) files just like the latest iterations of MSOffice are tools to create Office OpenXML files. Although each suite is capable of opening "the other" file format, they are best suited to handle the one they were created for. In short, use ODF as your default file format.

Getting a free suite means that you do not get some things like templates, clip art, and grammar checker, but they are available for download. The trickier one is the

grammar tool. You will have to go to the Lingucomponent webpage (http://lingucomponent.openoffice.org/grammar.html) to check the available tools. After the deadline (http://afterthedeadline.com) has been the best of the offered tools with the drawback that you will need to install it on your server and have at least 4GB of RAM and several cores in it. It pays to do it.

OpenOffice provides user guides at http://wiki.services.openoffice.org/wiki/Documentation/OOo3_User_Guides. Download them and have them available for your employees. Many of their first time use and migration pains are explained there. On Writer, go over the concepts of sections and page formats as those were some of the ones that gave me a lot of trouble. Learn to use paragraph, character, and page styles as these are very powerful. As children, we were taught that there are times that we need to emphasize text but word processors got us in the bad habit of using bold or italics. Same thing happens when separating paragraphs, an empty paragraph is added instead of using a paragraph style like Text body.

Calc provides a spreadsheet with mathematical formulas and chart functions. The conditional formatting works great when you have a table with values to compare against a standard. Once you set it up, the data that fulfills your instructions get automatically formatted. I use it to bold, underline, italicize, or any combination of them, values that are above reference standards. These values are then charted to evaluate, for example, their trend over time or over an area. Calc formulas also provide ample coverage for statistical, logical, arithmetic, and financial needs.

Many users of Impress will complain of the lack of templates. That said, move on. Impress does its job well enough. Transitions are good, and one thing that I have found that works better than Powerpoint is the embedded media player. Impress will automatically play the video, I wasn't able to do that with Powerpoint.

The bundled office suite provides for your needs. However, there is LibreOffice. LibreOffice now ships inside the current Ubuntu, and it looks like it will ship in the next LTS edition (12.04). Everything I said holds for LibreOffice. There are some features that LibreOffice has that have not made it to OpenOffice - yet. If you find that you want it, follow the instructions at https://wiki.ubuntu.com/LibreOffice. You will have to uninstall OpenOffice as the two cannot coexist.

Lyx (http://www.lyx.org) is an alternative document processor that you can try. Being a front end to Latex, Lyx emphasis is in writing; Latex rules are used to style the document. The basic textclasses are good, but people used to managing every single space may find them frustrating. Lyx takes some of Latex's complexity away and those who know Latex can create new textclasses to suit their needs. Lyx can output to pdf, html, DVI, and others.

Email and contact management

Evolution. Learn it, love it. It is no different (in terms of basic usage) from MS Outlook or IBM Lotus Notes. It manages your email, contacts, and calendar. Base connects to your address book so you can do mail-merge easily.

Accounting

This is a category with challenges - because not many free accounting packages exist for Linux small businesses. Luckily, the software repository has a Canonical Partner source that has a link to such software. Openbravo ERP is a web based application that lets you manage projects and create invoices, and access business intelligence tools, for a price. The certified software web page also points to Accountz (http://www.accountz.com) and Muli (http://www.muli.com.au). I have not had any experience with any of these packages but Ubuntu says they will work. Whether these do what you want is another thing.

Image manipulation, CAD, GIS, Scanning

The pictures taken during field word, the hand-made drawings, geolocating the samples, and digitally preserving all these, require the use of special software. Let's start by looking at the image manipulation software. If you are new to Ubuntu, you may not know GIMP because it is no longer a default application. Go ahead and download it from the Software Center. GIMP is often compared to PhotoShop because it is

just as powerful. If you care to learn it, there is a lot that you can do with your images. It will be part of your workflow of desktop and web publishing apps. In this instance, we will use it mostly for picture resizing because it gives us the option of using physical units (mm or in). When pictures are printed as part of a report, they will only take a set space, let's say a 4×6 in. With most cameras these days, if you take pictures at full resolution, you end up with a picture of several MB and in the 30-inch size range. If you create a document, think Draw, with several of these images, the resulting file will be bloated, unwieldy and slow to print. Use GIMP to open the picture and go to the Image menu. From there. select Scale. In the dialog box, go to resolution, make sure that the chain link between x and y is not broken, and if it is anything different from 300, change it. Look at how the size changes. Now move to the unit selection box and select inches. Pictures are usually taken landscape - meaning that the width is the largest dimension. Change the dimension to 4 inches. The height will change automatically. Save this picture - with a different name - and compare its file size to the original one. Using these resized pictures will give you an excellent printed document and the file size will also be manageable.

Ubuntu's default scanning application is Simple Scan, and simple it is. You will scan documents that you receive from third parties, and Simple Scan has settings for A4, A5, A6, letter, legal and 4×6 sizes. The resolution is limited to several choices, and saving options are limited to pdf, jpg, and png. I believe that these settings are enough, but Simple Scan always scanned the largest size and I had to crop every single image. When using the document feeder, Simple Scan was able to detect the last page and stop scanning. Double-sided scanning using a document feeder with automated collating of the pages is not possible. Simple Scan is also missing an optical character recognition (OCR) option because that is not the goal of the application.

For OCR, and some more advanced features, look at gscan2pdf (http://gscan2pdf.sourceforge.net). Gscan2pdf is a collection of different tools that makes scanning more convenient by far. One of the things that it does is page cleaning and deskewing via unpaper (http://unpaper.berlios.de). By using scanadf (http://www.martoneconsulting.com/sane-scanadf.html), gscan2pdf should detect when the ADF is out of pages. Unfortunately, for me that feature does not work. I use an HP Photosmart Premium and every time I use the ADF I have to enter the number of pages in it. To use OCR you have to install an OCR engine. Of those that I have used, I obtained the best results with Tesseract (http://code.google.com/p/tesseract-ocr). Install it and any language you need before you install gscan2pdf. None of the tools that I have used in Ubuntu work like the ones that come for Windows. The multifunction printer I have comes bundled with software that scans to pdf and inserts the OCR'd text in such a way that you just select the line to copy the text. When saving to pdf, gscan2pdf places the OCR'd text in a note which some people will find odd. I will call this a limitation to the current state of the software. Another limitation is complex layout analysis. Ocropus (http://code.google.com/p/ocropus) and Cuneiform (http://launchpad.net/cuneiform-linux) are alternative OCR and layout analysis engines that you can use with gscan2pdf. Your results will vary depending on the layout of the documents, and both tools are command-line only.

Once you have scanned your field drawings, you will have to use a CAD application to digitize them. For those who know only AutoCAD, you will be surprised by the options in Ubuntu. AutoCAD is not available, and the best option in the repositories is QCAD. There is a free edition and a paid one (www.qcad.org). The commercial edition is only $36.00 USD - and well worth it. My reason to get the commercial edition was to get pdf export. There are some new features and bug fixes as well. I use QCAD to do layout of the facilities, and mark utilities and sample locations. It has a model space and no paper space. The missing paper space is the major drawback for me, but I have learned to work around it. The default file type it uses is dxf, and it can not export to AutoCAD dwg. That is no problem to me, but, if you want dwg support, look to Bricsys (http://www.bricsys.com) to obtain Bricscad. It works great in Ubuntu (an Ubuntu software partner), it is much more sophisticated than QCAD, and has a reasonable price at $400 USD. Another free option is DraftSight (http://www.3ds.com/products/draftsight/free-cad-software/). It appears promising enough - offering capabilities similar to Bricsys. When I installed it in Ubuntu, I was barely able to run it. I met the hardware

specs, but scrolling, moving the mouse, and adding elements, was painfully slow. It reminded me of the time I was playing a game and my graphic card did not meet the minimum requirements. A couple of days ago, a new version came out - so things might have changed. I have stayed with QCAD because it provides for my needs.

Geographical Information Software is part of the toolbox used in the environmental sciences and many other places. It lets us evaluate the geographical relationship between many diverse aspects. If you have an Android phone, go to Latitude or Maps. If you get your location you can see what is around you. Do you want to know if the presence of a university has an impact in scholarization around it? You can go the US Census web page (http://www.census.gov/geo/www/tiger) and download their data. Then get the location of several universities, and use GIS tools to see if there is a change with distance. That is geographical information at work. GIS is even used in crime fighting (http://gislounge.com/crime-mapping-gis-goes-mainstream/). For my GIS needs, I use QGIS (http://www.qgis.org) which is not in the repositories. You will need to follow their instructions (http://www.qgis.org/wiki/Download#Ubuntu) to add their repositories. When installing it, also include the GRASS plugin. Those who have used ArcGIS will find QGIS somewhat familiar. The main problem that I have found is with the Coordinate Reference System (a type of information that gives a placeholder of locations). Read the manual on these because it works a little different from ArcGIS.

QGIS will also help in creating contours, whether they are of elevation or contaminant concentration. Follow these tutorials from Scratching Surfaces to do them. http://www.surfaces.co.il/?p=595 and http://www.surfaces.co.il/?p=578.

Records management

Sometimes people forget that the information collected and created needs to be managed for several years. The Occupational Health and Safety Agency (OSHA) requires that employers keep certain records related to health monitoring for 30 years after a person leaves the company (29 CFR 1910.1020(d)(1)(i)). The US Environmental Protection Agency (EPA) has a record schedule (http://www.epa.gov/records/policy/schedule/) that governs the maintenance of their records. Records - paper, electronic or in any other media - consume space, money, and time. This is records management (http://en.wikipedia.org/wiki/Records_management). If we go back to our workflow, records are generated at almost every step: when a proposal is sent, when the proposal is accepted, the documents generated as part of the field work, invoices, payments, documents received from third parties, and so on. When you print those records, and start filling file cabinets, you will get to the point in which you will have to add to the file cabinets. The electronic records start filling your hard drives - requiring that you add more hard drives. I know people who have not erased any business email in over ten years. Holding on to records forever does not makes good business sense. You have to get rid of some. The National Archive and Records Agency (NARA) has a framework, geared to federal agencies, for developing records management guidance (http://www.archives.gov/records-mgmt/policy/rm-framework.html). There is even guidance for using sustainable formats (http://www.archives.gov/records-mgmt/initiatives/sustainable-faq.html) and pdf (http://www.archives.gov/records-mgmt/initiatives/pdf-records.html). The International Organization for Standardization (ISO) has for sale a two-part standard for electronics record management (http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=31908). This Australian webpage (http://www.records-management.com.au/information.shtml?standards-) has a comprehensive list of records-related standards and guidance from around the world.

Now that I have convinced you to throw away those unneeded records, I can tell you about record management software (RMS). RMS works like a gateway of documents. You use the RMS to save a document within the vaults of the repository and to request documents within it. The RMS keeps track of changes to the documents and who has the document out for editing. It also takes care of archiving. The Canonical Partners repository has one such option by a company called Nuxeo. Nuxeo goes a bit over record management, and it also offers content management. Think of

"Terms and Conditions" that are added to contracts. There is a free option for you to evaluate.

Another RMS that you can check, and that is DoD 5015.02 certified, is Alfresco (http://www.alfresco.com). There is a free community edition. We are looking for a RMS where I am working now, and Alfresco is one of the contenders. The main reason to evaluate it is because it can connect to Documentum (a monster of enterprise content management software). I have not tried it yet, and, if you want to do it, the Linux Community Edition is 64bit only.

As you can see, Ubuntu offers all the tools needed by a small environmental company. The main cost for the company will be in acquiring the hardware, and setting the network and software. Most of the software that I mentioned above is free, and in the repositories, removing some of the headaches associated with hunting down software. Have no fear in taking the plunge to open shop with such a great free environment.

Jesse est un microbiologiste industriel dans le domaine de l'environnement, qui travaille maintenant pour le gouvernement. Along the way loving FOSS and ways to help people with it.

GRAMPS - Partie 2

I need to begin by correcting some bad advice in the previous article. The Marriage event is properly entered for the family - not for the individual. It is, after all, a family event, and not just that of any person, although it will show in the individual screen as a shared event.

Before you get too far along in recording your family history, here are some hints gained from many researchers' experience and mistakes:

• DO NOT start by trying to find family data on the Internet. Always work from the known to the unknown – gives your feet a firm place to stand.

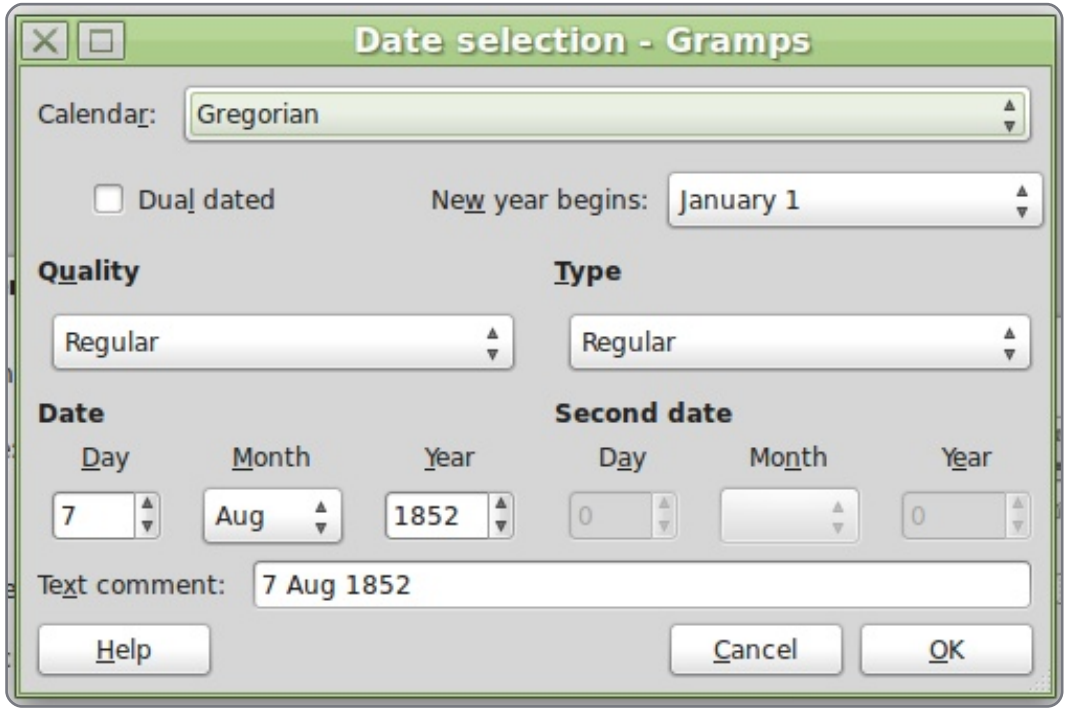
• Don't blindly assume those family legends to be the complete truth. They usually have some root in reality, but you may not recognize it right off.

