ubuntu

kubuntu

xubuntu

edubuntu

KDE 4.0 RELEASED
FINALLY TIME TO 'BE FREE'

OPENGEU
THE DISTRO FORMERLY KNOWN AS GEUBUNTU

SERVICE!
CREATE YOUR OWN SERVER – PART 1

full circle

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EDITORIAL

Welcome to the first Full Circle of 2008!

The big news this month is, of course, **KDE 4.0**. Robert Clipsham and I have both reviewed KDE 4.0 this month. I thought it would be fun to review KDE 4.0 from both sides of the fence, me being a KDE user and Robert being a GNOME user. I have noticed a few quirks with KDE 4.0 but I love KDE and I won't give up on it, but I do hope they issue updates soon!

Out with the old and in with the new? Not so! Step back in time by following our guide to installing OpenTTD. TTD being Transport Tycoon Deluxe - a highly addictive transport sim from years ago which I was heavily addicted to on my old 486 PC. Me? Old? Oh yes, I'm old enough to even remember 386s!

Starting this month we have a step-by-step series on creating your own server. Part one covers the basic installation of Ubuntu Server and in a few months time you will have a fully working and well configured Ubuntu Server. Speaking of which, if anyone out there would like to write a series of articles on GIMP, please get in touch as it's something people are always looking to learn.

Enjoy the magazine and keep in touch people!

All the best,
Ronnie
Editor, Full Circle Magazine
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This magazine was created using :

What is Ubuntu?

Ubuntu is a complete operating system that is perfect for laptops, desktops and servers. Whether at home, school or at work Ubuntu contains all the applications you'll ever need including word processing, email application and web browser.

Ubuntu is and always will be free of charge. You do <u>not</u> pay any licensing fees. You can download, use and share Ubuntu with your friends, family, school or business for <u>absolutely nothing</u>.

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

http://url.fullcirclemagazine.org/7e8944

NEWS

Ubuntu 7.1O Desktop Course Released!

OK folks the long awaited Ubuntu 7.10 Desktop Course is ready, waiting and all yours for the taking! Thanks to all the community members who slogged over writing, reviewing, editing, proof reading and fixing the layout. This is just the beginning of the project which we hope will live and evolve with each new Ubuntu release. Yours to develop, enhance and branch off to your heart's content! There are 10 lessons in total. The course is modular - 2 days if all lessons are covered, however, topics and lessons can be selected as required. There are 2 versions of the course: an Instructor Guide, and a student guide.

Student Version (PDF)**:**
http://url.fullcirclemagazine.org/0cce36
Instructor Version (PDF)**:**
http://url.fullcirclemagazine.org/de2e29

Source: Ubuntu Weekly News #73
https://wiki.ubuntu.com/UbuntuWeeklyNewsletter

Driver–Free Car Runs Ubuntu Linux

While not as sexy as the BMW Z4M or some of the other automobiles on display during CES, we had learned an interesting fact about the driver-less Carnegie Mellon vehicle: it runs Ubuntu. This Carnegie Mellon vehicle with sponsors such as Google, NetApp, and Intel, had won this year's DARPA challenge. This automated vehicle uses a dozen Intel Core 2 processors, but at the bottom of the software stack is Ubuntu 6.06 "Dapper Drake" Linux. Ubuntu 6.06 was chosen for being an LTS (Long Term Support) release. Perhaps next year's vehicle will be running Ubuntu 8.04?

Source: Phoronix
http://url.fullcirclemagazine.org/703fa0

New Linux Game – Nimuh

Released under the *Creative Commons* license, **Nimuh** is a puzzle type game based on the "Theseus and the Minotaur Mazes" game, but improved by adding a 3D, isometric, view. In the game you play through 40 different Andalusian locations and learn about the typical food, fiestas and history of the place.

You can find information about **Nimuh** at www.nimuh.com. You can also download the Linux source code and packages for Ubuntu Gutsy Gibbon with versions also available for Windows and Mac.

The entire project has been developed using Ubuntu Linux.

Source: Nimuh.com
http://www.nimuh.com/

Acer Selling Ubuntu Laptops

Acer is making a limited laptop series available now with Ubuntu Linux pre-loaded.

You just have to go to a Dick Smith store and look for product code XC5822. The picture here is the same as the one on the site, but I am told it's not exactly the same as the model being offered.

They are some late 2004 Acer Aspire 4315-100508Ci models, based on an Intel Celeron M 540 1.86GHz Processor, 512MB DDR2 RAM, 80GB 5400 RPM SATA HDD, 14.1" Widescreen Display, DVD+CDRW Combo Drive, Intel Media Accelerator X3100 Graphics Card and wireless LAN.