• Don't expect "Who Do You Think You Are?" results without years of hard work!

• Begin by recording what you know about yourself – your birth date and place. How did you know that? Gather copies of your birth record if you don't have it already. In the US, a birth certificate will generally include only a minimum of extracted data. Try to get a copy of the actual courthouse journal entries.

• Dates are usually entered in day-month-year (08 Jun 2011) format to avoid confusion. Enter as much of the date as you know. Some useful common abbreviations are – cal, Calculated; bef, Before; aft, After; ca, Circa; abt, About; est, Estimated; bet, Between.

As we saw in the last article, Gramps facilitates this by having a date selection screen where you can choose how best to enter the dates as you know them. Just click the little box to the right. You can even choose the calendar you're using – not a problem for most of us! Making a choice from the 'Quality' dropdown says something about how certain you are about the date. Making a choice from 'Type' takes care of choices mentioned above. Entering one or two dates into the date fields c



ompletes the entry. The 'Text Comment' box will show you how your choices will appear. You'll use 'Calculated' for those birth dates extrapolated from Census data or calculated from an age and death date. Be aware of accuracy problems found in many date calculators. Many don't take into account everything they should!

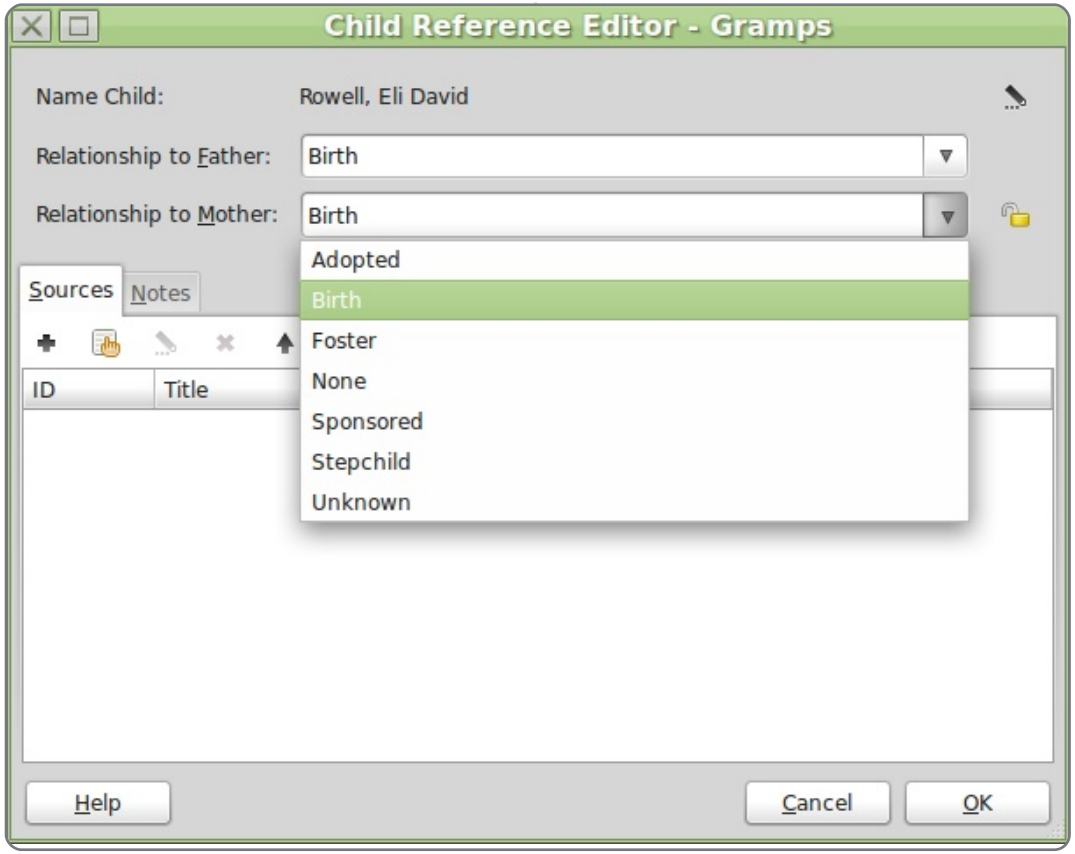
Be aware that there was a calendar change from Julian to Gregorian method of calculation that may well impact your work. While the change should have taken place in the 1500's each country decided when to adopt it. Britain and the British colonies seem to have adopted the new calendar in 1752. Suffice it to say that, if you're dealing with dates around the changeover you have to be very careful. You may also run into double dates that stem from the definition of what date the year started. Then there was the French Republican calendar, but we won't go there! My advice is to record the date as you found it and make use of 'Notes' to record your evaluation of the situation.

• As you gather family data, you're bound to find that you have entered children out of birth date order. To fix this click the edit box to the right of 'Family'. On this screen (only) you can drag and drop to establish the right order, or you can use the 'up' and 'down' arrows.

• Placenames are entered in small to large order - parish, township or city, county, state, country; e.g. Lysander Township, Onondaga County, New York, US of A. This level of detail is needed to make a positive location. It is important that places be entered as they existed when the event took place. Knowing that will help in locating primary records. For example the present Oswego County, NY, was formed from Oneida and Onondaga Counties in 1816. Hinmansville and its records would have been in Onondaga County in 1810 - even though it is in Oswego County now. Nor will you find an 1810 census for Oswego County. You can search for this sort of information on the 'Learn" tab at FamilySearch.org.

• I will guarantee that you will want to revisit your source data at some time in the future. If you record enough information to uniquely identify both the specific source and where you found it, I feel that's enough. Others would insist on a more formal citation. Data on the Internet had to come from somewhere else. Cite the source of your source. In that manner, you have some assurance of finding the data even if the site changes. It may seem a tedious waste of effort to find and record the source information for your data, but it's not. Just do it!

• If you're married, record your spouse's and children's data in the same way. The complete family information is usually recorded on a 'family group sheet'. Gramps will generate a 'Family Group Report,' simply choose Reports->Text Reports->Family Group Report. Select your family and options, then press OK. I find PDF output to be the most convenient, but Open Document format is handy if you need to edit the report. I'd avoid plain text, it's formatted for fixed-width printing, and RTF, because every WP processes it differently!



• Be sure to select the child's relationship to the parents when recording family data. Gramps includes what appears to be all the usual parent relationships in the dropdown box. Please don't ask how to handle the complex situations that might develop from a surrogate mother situation or sperm or egg donation. I'm sure those have been discussed on the Gramps forums – look there.

• Now it's time to record yourself as a member of your parents' family. Record your siblings too. Again, secure copies of documents that verify the data.

• Working backward in time, record your parents as members of your grandparents' families. You may begin to find that documentation is getting hard to find. Record what you know and make a to-do list for the unknowns. Try to find pictures and get your grandparents to talk about the people and places in them.

• If you don't know parts of a person's name, DO NOT enter unk or unknown – that will bite you, guaranteed! I type [–?–], there's no question that is a symbol, not a name. I took that away from months' long discussion on one

of the Genealogy newsgroups years ago.

• Contact your cousins, aunts, and uncles. Find out about your family history from "the horse's mouth" so to speak. One day my cousin and I looked at each other and realized that we were 'the older generation'! Too late then.
Genealogy isn't just dates and numbers. Try to flesh out your knowledge with pictures, recordings, letters, medical information, precious objects, and interviews. Talk to your parents about events that have special meaning to them. Have them identify people and places in pictures.

• Start some sort of filing system to keep track of the documents you're gathering. Some file by person, some by family. Some use notebooks, some use folders in a file. Your choice, but do something, or you'll find yourself staring at a pile of half remembered papers! Develop a system to preserve the names and places you've identified in those old pictures. Reading through http://genealogy.about.com/cs/organization/a/filing_systems.htm will give you some ideas.

• It is helpful to keep a record of places (books, web sites ...) you've researched, what you searched for, and what you found. "Nothing" is a perfectly valid and useful fact! This practice will help prevent searching again and again for the same item in the same place. Of course this isn't strictly true in the case of searching on the Internet, since URLs and content vary with time.

• Consider this about the Census – the census taker only recorded what he thought he heard, generally without checking spelling. In many cases someone else may have provided the information to the census taker, perhaps the family was away for the day? Get used to inferred birth years changing over time. Accept the fact that names and name spelling just weren't that important in the old days. I've found a certain "liquidity" in reported ages. Perhaps being older or younger than your spouse had a certain stigma?

• At some point, hopefully after you've recorded some data for your grandparents, or even great grandparents, you will want to seek further information on the Internet. Learn to develop a skeptical attitude toward what you find – some "researchers" aren't at all careful about what they record. There are even known cases of fraud. There's a lot of garbage and copies of garbage out there. You want to get back to hard evidence – original records if they exist.

• As a newcomer to genealogy, I'd suggest that you visit https://www.familysearch.org/learn/getting_started, and work through some of the guides provided. The Family Search site is provided by The Church of Jesus Christ of Latter-day Saints, the Mormons. I understand that family history is very important in their religion. LDS has undertaken some very large international projects to digitize original records – much of this work is available for your research on the Family Search website at no cost. They also have a worldwide network of FamilySearch Centers. At these Centers, you can view microfilm of these original records and use some for-fee sites at no cost on their computers. Microfilm not found at a Center can be rented very reasonably from their main library in Salt Lake City. On-site staff will be helpful but may not know much about genealogy. No, I'm not evangelizing here - it's just that LDS has generously provided these services for your use at no cost and with no strings attached.

• At some time you will need to visit http://www.rootsweb.ancestry.com/ to consult and register for some of their lists. You'll find a wealth of background information on RootsWeb. RootsWeb is hosted by Ancestry, but has remained free and independent of commercial influence.

• Other resources include www.worldgenweb.org which will link to www.usgenweb.org www.canadagenweb.org and other national sites. The information you'll find here is organized geographically, and may contain information you need.

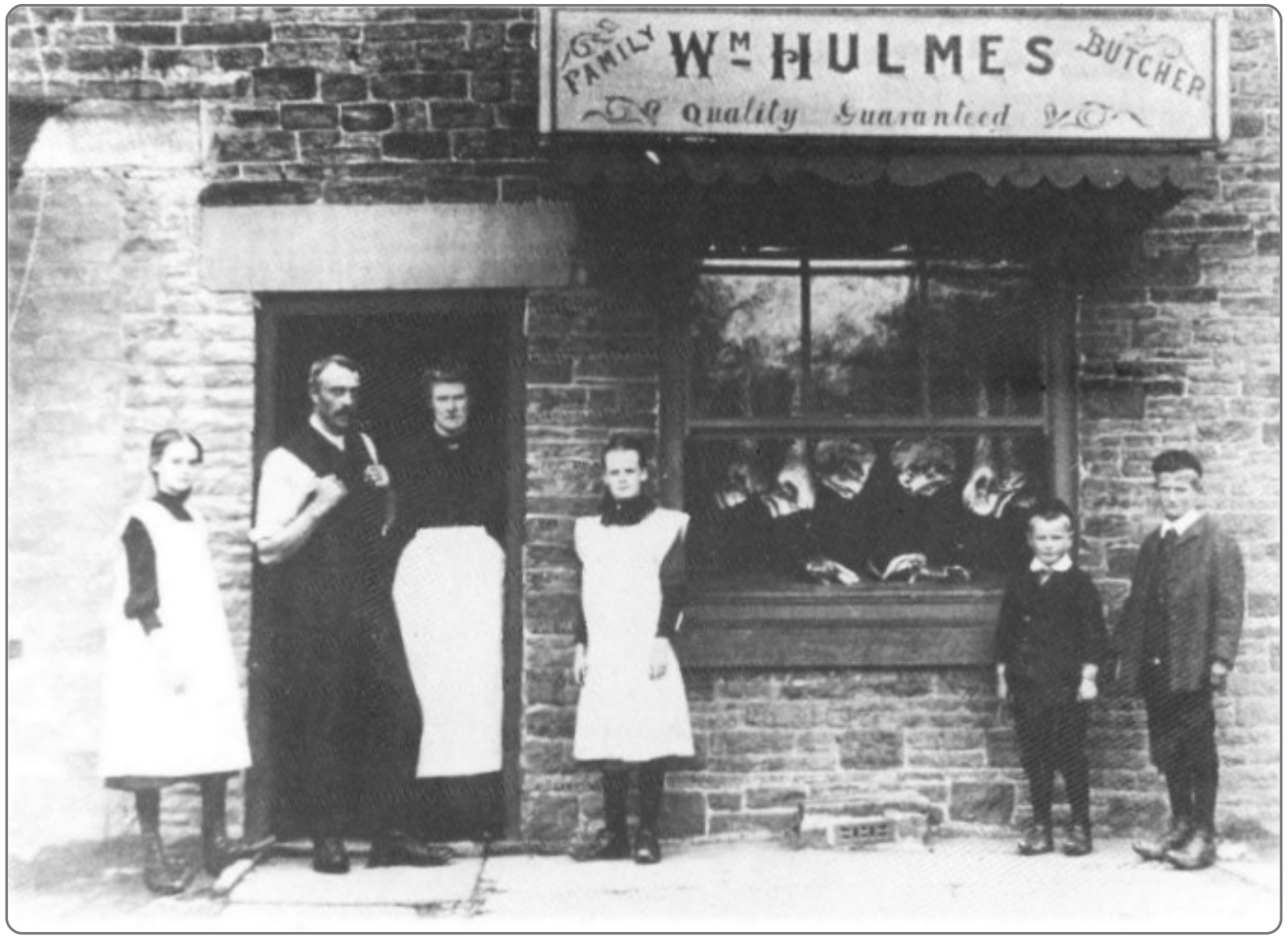
• You may well find that your local library has a genealogy and local history department. Most provide user access to online databases such as Heritage Quest or Ancestry. Some systems even allow remote login. Ask at the Reference desk.

• If you can afford it, www.ancestry.com has, probably, the most complete online digital content. Remember the "Who do You Think You Are?" TV series? You can search for events, names, or places, find and view original and secondary sources, and participate in online training. Considering Ancestry's vast content,

the price is reasonable.

• Google is your friend even for genealogy! Surprisingly, Wikipedia will also prove useful.

This brief note should get you well started on the path to building a good sound family history database. Don't forget those sources!



Écrire pour le Full Circle Magazine

Consignes

La seule règle pour un article est qu'**il doit avoir un lien quelconque avec Ubuntu ou l'un de ses nombreux dérivés** (Kubuntu, Xubuntu, Lubuntu, etc.).

Écrivez votre article avec le logiciel de votre choix. Je vous recommanderais LibreOffice, mais s'il vous plaît, **VÉRIFIEZ L'ORTHOGRAPHE ET LA GRAMMAIRE !**

L'écriture

Dans votre article, veuillez indiquer où vous voudriez qu'une image particulière apparaisse. N'intégrez pas vos images au document LibreOffice.

Les images

Elles doivent être au format JPG avec peu de compression.

Concernant la taille de celles-ci : si vous avez un doute, envoyez une version plein écran et nous la réduirons. Pour une liste plus détaillée des règles de style et des problèmes usuels, reportez-vous à : https://wiki.ubuntu.com/UbuntuMagazine/Style - En bref : orthographe US, pas de langage l33t [Ndt : langage de l'élite (geek leet speak), cf. Wikipedia] et pas de smileys [Ndt : des émoticônes].

Si vous écrivez une critique, veuillez suivre les consignes données ici.

Quand votre article est prêt, envoyez-le par courriel à :

articles@fullcirclemagazine.org

Si vous ne pouvez pas écrire d'articles, mais traînez sur les Forums Ubuntu, envoyez-nous un fil intéressant que nous pourrions publier.

Auteurs francophones

Si votre langue maternelle n'est pas l'anglais, mais le français, ne vous inquiétez pas. Bien que les articles soient encore trop longs et difficiles pour nous, l'équipe de traduction du FCM-fr vous propose de traduire vos « Questions » ou « Courriers » de la langue de Molière à celle de Shakespeare et de vous les renvoyer. Libre à vous de la/les faire parvenir à l'adresse mail ad hoc du Full Circle en « v.o. ». Si l'idée de participer à cette nouvelle expérience vous tente, envoyez votre question ou votre courriel à :

webmaster@fullcirclemag.fr !

CRITIQUES

Jeux/Applications

Si vous en écrivez une critique, veuillez noter clairement :

- le titre du jeu ;
- qui l'a créé ;
- s'il est en téléchargement gratuit ou payant ;
- où le trouver (donner l'URL du téléchargement ou du site) ;
- s'il est natif sous Linux ou s'il utilise Wine ;
- une note sur cinq ;
- un résumé avec les points négatifs et positifs.

Matériel

Si vous en écrivez une critique, veuillez noter clairement :

- constructeur et modèle ;
- dans quelle catégorie vous le mettriez ;
- les quelques problèmes techniques éventuels que vous auriez rencontrés à l'utilisation ;
- s'il est facile de le faire fonctionner sous Linux ; • si des pilotes Windows ont été nécessaires ;
- une note sur cinq ;
- un résumé avec les points négatifs et positifs.

Pas besoin d'être un expert pour écrire un article ; écrivez au sujet des jeux, des applications et du matériel que vous utilisez tous les jours.

ZoneMinder CCTV - Partie 2

Écrit par Ronnie Tucker

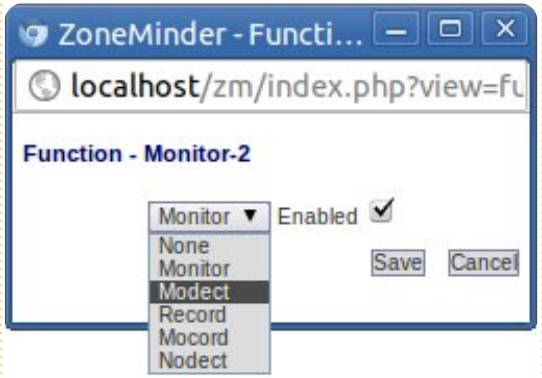
Last month we got our CCTV system up and running. The only downside was that it was view only. It wouldn't record. We'll rectify that this month.

Here's the scenario: I have my laptop on my desk, and I want to know if someone has touched, moved, or taken my laptop. The easiest way to do this is to have our ZoneMinder CCTV pointing at it:

then, in the ZoneMinder admin

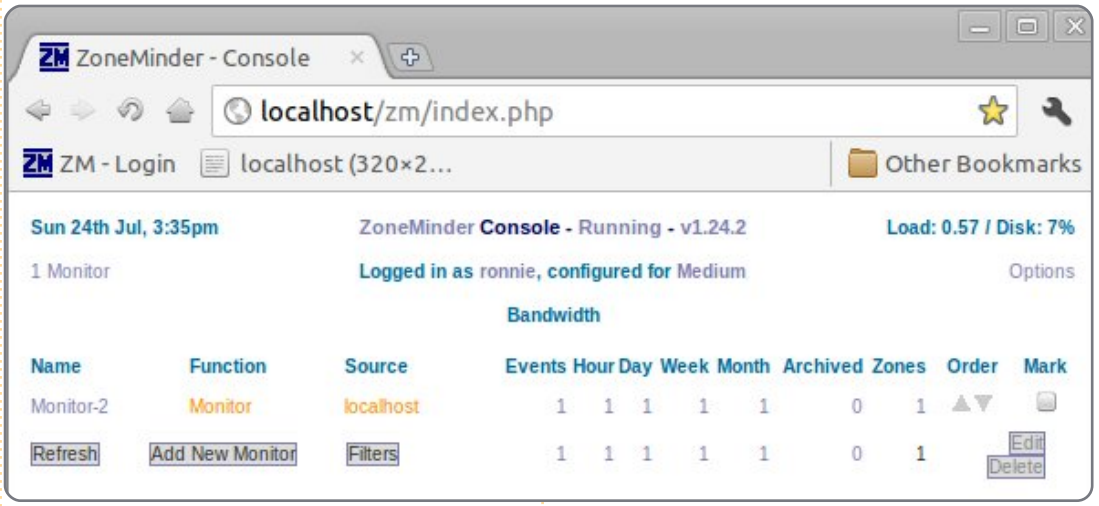
screen, click the link which says 'monitor'. You'll get a pop-up window with some options. These options are what ZoneMinder is doing. Monitor is what we were doing, just monitoring, or watching, the situation. Here, we want to choose 'Modect' which is short for 'motion detect' and click 'Save'.

Now ZoneMinder is sitting



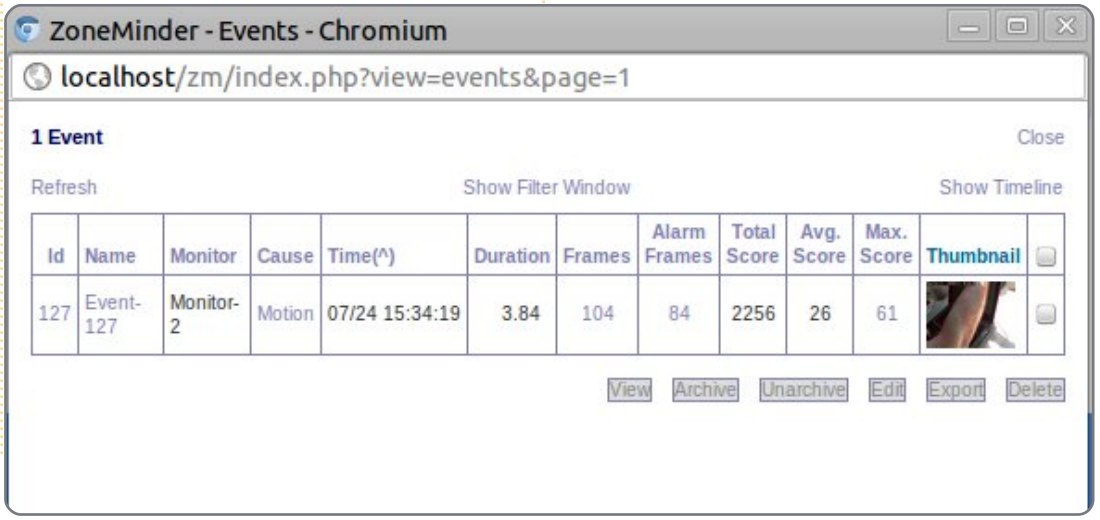
watching (monitoring) for motion detection. That is, it is waiting for something to move. When something does move, you'll notice some numbers appearing on your admin screen (above right).

The number one (in my case) means one event has happened. Clicking the number one in the events column will take you to your list of events:



You'll see information for your event(s). In this case the 'Cause' is 'Motion' (a movement). The time the event took place, duration of the event (or movement) and various other pieces of data. If you've enabled it in the settings you'll see a thumbnail of the event too.

Clicking the name/Id will play the event:



Don't panic, it's only me closing the lid on my laptop, but it could also

have been someone stealing my laptop. You'll also notice that the playback has the date and time stamped on it.

Just above where it has my time stamp, you'll see a link to 'Export' the scene as a video. If you're lucky, you'll get a window which asks you which things you'd like to export:

Me? I got nothing. It turned out to be another ZoneMinder/Ubuntu clash which I could only resolve by using a static URL to gain access to the export screen. So, if you don't get the export pop-up, try using this URL:

```
http://localhost/zm/index.php
?view=video&eid=127
```

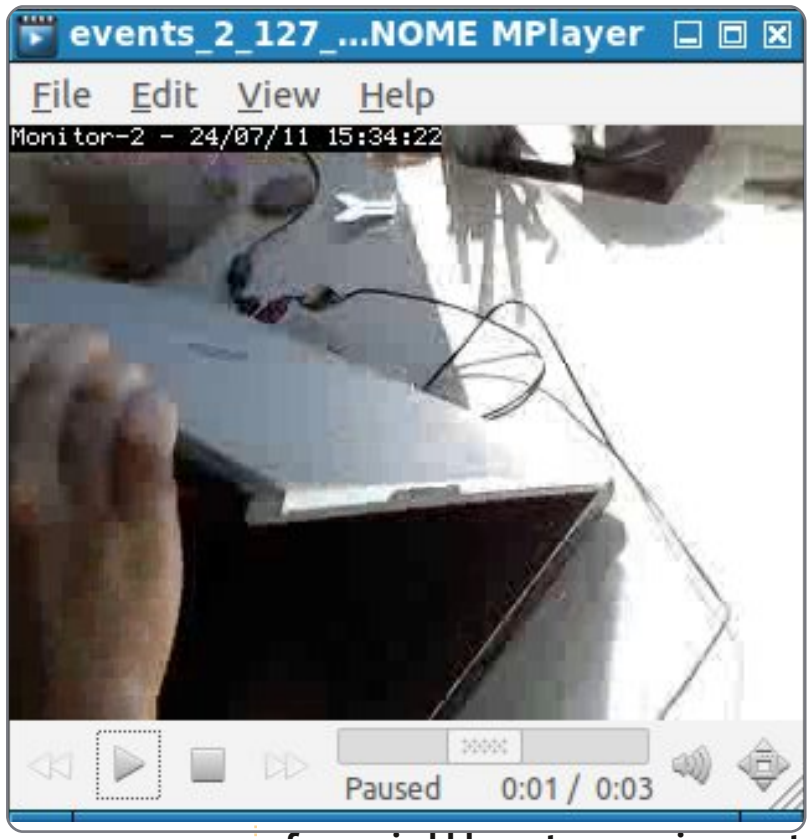
NOTE: the '127' at the end of the URL is the event ID which can be found either in the event list window, or in the video playback window. Make sure you change the 127 in the above URL before you export your video.

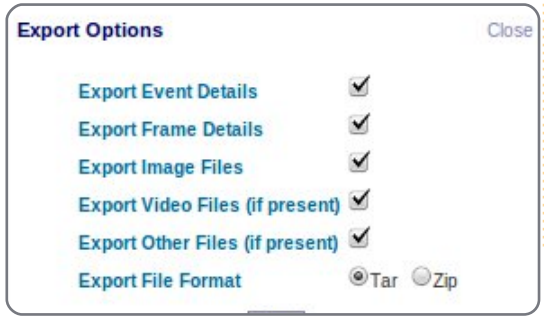
Which should take you to:

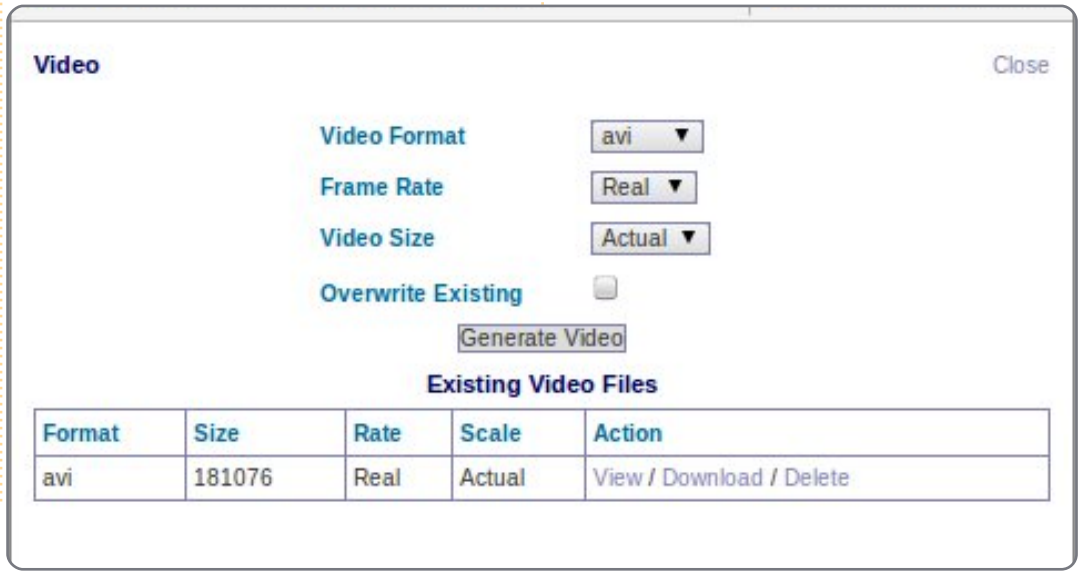
where you can choose the video format, frame rate, and video size, and get access to the 'Generate Video' button. Once you've clicked generate, you can then view, download, or delete the generated video.