The laptops are running Ubuntu 7.10.

What's more interesting is the price: NZ$699, making it a great value when compared to the ASUS Eee PC, which has only a 4 GB flash memory for storage and costs the same.

Source: Geekzone.co.nz

Linux Development More Like Social Network Says Torvalds

Linux development is more like a social network built on trusted relationships and less like a democratic community of individuals dedicated to a single development process, according to Linux creator Linus Torvalds.

"*I have a policy that he who does the code gets to decide,*" said Torvalds, the Linux project coordinator who has written approximately 2% of the Linux code since creating the operating system in 1990.

Torvalds made his comments during a two-part interview with Jim Zemlin, CEO of the Linux Foundation. Torvalds is a Fellow at the foundation, which funds his work. He can be heard in his own words via podcast on the Linux-Foundation.org Web site. Part 2 of the interview will be posted in early February.

Source: ComputerWorld.com

http://url.fullcirclemagazine.org/49df86

Hardy Heron Alpha 3 Released!

Hardy Heron Alpha 3 is the third alpha release of Ubuntu 8.04, and with this new alpha release comes a whole host of excellent new features.

Note: This is still an alpha release. Do not install it on production machines. The final stable version will be released in April 2008.

These features are showcased for your attention. Please test them and report any bugs you find. If you want to see what the developers have cooking for the next alpha release take a look through the hardy blueprint page https://blueprints.launchpad.net/ubuntu/hardy

Full Circle Magazine has a small team of developers who are working on an open source application which will help those, like us, who create publications. We are always looking for more developers. If you would like to help, please visit:

http://dev.fullcirclemagazine.org

Many of you may not recognise the name. OpenGEU was previously known as Geubuntu but we had to change its name because of Ubuntu trademarks. Since GEU is not a real remix (it doesn't use official Ubuntu repositories only) it's not right for us to use the Ubuntu name in our derivative.

OpenGEU is a normal Ubuntu distro using Enlightenment DR17 and some bits of GNOME to render the desktop instead of the standard GNOME Desktop Environment or KDE from Kubuntu or XFCE4 from Xubuntu. This means a lot of things. To resume the main points:

• E17 is beta software, so OpenGEU may have some bugs we didn't notice. In this case, please report them in our forum, ML or IRC Channel. Also, there are some known bugs we're trying to shut down. Please refer to our wiki, which is in our main site, to learn more about known bugs.

• E17 is filled with eye-candy but with very low hardware requirements. This means that OpenGEU may even be faster than Xubuntu on your machine but it will give you an incredible look and with amazing animations.

• Since E17 is a window manager, you won't be able to use it with Compiz. But to say that Compiz is the master of 3D effects, then E17 is the almighty Lord of 2D effects. Also E17 will give you very elegant and amazing effects without asking you for a 3D card or a powerful machine, so it will run smoothly and perfectly even on a Virtual Machine! That's an incredible plus.

Ten Step Installation

That said, let's start with the real installation. Warm up your CD burner, load your preferred burning software (K3B, Brasero, Gnome-Backer, Nautilus-Burn, anything will do), download the OpenGEU ISO and burn it to an empty CD.

If you are planning to try OpenGEU on a VM then you don't need to burn the ISO on a CD. You can run the disto straightly from the .iso file. You can download and use, for free, the Open Source virtualization application VirtualBox (http://www.virtualbox.org). You can find an article of mine about VirtualBox in **Full Circle** #5 (http://fullcirclemagazine.org).

Put the OpenGEU CD into the CD-Rom drive of your machine and boot it up. Remember to set up the BIOS so that your CD-ROM drive is loaded before your hard disk is, otherwise OpenGEU won't boot. Remember to back-up your important data before installing OpenGEU. Even though