And, here's the generated video of me not stealing my own laptop.

Next month, we'll discuss more motion detection. What if you're wanting to watch your car, but you don't want to have the CCTV getting false positives from wind-blown trees or innocent passers by?







Ubuntu dans ma salle de classe

Écrit par James L. King III

I teach various music classes at Florida Keys Community College in Key West, Florida, and am proud to use Lubuntu - along with open source or public domain materials in as many areas of my job as possible.

I have a history of being interested in being involved in the open source community, having created a piano primer licensed under the GFDL titled "Learning the Code," which is available for download in several places, including Scribd and the Internet Archive. It was only natural that I would take my opportunity to teach in the classroom to see what materials could be successfully used in music appreciation.

First, I have a simple Acer Aspire One 255E netbook. This is the modest machine that I use to get results in the classroom. I use the Lubuntu distro, having switched to it after Ubuntu switched to Unity. I really like Lubuntu and see it as the eventual successor to Xubuntu.

For classroom lectures and presentations, I use LibreOffice Impress 3.3. I embed music and video clips liberally in my presentations, as they seem to keep students' attention. I looked at other open-source presentation software, but, of all solutions available on Lubuntu, LibreOffice serves my needs best. As LibreOffice improves, I will continue to improve my presentations.

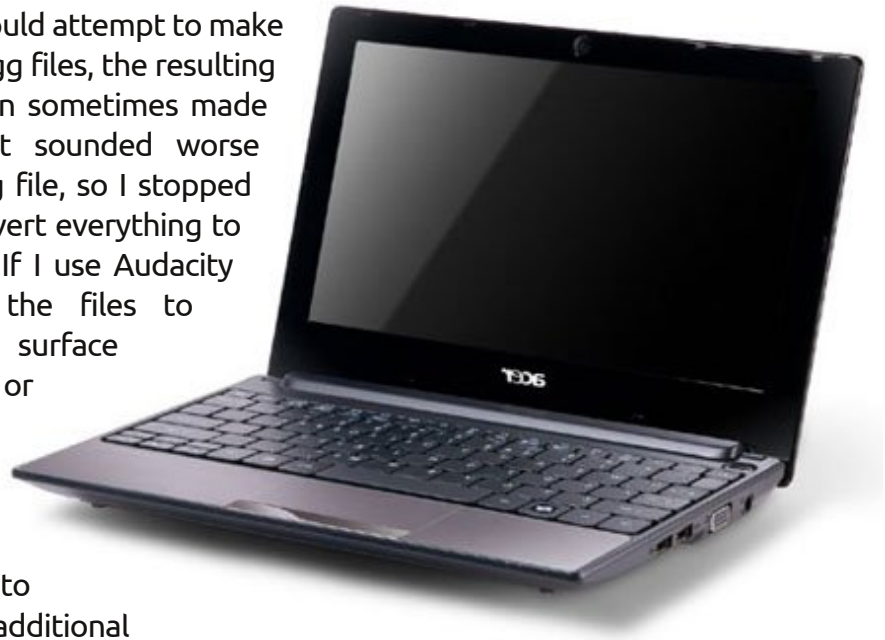
I ask my students to do their presentation projects in Google Docs, when practical, for portability purposes: I feel Google Docs is superior to LibreOffice or MS Office in this regard. No matter what computer displays the presentation, it will look the same. This allows students to view the presentations outside of class on their computer without formatting issues.

I am also using OpenShot and Audacity to create podcast-style video mini-lectures that will eventually be a part of the online curriculum at the school.

I regularly use materials from the Internet Archive and MusOpen. Both of these are great sources for public domain and copyleft music performances. The International Sheet Music Library Project is a great source for first editions and manuscript copies of music, which I use in some of my presentations.

I regularly listen to all the files in each format to determine which one sounds the best. This means that I have several different file formats on my data DVD: mp3, mp4, ogg, ogv, oga, mov, flac and wav. I provide an installer for VLC for my students on the data DVD so they can listen to all the files without problems.

When I would attempt to make mp3s from ogg files, the resulting recompression sometimes made a result that sounded worse than the .ogg file, so I stopped trying to convert everything to mp3 format. If I use Audacity on any of the files to remove surface noise or record pops and clicks, then I save the file in .flac format to avoid any additional degradation from lossy compression.



I use Scribus to typeset, using open source fonts. The fonts I find most useful are the Fontin family (regular, sans, smallcaps), the Nimbus Sans family (especially the condensed variety), Delicious, and Miso. All of my printed material is rendered in .pdf format.

When I am composing (I have written an Alma Mater and a Fight Song for the school), I use MuseScore and Lilypond together. MuseScore

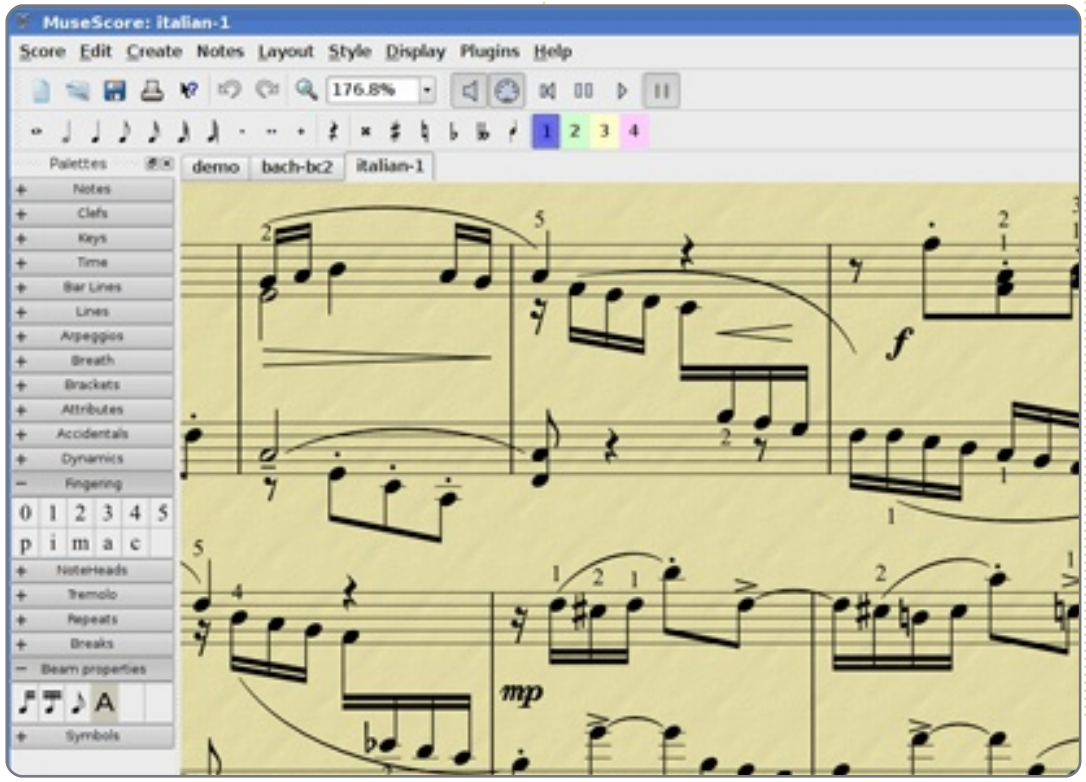
allows me to place the notes easily using a GUI, and then I use Lilypond to polish the final score. I really believe Lilypond creates some of the best looking sheet music out there. I used Finale from version 3.1 through 2005, switching to Lilypond in 2006. For my legacy Finale compositions, Finale 2005 runs acceptably well through Wine. Until I started using MuseScore as a GUI aid for inputting notes for Lilypond to typeset, I used jEdit for its wonderful LilypondTool plugin.

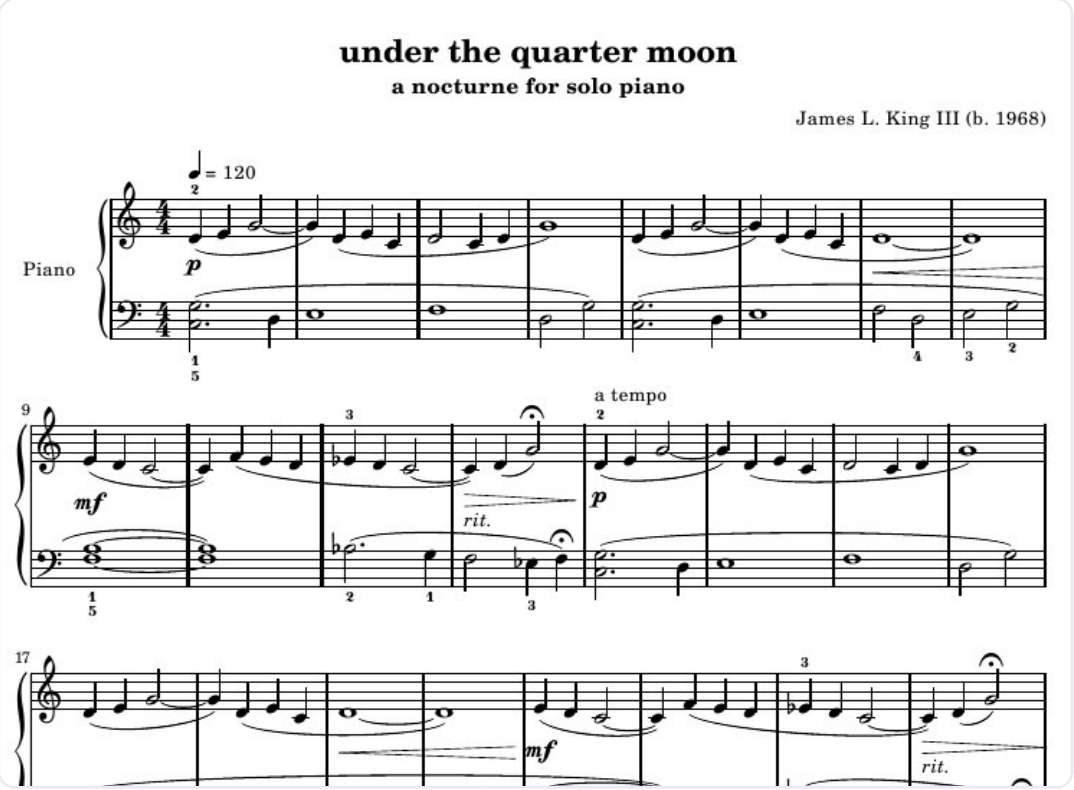
For recording, I use Rosegarden or Audacity. My multitrack recording needs are not as extensive as others.

LibreOffice allows me to open up all MS-Office-created documents that the administration asks me to fill out and return, and I have never once been told that the files I saved in MS Office format (using LibreOffice) were corrupted or unusable.

I use public transportation to get back and forth from home to school so I can remain productive while traveling. I use my iPhone on the road, tethered to my netbook for internet access so I can work on files, respond to student emails, and do continued research for the music textbook I am creating (which will be open-sourced when finished).

I see myself as a willing and enthusiastic volunteer to experiment with using open-source materials in an environment that is not always open-source-friendly. I always look at what the software can do and what it's capable of doing, and work within those parameters. If I always looked at what any software (proprietary or open-source) couldn't do, I'd never get anything done with the negativity.





MON HISTOIRE

Écrit par Matt Anthony

J'aime Windows. Certains de mes lecteurs sont sans doute en train de rire en se disant : « Les rédacteurs ont laissé passer une faute de frappe vraiment amusante : l'auteur a mis "Windows" à la place d'"Ubuntu". »

Je suis sérieux, j'aime Windows. C'est grâce à Windows que j'exerce un emploi lucratif depuis le milieu des années 80. J'en ai regardé arriver et repartir, itération après itération, de Windows 1.0 à Windows 7 et, au cours des années, j'ai aidé plein, plein, plein d'utilisateurs à surmonter leurs ennuis divers avec le système d'exploitation (OS).

Windows fait ce qu'il fait, c'est-à-dire qu'il rend l'utilisation d'un ordinateur assez facile pour une vaste majorité d'utilisateurs. A-t-il de sérieux défauts ? Oui, certainement. Sera-t-il jamais un système d'exploitation « parfait » ? Pour certains utilisateurs, il l'est déjà, mais pour d'autres il ne fonctionnera jamais « comme il faudrait ». Malgré toutes ses déficiences, lacunes et faiblesses notoires, il paraît tout à fait improbable que Linux, Mac, ou tout autre système d'exploitation le détrône un jour en tant que l'OS le plus utilisé au monde. Tant que cette réalité demeure, je garderai mon emploi lucratif.

Cela étant dit, j'adore Ubuntu pour des raisons qui sont totalement différentes. Ubuntu me fut présenté pour la première fois en 2006 lors d'une exposition FOSE [Ndt : la Federal Office Systems Exposition, le plus important événement technologique pour le gouvernement des États-Unis], ici à Washington, D.C. Parmi tous les stands et les sociétés essayant d'attirer votre attention, il y avait une minuscule table tenue par trois personnes, qui distribuaient des exemplaires d'Ubuntu 5.10 Breezy Badger. Aucune tentative de vente, aucun argument commercial, mais, à la place, une simple demande : « Essayez-le » !

J'ai mis le paquet Ubuntu (Live CD et disque d'installation) dans le sac des cadeaux avec les autres trucs promotionnels et je l'ai oublié pendant un ou deux mois, jusqu'à ce que je change de bureau. Quand j'ai revu les disques, je me suis souvenu de la demande formulée au moment où je les ai obtenus, « Essayez-le. » Il se trouvait que, comme pas mal d'autres personnes qui écrivent pour la rubrique « Mon histoire », j'avais un ordinateur qui venait de mourir, un portable Gateway Solo 5300. J'y ai mis le Live CD et, moins d'une minute plus tard, j'avais un bureau. Carte graphique, carte son, carte wifi - absolument tout fut reconnu et fonctionnait immédiatement. Je n'ai pas eu besoin de mettre un autre disque, de charger des pilotes supplémentaires, de télécharger quoi que ce soit sur le Net - tout fonctionnait, tout simplement.

C'était impressionnant.

Pendant quelques jours, je me suis amusé avec ; j'ai essayé tout ce qu'il y avait sur le Live CD. De temps en temps, j'oubliais que le portable que j'utilisais était en fait en panne, mais chaque fois que je le redémarrais, l'écran « Windows n'a pas démarré correctement » me le rappelait. Finalement, c'est cela qui m'a décidé. « Essayez-le » est rapidement devenu « Faites-le » et j'ai effacé le disque dur pour installer Ubuntu seul. Quand l'installation fut terminée, j'ai passé les CD à un collègue . À sa question « c'est quoi, ça ? », ma réponse fut, bien entendu, « Essayez-le » !

Pendant l'année suivante, j'appris joyeusement tout ce que je pouvais au sujet d'Ubuntu ; les forums étaient (et sont encore) étonnamment riches en connaissances et en soutien. La revue Tux (maintenant disparue) était également une ressource utile. Mon collègue a installé Ubuntu quelques jours après avoir utilisé le Live CD et nous étions ainsi deux à renoncer au « double amorçage » et à nous plonger la tête la première dans le système d'exploitation. Il y avait quelques tracas (le plus important étant « iTunes fait son idiot et ne veut pas fonctionner avec ce système »), mais, en général, l'expérience était fantastique.

A la longue, cependant, mon vieux portable Gateway est bel et bien mort d'un ACV massif du matériel. J'ai acheté une nouvelle machine, un netbook Lenovo Ideapad S10, sur lequel Windows XP était pré-installé. J'ai laissé tel quel (moins les logiciels qui prenaient trop d'espace disque) et je l'ai utilisé avec bonheur pendant un certain temps ; j'avais presque oublié Ubuntu. Je n'avais pas de lecteur de CD et ne pouvais donc pas lancer un Live CD. Qui plus est, iTunes fonctionnait très bien et, ainsi, tout semblait aller pour le mieux dans le meilleur des mondes.

Il y a quelques mois, j'ai commencé à remarquer que mon petit netbook avait vraiment du mal à accomplir les tâches les plus simples, comme démarrer. J'ai donc calculé le temps qu'il mettait à démarrer et à ouvrir ma page d'accueil.

Je n'accédais à ma page d'accueil - qui a fini par s'ouvrir - que cinq minutes et huit secondes plus tard et je me souvenais de la rapidité d'Ubuntu sur mon vieux portable. Peut-être faudrait-il l'essayer à nouveau.

Une recherche rapide sur le Net m'a amené à Pendrivelinux.com, où j'ai créé une clé USB amorçable avec Maverick Meerkat. Un redémarrage, un ajustement au menu « boot » dans le BIOS et en seulement trente-huit secondes tous les sentiments que j'avais eu pour ce système d'exploitation furent ranimés. Bon, iTunes n'y fonctionne toujours pas (je sais que je pourrais lancer une machine virtuelle ou Wine), mais je peux graver les quelques chansons que je possède dans leur format mp4 sur un CD pour les ripper ensuite sur une autre machine.

Banshee fonctionne à merveille (je n'ai pas réussi à faire fonctionner Amarok comme il faut) et synchronise mes appareils parfaitement, Calibre est extraordinaire pour organiser mes livres électroniques et mon lecteur Sony Pocket, et la configuration de mes comptes mail dans Evolution a été tout ce qu'il y a de plus facile. Je me suis même servi d'OpenOffice (et maintenant de LibreOffice) pour aider un client à récupérer des diaporamas PowerPoint que Windows trouvait corrompus et illisibles.

Et voilà : c'est plus ou moins la fin de mon histoire. De temps en temps, j'ai l'occasion de passer Ubuntu à quelqu'un d'autre. Je leur montre mon netbook, sa rapidité de fonctionnement, tous les logiciels gratuits, toutes les fonctionnalités qui leur plaisent sous Windows. La plupart sourient par politesse, en me disant que j'aime utiliser Linux parce que je suis « geek ». Une ou deux personnes ont l'air de s'y intéresser vraiment et, à ceux-là, je donne un Live CD en disant la même chose qui m'a fait me lancer : « Essayez-le » !

Mon système :

J'ai un netbook Lenovo Ideapad S10 avec une version complète d'Ubuntu 11.04 dessus. J'ai enlevé l'interface Unity, car je lui préfère - et de loin - le bureau classique. Étant un netbook, les spécifications système ne sont pas très impressionnantes : processeur Intel Atom à 1,6 GHz, 1,5 Go de RAM et un disque dur de 80 Go. J'ai rajouté un contrôleur Bluetooth au système pour pouvoir utiliser ma souris (la machine ne possède que deux ports USB, alors je ne voulais pas devoir en gaspiller un sur une souris). Ubuntu fonctionnait avec tout le matériel dès l'installation. Même mon imprimante HP Photosmart C6280 a été reconnue dès le premier essai et, muni du greffon HP, je peux facilement faire des scans, imprimer et copier, le tout sans fil.

Mon bureau est sans fioritures et je l'aime comme cela. J'exécute trois Screenlets : l'horloge standard, la météo et un calendrier. Parfois, je change pour un dock AWN, mais, d'habitude, je remets la barre standard en bas après quelques jours. Je pense que je n'ai pas encore trouvé la configuration du Dock AWN qui m'inciterait à le garder. C'est une autre raison pour laquelle j'aime tant Ubuntu ; c'est personnalisable à souhait et il est tellement facile d'y faire des modifications.

Le Podcast Ubuntu couvre toutes les dernières nouvelles et les problèmes auxquels sont confrontés les utilisateurs de Linux Ubuntu et les fans du logiciel libre en général. La séance s'adresse aussi bien au nouvel utilisateur qu'au plus ancien codeur. Nos discussions portent sur le développement d'Ubuntu, mais ne sont pas trop techniques. Nous avons la chance d'avoir quelques supers invités, qui viennent nous parler directement des derniers développements passionnants sur lesquels ils travaillent, de telle façon que nous pouvons tous comprendre ! Nous parlons aussi de la communauté Ubuntu et de son actualité. Le podcast est présenté par des membres de la communauté Ubuntu Linux du Royaume-Uni. Il est couvert par le Code de Conduite Ubuntu et est donc adapté à tous. L'émission est diffusée en direct un mardi soir sur deux (heure anglaise) et est disponible au téléchargement le jour suivant.

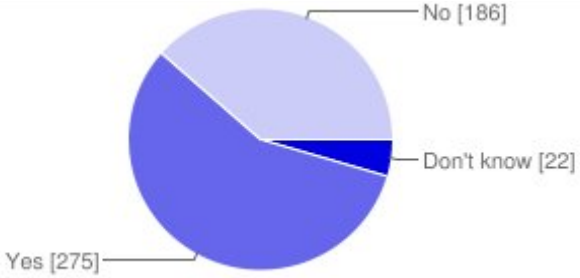
podcast.ubuntu-uk.org

I THINK...

Last month's question was:

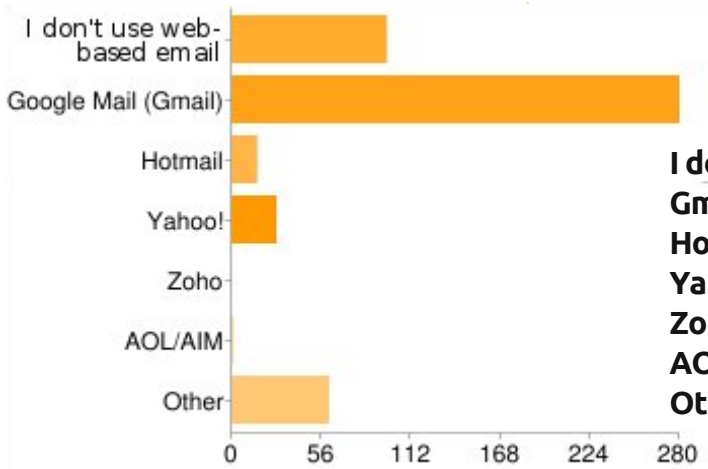
With the rise of web-based email, do we really need an email client installed by default?

With the rise of web-based email, do we really need an email client installed by default?



Yes	**266**	**57%**
No	**179**	**38%**
Don't know	**21**	**5%**

Do you use web-based email? If so, which one.



I don't	**97**	**20%**
Gmail	**280**	**58%**
Hotmail	**16**	**3%**
Yahoo!	**28**	**6%**
Zoho	**0**	**0%**
AOL/AIM	**1**	**0%**
Other	**61**	**13%**

❝ Why keep emails on a computer when there is the cloud? GMail lets me import my mail from other servers, why should I not use it? Moreover, I can access the same email on my laptop, on my mom`s pc, on my phone or tablet.

I use both web based and computer ❝ based email clients. I see the need for both.

I don't want my business email to be ❝ hostage to web-based storage. I want to keep my own records.

In my personal experience, since I'm using GMail, I have never run ❝ Evolution again on my Ubuntu System.

Web-based email is slow and not comfortable.

❝ People aren't ready for it not to be included -- yet.

❝ Yes we need to download and store emails for offline use.

❝ I have not used an email client for over 5 years. Web-based ❝ works just fine.

I use Hotmail, and have my Gmail accounts downloaded into ❝ Thunderbird. I prefer the client, so I can tailor how I view the emails.

Since I have various e-mail adresses, Evolution is important.

❝ Not being able to remove Evolution has bugged me for ages.

❝ Only used to use email client to notify me of mail, but now use Google Mail Checker in Opera, so no need for ❝ client now.

Mixed opinion. Essential - No. But if it is necessary to have full integration, then yes. I find that I am ❝ more and more impressed with Thunderbird every day. Still, it is not essential for default installation.

❝ An email client is useful to access these emails in case of unavailability of Internet connection.

I do use GMail, but through Thunderbird.. . So yes, I am using an e-mail client, but personally, I don't really need it by default, as I can easily install it myself. I would just like to have better integration with Thunderbird once I install it.

I want MY data (including emails) on MY computer. Do not want to hear about this "cloud" thing.

Webmail = low security, to me.

With the rise of web-based email, we need an email client which merges each email account into a single piece of software.

I sometimes use Thunderbird but would like all that Evolution stuff to go away

The question I'd like to pose for FCM#54 is:

What age do you think the average Linux user is?

To give your answer, go to: http://goo.gl/AB1nX

Quick How-To : Broadcom Wireless

by Eric Skala

When you install, or upgrade to, Ubuntu 11.04 you may notice that you can not use your Broadcom Wireless adapter. Many people have left Ubuntu and/or Linux for this reason. Yes, you can look online for a way to install the driver, but I'm going to show you how to quickly install the driver. The way I'm going to show you works in all Ubuntu derivatives.

First, open a Terminal, and enter:

```
sudo apt-get firmware-b43-installer
```

It will ask you for your password which you should enter. When the program has been successfully installed go back to your terminal and type in:

```
sudo apt-get install b43-fwcutter
```

Again, typing in your password.

If you don't wont to use the terminal you can open your package manager and search for *bcm*. Make sure you uninstall the *bcmw1-kernal-source* package. Search for *firmware-b43-installer* and install it, then search for *b43-fwcutter* and install that. Your wireless should now work. I used the steps above to also get the wireless on my Dell Inspiron 1200 laptop to work. Remember, **you need to have a wired network connection to do the steps above!**

Linux Mint comes in two flavors (I know, I know, cliché alert...), the rolling Debian release, and the more established, Ubuntu-derived, periodic release. Mint 11, codenamed 'Katya,' is the newest based on Ubuntu 11.04, re-spun with the Mint team's distinctive applications and software choices.

If you are expecting revolutionary or cutting edge: don't. Mint 11 uses Ubuntu as its base, but with classic Gnome 2.32 as the default desktop environment. It remains, in our view, the premier Linux for new users and migrants from the Redmond way of life. Call it conventional if you like, but it has polish and it's tried and tested. Linux Mint 11 comes with updated software, refinements, and new features to make a comfortable desktop in use.

Some people attribute Mint's dramatic rise in popularity to defecting Ubuntu users who are unhappy with Ubuntu Unity; I think there's more to it than that.

Mint Installer

I still think this one has the edge over the Ubuntu installer; coherent Mint branding starts here, as the installation steps through, quickly and solidly bringing you to a clean, attractive desktop.

Mint has long been distinctive with its Mint Menu and Welcome screen. Mint 11 includes some artwork changes, an apt download command, and some changes in the packaged software. For a major numbered release, the main change is the adoption of the Ubuntu 11.04 code base.

Mint is available either as a full liveDVD or a lighter, smaller, liveCD (minus codecs and extra applications) available for those without a DVD burner, or for distributors in the USA and Japan.

Software Manager

I still regard Software Manager as one of Mint's major selling points. Ever more polished, a splash screen appears when you launch it, and the main window has bigger category icons, with new categories for templates and fonts.

It now shows even more icons and preview screen-shots. Previews of application icons are now gathered from the mintinstall-icons package and also from your current theme icons. Searches now take in package summary descriptions as well as titles; this may take longer but gives more accurate search results.

Further layout changes in Software Manager take it further on from the equivalent Ubuntu Software Center. Select a package to install, and the Mint Software Manager runs a diagnostic to tell you precisely which packages it will add to or remove from your system alongside the total download size. This may be just an impression, but Mint's ratings and reviews seem more complete to me.

Expanding Mint

The LiveCD edition is much reduced in the scope of applications installed, and comes with limited multimedia support from first boot. Both these are overcome with desktop short-cuts and Mint Menu entries for Upgrade to the DVD Edition and Install Multimedia Codecs. These provide additional browser plug-ins and codecs for full multimedia support of MP3 and video, the VLC player, Gimp, Giver, Tomboy, LibreOffice-Base, and additional fonts; Java, Samba file sharing, more backgrounds, themes and icons.

Shifting Mint

The Mint team has actually used the feedback in the reviews and scores provided by the user community in the Software Manager, changing the default application software:

- Gwibber is dropped, just before Ubuntu does the same
- gThumb replaces F-Spot as the default photo manager
- Banshee replaces Rhythmbox as the default music player, the same as Ubuntu
- A stack of Pulse Audio utilities are no longer installed by default
- LibreOffice replaces

OpenOffice.org.

Mint Update

Mint Update was always a strong selling point, categorizing updates according to criticality. It's now faster as change-logs are downloaded asynchronously in the background. The whole thing now has a more attractive graphical interface; for example, all Update dialogs are now modal, so you can't lose windows in a stack like you can in Ubuntu (which drives me crazy). After a successful update, the Update Manager hides itself, without parking a confirmation dialog on the screen. Warnings and information tabs now only appear for updates that need them.

The update rules including the safety level for each package are embedded and refreshed with each Mint 11 Update Manager version, so the majority are no longer downloaded in real time; Update Manager checks only for new versions of itself, which it updates as a priority, then for package updates for everything else.

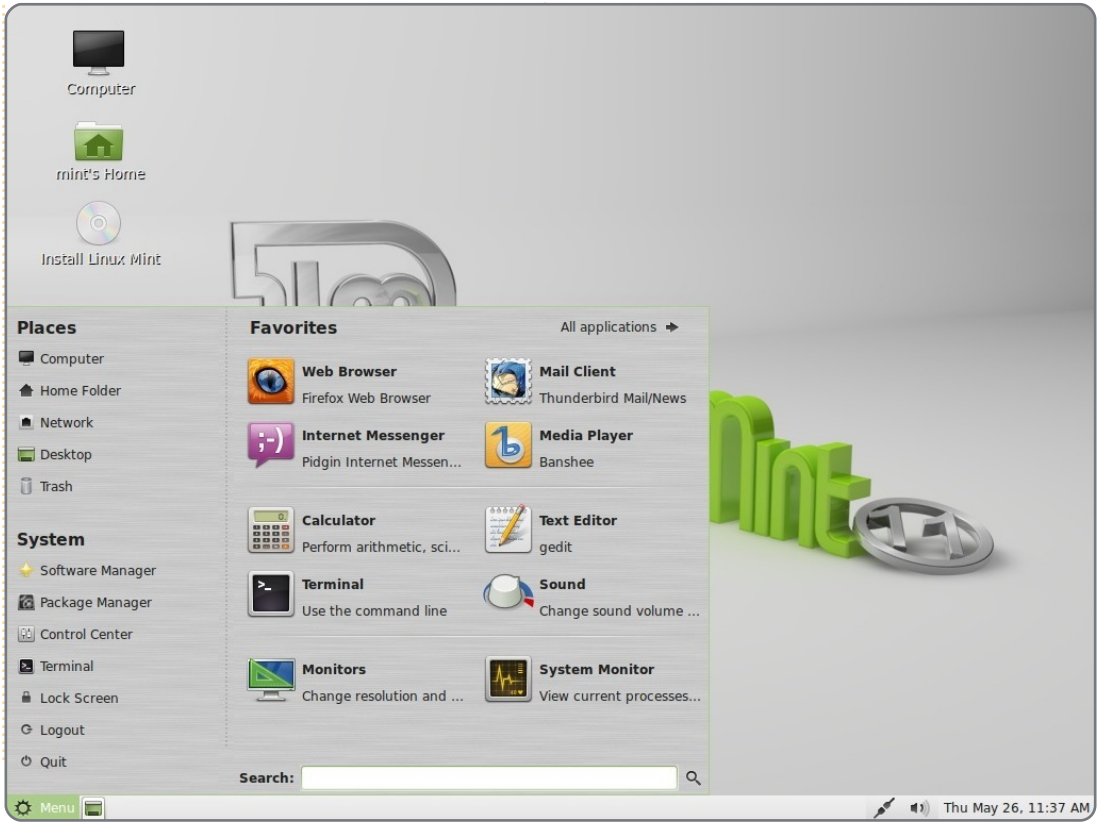
Similar to Software manager, Mint Update runs a diagnostic to determine package and library dependencies, which is output in a separate dialog, so that, for each update, you get a better picture of what it entails.

The Good, the Bad, the Indifferent

- **Themes and artwork**: Mint has always featured good backgrounds and themes. Mint 11 leaves behind water droplets and goes 3-D,
- **Desktop Settings** also provides the control framework for any desktop in any desktop version; Gnome, KDE, LXDE, XFce,
- **Fortune Quotes**: Mint has a sense of humor, which is why the terminal window features an ASCII-art cow telling bad jokes. You can turn these off, too,
- **Mint menu**'s application categorization has its critics, mainly those who find them inconsistent. It may be true, but the Mint Menu remains one of the more familiar features for those looking for a 'Start' menu,
- **Overlay scrollbars**: Linux Mint 11 inherits the overlay scrollbars from Ubuntu upstream, and enables them by default. I hate them, but I can turn them off using the Desktop Settings tool ,
- **The boot process** is a mixed bag of changes; the Plymouth boot screen kicks in late in a fast boot process, which is mostly 'quiet', that is to say - black. Very professional, but not so helpful when it fails to boot into higher resolutions, which it sometimes does.

Verdict

This is one of those times when conservative with a small 'c' is a complement. Full marks to Clement Lefebvre and the team for delivering an incremental update with stability and continuity in mind.



COURRIERS

Tous les mois, nous aimons publier quelques courriels que nous recevons. Si vous voulez nous envoyer une lettre, une plainte ou des compliments, veuillez les envoyer, en anglais, à : letters@fullcirclemagazine.org. NOTE : certaines lettres peuvent être modifiées par manque de place.

Pagemaker

Many thanks for the article in My Opinion in Issue 52: How to install Microsoft Office in Ubuntu. While I did not want to install this software, the Wine set up in the article allowed me to install an old copy of Page Maker. I still use this program and was stuck with a Windows computer previous to this article.

Allan Hambidge

Telephone Bill Desktop

I got my telephone bill today; on the page where they list the calls over a particular amount there was not enough room for them all so they appened a little note "a bit more to go...". What is wrong with "continued overleaf"? This really got me annoyed.

I tell you this to explain why I do not like the way desktop appearance seems to be heading. I do not want pretty pictures, icons or similar displays, I want a well structured menu with the ability to access frequently used items by hot key combinations. I currently have this in my Kubuntu desktop and near enough with my Ubuntu desktop on my laptop. I could, of course, do it all from the command line but typing in a hurry leads to mistakes which are easier to avoid with a clean graphical user interface. Am I out of touch with the modern world? Or is it that there are now two sorts of computers - one in the world of work and one in the world of play?

Even considering the world of work computer for the majority of users, it seems they only use a dedicated program with restricted icon-guided interface and very restricted rights. The world of play, where so much is dictated by Apple design style, menus and textual interface seem so out of place. I guess I will continue to be a misfit in my belief that it is possible to have far greater richness in an interface that is menu driven and I hope that Kubuntu and Ubuntu designers will always provide that facility to configure the interface the way the user likes it, not what current style dictates.

Roy Read

GRAMPS Update

While I appreciate that your series (GRAMPS Pt.1, FCM#52) has so far only scratched the surface of the possibilities of GRAMPS, and I note with pleasure that you do tend to push forward the use of Sources and Notes there is one possible error.

While the person edit form does allow you to add Marriage as an event this is not the preferred method to add Marriages. A Marriage is a family event and should be added as an event under the family edit form, the one marriage event will then correctly be associated with both people and the database structure will correctly link families. I made the mistake of adding marriage events to people when I first started with Gramps and had all sorts of problems finding relationships and seeing people married twice to the same person and lots of database instability. I ended up manually re-entering details for 800+ people.

R. Geleick.

David O. Rowell says: *The reader is, of course, right. I never fell into that particular trap - thank goodness! The ability to do decidedly unclever things like that is one of the features that leave me a bit uneasy using GRAMPS.*

Upgrading From 11.04

A number of friends I convinced to install Ubuntu Linux instead of Windows XP, as well as myself, who have found Ubuntu 11.04

too bug laden, would like to downgrade to 10.10 or perhaps 10.04 LTS in order to get some work done while looking into which Linux distribution, if any, might provide for our needs going forward. It would be nice to see an article on how to return to a previous version, safely, as most all have no means to back up their /home partitions.

While Unity is the primary cause of disatisfaction, many other problems too numerous to list have created an unbearable situation rendering our computers barely usable. None, including myself again, expect 11.10 to be an improvement, so Ubuntu 10.xx will likely be the last upgrade, unless Canonical gets its act together.

Joe

Dell Go-Go

Dell may no longer sell pre-installed Ubuntu, but on higher cost machines it will sell it to you OS free at a reduced cost to offset the Windows/3rd party licenses. So, call a salesman and negotiate!

Of course, there will be no support except for hardware failure, but that's why we have Ubuntu Forums.

Matt

KDE Konvert

I have not even been able to get Gnome 3 to work on any of my computers, and I think that Ubuntu has totally lost the plot with trying to look like Apple.

Hence, I am returning to KDE. I have found the new KDE 4 very different to the beautiful KDE 3.5, and had written it off in the past. But, with what has happened to Gnome, I think that KDE is the only way to keep Linux.

I do think that KDE is the way to go.

I moved to Mint Linux as soon as Ubuntu put the window buttons on the wrong side. I know you can change them, but it shows their attitude to the people who made them what they are, more than anything. But even Mint won't be able to keep Gnome 2 alive. Very sad because Gnome 2 was the perfect desktop for getting the job done, and efficiently.

Ray

More Toys

I have a similar set up to David O. Rowell's (FCM52) and I am working through a consolidation and simplification to reduce the complexity and confusion of having different files on different machines. My approach to simplify things is to add something else.

I have just added a 4 yr old Dell Precision 390. Adding a server negates the need for the separate USB drive and my old NAS box. It makes it possible to move, synchronise or backup all home directories files to one central location (i.e. available then to all other PCs on the home network or if required, from anywhere on the internet). Not sure yet how the Apple will interact (it may need to have its own directory shares).

It connects to the router via Devolo Powerline Ethernet, is headless (ie no screen or keyboard needed once it is configured and can be shutdown, halted, or started up remotely using 'wakeonlan' so it doesn't need to be left swicthed on) and uses NFS to provide access to the Linux OS PCs. It also uses Samba to provide access to the Windows PCs, and Netatalk to to provide access to my Apple.

Adding the server has cost me just €150, and that was for the two 2TB disks.

All of the above and lots more is possible - Its not bleeding edge speed and its not bleeding edge technology but it is working, it is cheap and it is do-able with a little time and research.

Peter Errity

This summer, the Ubuntu Women team held the annual election for project leaders. Among them are newcomers Cheri Francis and Jessica Ledbetter, and leadership incumbent Elizabeth Krumbach. We asked these leaders about their work so far, and their goals for the Ubuntu Women project.

Cheri Francis

Ubuntu-Women was one of the first Ubuntu related IRC rooms that I braved as a new user. From that moment on, the people there have been an amazing support, and just good people. I have been trying to find ways to "give back" to the project, and I really hope that, as one of the leaders, I can do so. I have been working in my LoCo to encourage participation, and making the group welcoming to new users and contributors. I fully believe in the community aspect of Ubuntu, and have seen that manifested in many ways since I've been a part of it.

Cheri's Goals for Ubuntu Women:

Career Days project: have a "day in the life" series of sessions, talking about various IT jobs and what some of our members do in "real life".
Publicity: raising visibility of the project, helping people on other projects realize that small adjustments can make things more welcoming to everyone (including women).
LoCo Outreach: expand on our "best practices" list, and be a resource for LoCos that are interested in welcoming everyone and helping them feel comfortable.

Elizabeth Krumbach:

I have been an active member of the Ubuntu Women project since 2006 - working on all portions of the project including: Holding foundership of IRC channel, and maintaining the access list, launchpad admin, website admin, wiki admin, heading up monthly team reporting. I have been involved with organizing our Full Circle Magazine Ubuntu Women series and interviews series, the mentoring program, conference resource development, courses, and collaboration with Ubuntu Classroom, and have had the opportunity for in-person presence at Ubuntu Developers Summits (Lucid, Maverick, Oneiric) regarding the project, and will be attending the next UDS for the LTS release next year.

Elizabeth's Goals for Ubuntu Women:

Our website is the first resource people see for the team, and the theme is very out-dated. We'll be continuing to work toward getting the new theme in place so we can get it published before the end of the year.

The mentoring program we have now is very casual - with people joining the team and members of the team connecting them with people and resources within the Ubuntu project. I'd love to see us making more progress on a formalization of the process so we can get more feedback and learn how we can improve our program.

Jessica Ledbetter:

Currently, I'm a web developer and designer who creates applications in Java, Python, and Ruby. In addition to full-time development for a company, I am also a developer on Peer 2 Peer University (http://p2pu.org/). I've been using Linux for years, and Ubuntu for more than a few cycles.

The Ubuntu Women Project was

one of the first IRC channels on freenode that I joined. It was a great environment to learn more about the Ubuntu project as a whole, and to find ways to get involved. Everyone was very welcoming and helpful back then, and continue to be that way today. Through the UW members, I've seen people encouraged to contribute to leading classroom sessions, contributing to coding projects, speaking at conferences, building one's own business, and more. It's a very supportive place for everyone.

Jessica's Goals for Ubuntu Women:

Publicity: Getting the word out about the team and team members' accomplishments, and collaborating/helping other groups to be more welcoming.

Mentoring: Help find ways to increase the team and team members' accomplishments by improving the mentorship program.

UN APPEL EN FAVEUR DU PARTI PODCAST

Comme vous l'aurez entendu dans l'épisode n° 15 du podcast, nous lançons un appel à propos des sujets d'opinion pour la partie de l'émission du même nom.

Au lieu de vous attendre à ce que nous déclamions nos opinions sur tout ce qui nous passe par la tête, vous pourriez peut-être nous souffler un sujet et, ensuite, guetter l'apparition des champignons atomiques à l'horizon ! Il est fort probable que nous ne serons pas tous les trois du même avis.

Ou une idée encore plus radicale, envoyez-nous une opinion de façon contributive. Vous pouvez poster des commentaires et des avis sur la page du podcast sur fullcirclemagazine.org, dans notre section des Forums Ubuntu, ou nous écrire à podcast@fullcirclemagazine.org. Vous pouvez aussi faire un commentaire audio d'une durée de moins de 30 secondes et nous l'envoyer à la même adresse. Les commentaires et l'audio peuvent être modifiés pour une question de longueur. Veuillez vous rappeler qu'il s'agit d'une émission tout public.

Ce serait super d'avoir des contributeurs qui viendraient dans l'émission et exprimeraient leur avis en personne.

Robin

VVVVVV

Écrit par Ed Hewitt

Its that time of year again! - the release of the third Humble Indie Bundle, giving us 5 indie games which run on Linux, and we can pay what we want for them. Four of the games in the bundle will be reviewed over the next few issues ('And Yet it Moves' was reviewed in Issue 43). This month, I am reviewing this very retro platformer.

At first glance, **VVVVVV** will remind many of you about the good-old-days playing games on your Commodore 64. I have been told the good old classic games are brilliant, and so is VVVVVV. The story around VVVVVV is about Captain Viridian, who must try to evacuate her spaceship after it was affected by a dimensional interference. Over the lengthy single player campaign, you must try to find your crewmates across the dimensions of VVVVVV. The storyline, while fairly basic, is interesting, and is told through cut scenes and text. Sadly, no voice acting here.

The gameplay is typical of a 2D platform: enjoyable, while being simple and easy to pick up and play. However, VVVVVV does deploy some interesting gameplay mechanics. You cannot jump, even though there are plenty of platforms to jump across to and traps to avoid. VVVVVV solves this problem with the ability to switch how gravity works, you can be moving on the floor - and then switch to moving on the ceiling. It is a very clever ability, which makes the game very enjoyable, and different from your standard 'Mario-Style' platformer. VVVVVV can be a tricky game at times. It can be annoying falling off a ledge for the tenth time, but, luckily, VVVVVV has plenty of checkpoints to save your progress.

Sadly, VVVVVV is not as feature packed as many games are today. No extra modes, achievements, level editor, or multiplayer. Just a straight single player campaign, which in all fairness is decent in length, just not that replay-able.

As mentioned before, there is nothing to brag about with the graphics. It is the most retro new game you will play, taken straight out of the 8-bit era. You old gamers will love reliving this era, while some of our new gamers may find it slightly off-putting, but I don't think the graphics should put you off playing this excellent platformer. Remember, looks are not everything! The sound is solid throughout, suiting the look of the game, sounds of the 8-bit era.

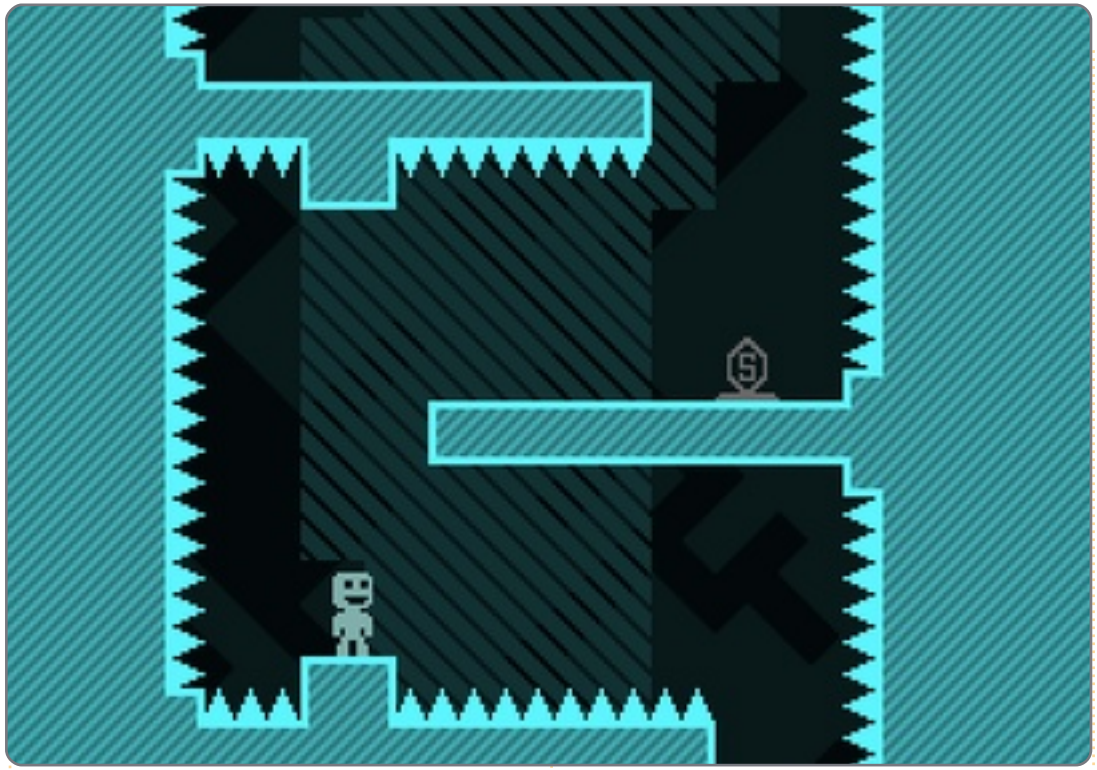
VVVVVV is a fantastic indie title. They have been very brave to design a game with retro graphics and sounds. But, it seems to work well for a 2D platformer. The level design is excellent, gameplay mechanics are new and interesting, plenty of checkpoints is a huge bonus while still making a challenging game. Sadly, there are no extra modes, and the

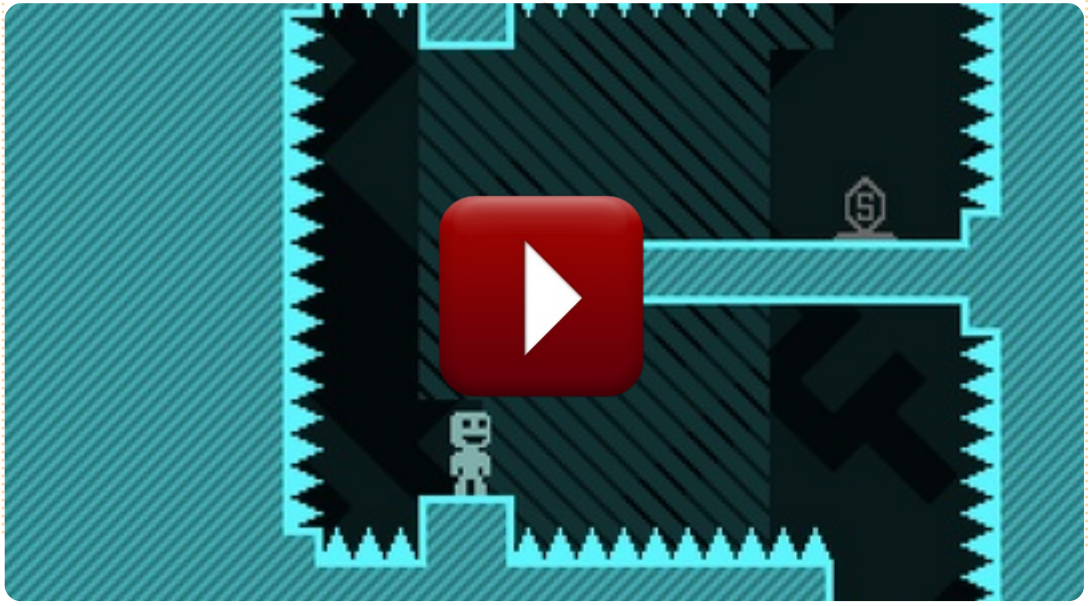
single player campaign you will probably only want to play through once; VVVVVV does not have a lot of legs. Out of all the games in the Humble Bundle 3, I think VVVVVV is my favourite game, even though the title is a pain to type!

Score: 7/10

Good:
Retro Graphics & Sounds
Great new mechanics
Plenty of Checkout

Bad:
No extra modes
Can be very difficult at times





Ed Hewitt, alias chewit (quand il joue), est un fervent joueur sur PC et s'amuse aussi parfois sur les consoles de jeu. Il est également le co-animateur du podcast Full Circle !

Q&R

Compilé par Gord Campbell

Si vous avez des questions sur Ubuntu, envoyez-les en anglais à : questions@fullcirclemagazine.org, et Gord y répondra dans un prochain numéro. Donnez le maximum de détails sur votre problème.

Q J'ai installé Ubuntu 11.04 sur mon Dell Mini 1010 et j'ai des soucis pour lire les fichiers vidéo comme les .avi et les .mkv. Ils se chargent, mais le son saute et la vidéo déraille/saute ; ainsi, ils ne peuvent pas être lus correctement.

R Installez CompizConfig Settings Manager, puis ouvrez-le à partir de Dash [Ndt : terminal/shell], allez au greffon « OpenGL » et décochez l'option « Sync to VBlank ».

Q J'ai un container Truecrypt, qui a une taille de 400 Go, formaté en ext4. Après y avoir supprimé tous les fichiers, Nautilus me dit que j'ai maintenant seulement environ 100 Go d'espace libre, mais je ne peux plus voir de fichier dans le container.

R Il a sa propre corbeille, que vous pouvez voir si vous faites Edition/Préférences dans Nautilus en lui demandant d'afficher les fichiers cachés. Vous devez vider la corbeille (« Trash ») pour libérer de l'espace.

Q Où puis-je trouver de l'information sur l'utilisation d'un modem 3G ?

R http://www.pcurtis.com/ubuntu-mobile.htm contient de l'information allant de la numérotation sur ligne fixe jusqu'aux clés USB pour les communications mobiles.

Q J'ai Sound Recorder installé sous Ubuntu 10.04, mais quand je clique dessus pour enregistrer un commentaire en voix off pour une vidéo que je suis en train de construire, ce message s'affiche : « Could not create the GStreamer GConf audio recording element. Please install the 'gconfelements' plug-in from the 'gst-plugins-good' module… » En vérifiant gstreamer, etc., dans la Logithèque, ils apparaissent tous comme installés. J'utilise un casque/micro connecté par USB pour avoir un enregistrement vocal propre.

R Après une installation complète et propre de 11.04, cela semble bien fonctionner.

Q J'étais en train de m'amuser avec MySQL, mais j'ai alors perdu mon mot de passe. Quand je le désinstalle et le réinstalle à nouveau, il ne me demande pas de nouveau mot de passe.

R Utilisez le Gestionnaire de paquets Synaptic et « sélectionner pour une désinstallation complète ». Cela vous débarrassera des fichiers cachés dans votre dossier personnel, où l'ancien mot de passe est stocké.

Q J'ai besoin d'installer Blender 2.5, qui n'est pas dans les dépôts.

R Ouvrez Accessoires/Terminal et saisissez ces trois lignes :

```
sudo add-apt-repository
ppa:cheleb/blender-svn

sudo apt-get update

sudo apt-get install blender
```

Q Comment puis-je partager mon lecteur CD/DVD pour un usage général, afin que tout CD/DVD inséré dans le lecteur soit accessible sur la machine distante ?

R Éditez votre /etc/samba/smb.conf depuis un terminal :

```
gksudo gedit
/etc/samba/smb.conf
```

Les instructions pour activer un lecteur CD partagé sont à l'intérieur du fichier.

Q Ma session KDE se fige inopinément et la seule solution est de faire un redémarrage matériel.

R (De l'auteur original.) J'ai trouvé qu'une de mes barrettes RAM était défectueuse. Pour ce faire, MemTest m'a été d'une très grande utilité.

Q Je me connecte bien, mais ma clé WEP n'est pas sauvegardée ; je dois la redonner à chaque fois !

R (Merci à **Barry** dans le Groupe Yahoo Ubuntulinux.) Essayez de créer la connexion manuellement avec Connexions réseau > Modifier et assurez-vous que la case « Disponible pour tous les utilisateurs » est cochée.

Q J'essaie d'utiliser winff pour convertir un fichier FLV en fichier AVI, mais j'ai ce message d'erreur « Unknown encoder 'libmp3lame'. »

R Activez le dépôt Medibuntu et saisissez cette commande :

```
sudo apt-get install ffmpeg
libavcodec-extra-52
```

Q Comment puis-je compiler des programmes C++ et d'autres langages de base ?

R https://help.ubuntu.com/community/CompilingEasyHowTo

Q Sur un Ubuntu Server 10.04, cette erreur s'affiche pendant quelques secondes avant son démarrage : « error: no argument specified. Press a key to continue… ».

R Allez voir : https://help.ubuntu.com/community/Grub2, allez à la section 12.1.5. Comme vous utilisez Server, il suffit d'exécuter les étapes 8, 9 et 10.

Trucs et Astuces

A l'aide : Docs de la Communauté

Une des grandes forces d'Ubuntu est le « Community Docs », un wiki sur comment faire ceci, cela et d'autres choses sous Ubuntu.

Cependant, les articles ne comportent pas de date d'écriture. Il y a une date de dernière mise à jour à la fin de l'article, mais la mise à jour pourrait avoir été la correction d'une erreur d'orthographe.

Le manuel pour les auteurs suggère d'inclure impérativement la version d'Ubuntu à laquelle un nouvel article s'applique. Mais un grand nombre d'auteurs l'ont ignoré. De même, de nombreux auteurs n'ont fait aucune tentative pour réactualiser leur article. Ainsi, vous avez un article qui dit qu'il s'applique à la Dapper et il se révèle qu'il était valide tout du long jusqu'à la Jaunty, mais après il est devenu obsolète. Il est toujours affiché par Google.

Un tutoriel écrit en 2007, quand j'ai commencé à utiliser Ubuntu, va probablement apporter plus de confusion que d'aide aux gens en 2011. La solution ? Si vous regardez un article et trouvez qu'il est obsolète de façon évidente, prenez un peu de temps pour le corriger.

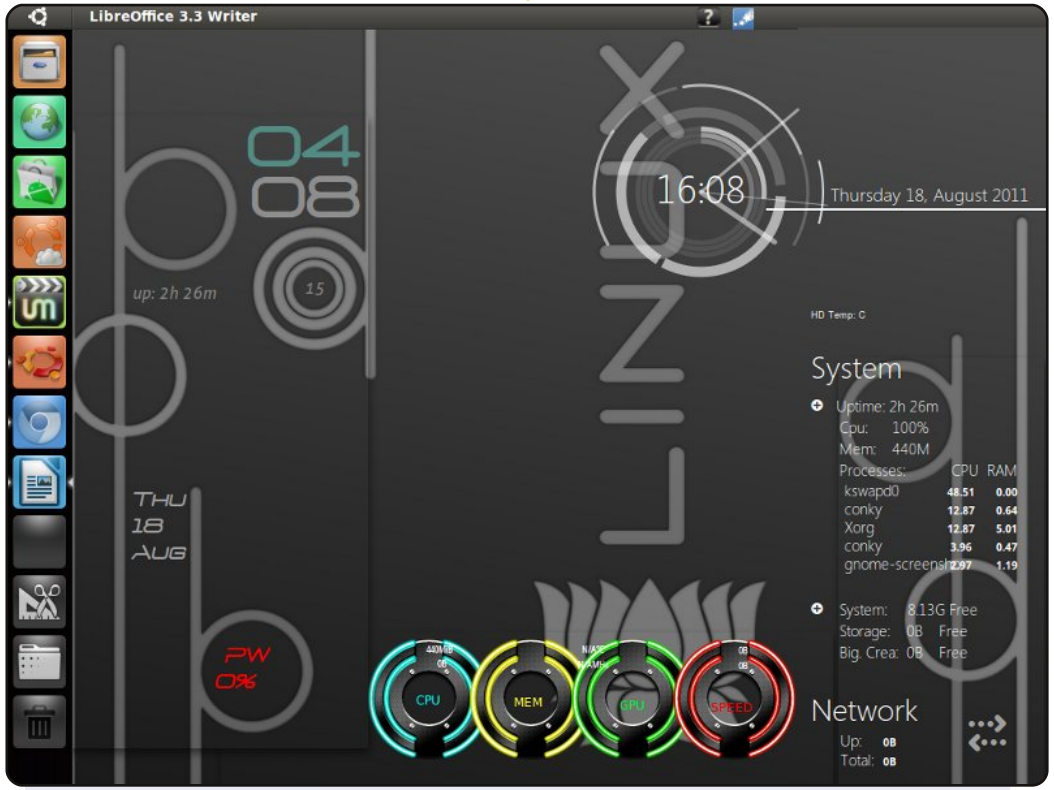
La procédure pour obtenir l'autorisation de mettre à jour les documents de la communauté est la suivante : D'abord, allez à l'article WikiGuide. Vous devriez jeter un œil à chaque chapitre, même si vous n'allez pas vous souvenir de tout. Puis suivez le lien « /Registration ». De là, suivez le lien vers le site d'aide de Launchpad. Puis d'autres liens pour aller sur la page de création de compte, puis « Create an account ». Entrez vos informations et essayez de bien reproduire l'agaçant « captcha ». Vous aurez alors un e-mail avec un code de confirmation que vous pouvez copier et coller dans l'écran suivant.

Maintenant, quand vous lisez un doc communautaire, vous pouvez cliquer sur « Log in to Edit » et quand vous le ferez, « Edit » apparaîtra en bas de l'écran.

Le charabia utilisé pour s'enregistrer sur Launchpad peut paraître pénible, mais on a besoin d'une procédure pour empêcher des gens inconnus de vandaliser les documents communautaires et c'est le processus choisi. En fait, ça ne prend que quelques minutes et vous passerez probablement plus de temps que cela à fixer le premier document que vous avez décidé d'améliorer. [Ndt : pour contribuer à des docs en français, voir http://doc.ubuntu-fr.org/wiki/participer_wiki]

MON BUREAU

Voici l'occasion de montrer au monde votre bureau ou votre PC. Envoyez par courriel vos captures d'écran ou photos à : misc@fullcirclemagazine.org et ajoutez-y un bref paragraphe de description en anglais.



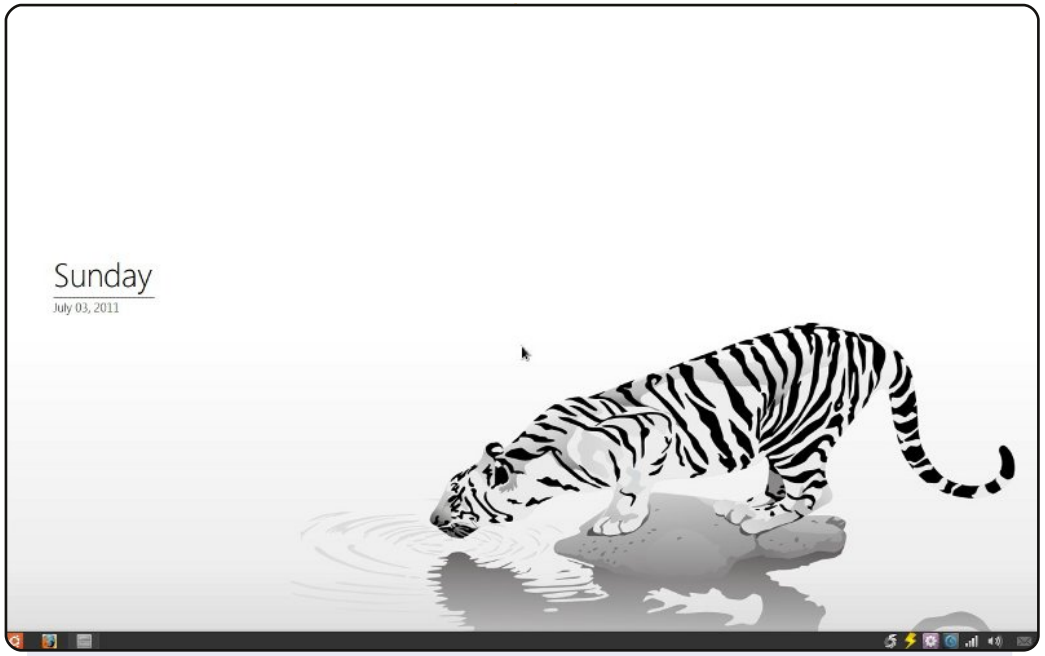
I'm from Indonesia, and this is my first participation in FCM.

I run Ubuntu 10.10 on an old low-end PC, P4 1.6 GHz, 512 SDRAM, 40 GB HDD, Nvidia Geforce2 TI, 15" CRT monitor.

All runs great here. I use Unity 2d with mac4lin theme and genoid icons. Compiz works in minimal settings since there's a warning on compizchecker. I put together 3 rcs into 1 conky.

Ubuntu rocks.

Hendraone

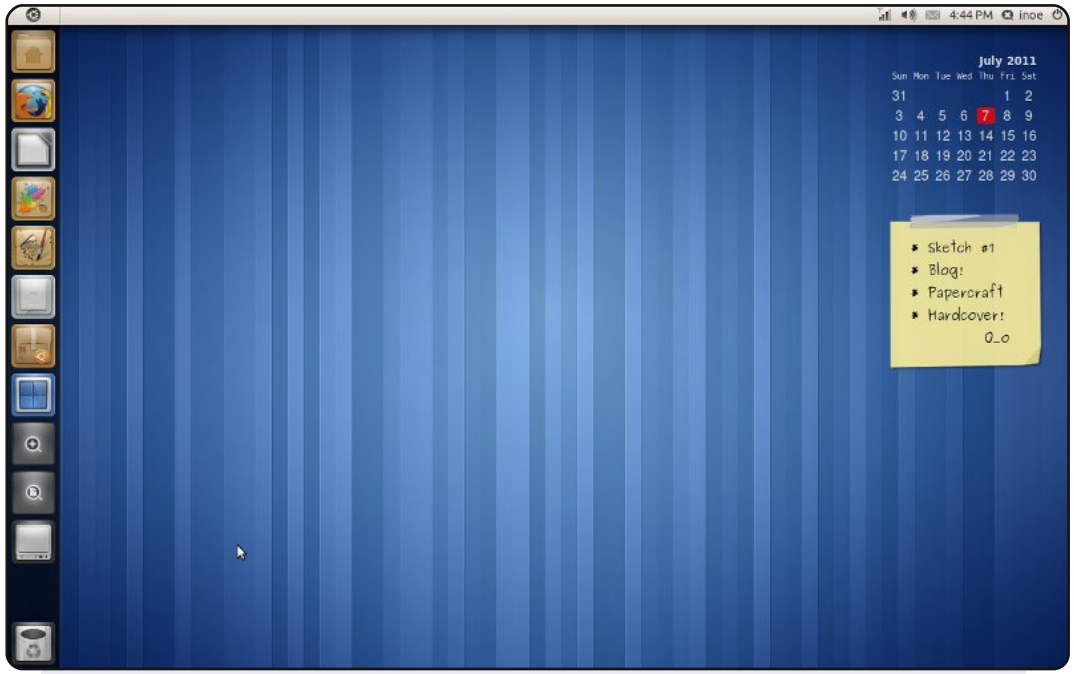


I took this screenshot some time ago, when I used Ubuntu 10.10. Now I'm using 11.04. In fact I like using Unity because it's simple, and satisfies what I need.

I like my desktop simple, and with no icons, so I removed the top panel and used the bottom panel with the dockbarx applet and gnomenu instead of the default one. I got the wallpaper from deviantart.

My computer specs: Toshiba Satellite A135-s2276, Intel Pentium Dual-Core 1.6 GHz, RAM 3GB, ATI Radeon 128MB (Shared) and a 320GB HDD.

Alvin Sie

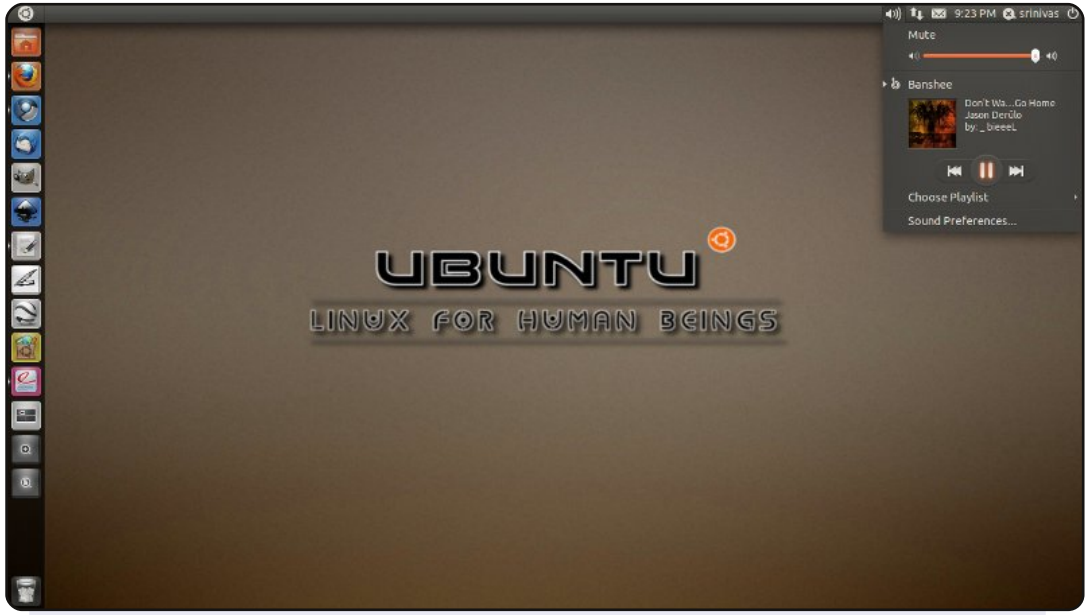


This is Ubuntu 11.04 Natty Narwhal, running on my 14" laptop, with Intel Celeron CPU 550 @ 2.00GHz and 1GB of RAM.

I disabled Nautilus showing mounted volumes on the desktop to provide a cleaner desktop.

The wallpaper is Stripes, the default wallpaper of GNOME 3 (Hey, it looks good with Unity :D). I use the Radiance theme, retouched with Faenza Icon Set. There are two Screenlets, ClearCalendar with Noback theme, and Lipik with a theme I made myself, Tempel, which can be found at http://i-n-o-e.deviantart.com/art/Screenlets-Lipik-tempel-1-0-208444137

Asmoro Budi Nugroho



This is my idea of a perfect desktop, something that's neat, simple, and minimalistic. Not too many short-cuts on the unity launcher bar, but with a little coding of Unity Quicklist scripts, navigation becomes just as good as any other bulky Unity launcher bar. I like this style because it's suitable for serious work and looks good too.

Wallpaper downloaded from: http://solancer-com.deviantart.com/gallery/#/d3jrhu0
Unity Quicklist scripts: http://solancer.blogspot.com/2011/05/ubuntu-1104-quicllist-for-unity.html

System specs: AMD Dual-core 2.5 GHz, Gigabyte S-series mother-board, 4GB RAM and a Seagate 500 GB hard disk

Srinivas Gowda

COMMENT CONTRIBUER

Pensez bien à rédiger tous vos messages en anglais…

Nous sommes toujours à la recherche d'articles pour le Full Circle. Pour soumettre vos idées ou proposer de traduire nos numéros, veuillez consulter notre wiki : http://wiki.ubuntu.com/UbuntuMagazine
Envoyez vos articles à cette adresse : articles@fullcirclemagazine.org

Vous voulez proposer des **actualités,** envoyez-les nous à : news@fullcirclemagazine.org

Envoyez vos **remarques** ou vos **expériences** sous Linux à : letters@fullcirclemagazine.org

Les **tests** de **matériels/logiciels** doivent être envoyés à : reviews@fullcirclemagazine.org

Envoyez vos **questions** pour la rubrique Q&R à : questions@fullcirclemagazine.org

Et les **captures d'écran** pour « Mon bureau » à : misc@fullcirclemagazine.org

Si vous avez des questions, visitez notre forum : www.fullcirclemagazine.org

FULL CIRCLE A BESOIN DE VOUS !

Un magazine n'en est pas un sans articles et Full Circle n'échappe pas à cette règle. Nous avons besoin de vos opinions, de vos bureaux et de vos histoires. Nous avons aussi besoin de tests (jeux, applications et matériels), de tutoriels (sur K/X/Ubuntu), de vos questions et des suggestions que vous pourriez avoir.
Contactez-nous via : articles@fullcirclemagazine.org

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Pour la traduction française :
http://fullcirclemag.fr.

Nous remercions Canonical, l'équipe Marketing d'Ubuntu et les nombreuses équipes de traduction à travers le monde. Sincères remerciements à **Thorsten Wilms** pour le nouveau logo Full Circle.

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