you shouldn't have any problems, better safe than sorry.
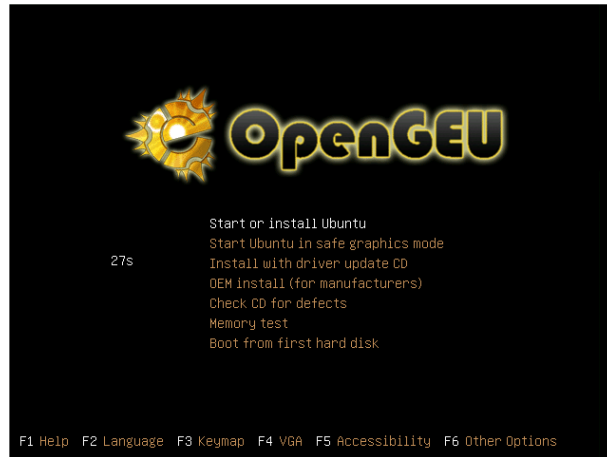
The CD boots and you see the screen above, with a number of options available. You can Check the CD for defects before you start the Live CD, this way you'll be sure that the ISO has been burned correctly so that you won't have any nasty surprises during the installation process. After a check (you can also skip it at your risk) choose 'Start or Install Ubuntu'. The screen will turn black with some white code showing for a few seconds, this is OpenGEU booting up.

Here you are on the OpenGEU desktop! The warm and happy 'Sunshine' theme welcomes you. Note that even the background is animated. You can access any application by left clicking on any empty zone of the desktop or on the OpenGEU logo on the golden bottom shelf. You'll also find a top panel, auto-hidden for your convenience, filled with important applets such as Trash, tray icon space, 'Preferences and Settings' menus and so on. You can test the distro in this Live mode but remember that since it is booted from a CD it will, of course, be very slow and you won't be able to save your settings and customizations.

Any time you wish to, you can switch to the 'Moonlight' theme from Sunshine and vice versa by launching the OpenGEU theme switcher from the 'Preferences' menu in the top panel. Whenever you're ready to install OpenGEU, just double click on the install desktop icon.

Then comes the usual Ubuntu installer. Choose your language and press the 'Next' button.

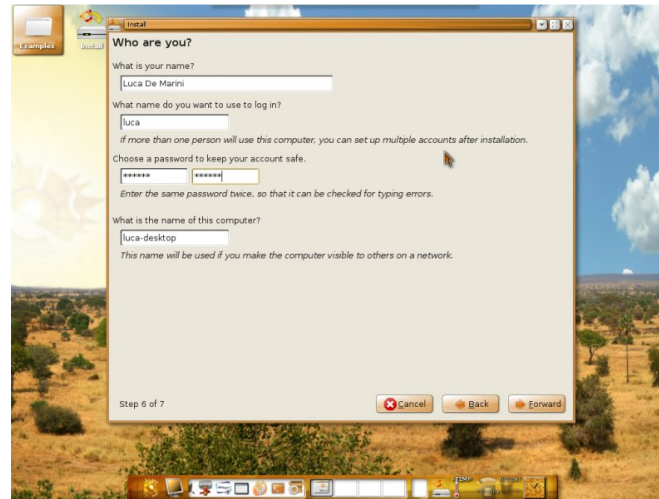Choose your time-zone from the map. This is needed to set up not only date and time but also the locale-settings which OpenGEU will download for your installation. It is important that you are connected to the Internet when you install OpenGEU if you want to have a completely localized
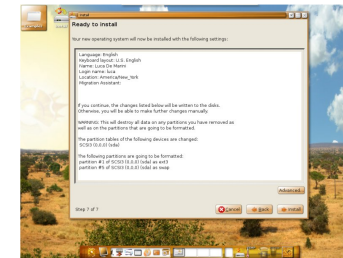
OpenGEU system, for example, if you are Italian, like me, the installation tool will download and install for you the Italian language support for all of your applications and desktop. If you cannot connect to the internet during install, you will have to manually download later, through Synaptic, a package called language-support-*, where * stands for your locale language. For example, it is "it" for Italian (language-support-it), "fr" for French and so on.

Now you can choose the keyboard layout for your system, it is automatically set by the installer, but should you believe it to be wrong, just change it, click next and move to the next step.

You will now be asked to manage your hard disk's partitions. Be careful on this step.

The installer will now ask you for personal details as well as some important data such as the username and password you'll be using on your daily use of OpenGEU. Each time you attempt to do an administrator operation, OpenGEU will ask you for the password. I suggest you to choose something easy to type and remember, but be sure that it is not an easy to guess password too for security reasons. In this step you can insert your real name, but be sure that the network name and username doesn't reveal your real data, again, only for security reasons (imagine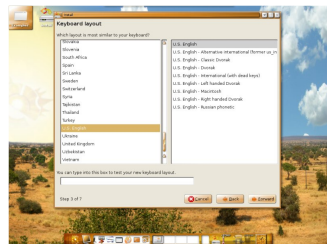 being in an airport, connected to their wireless network with your laptop and a network name such as: name_lastname_laptop. It would be paradise for a malicious hacker.)

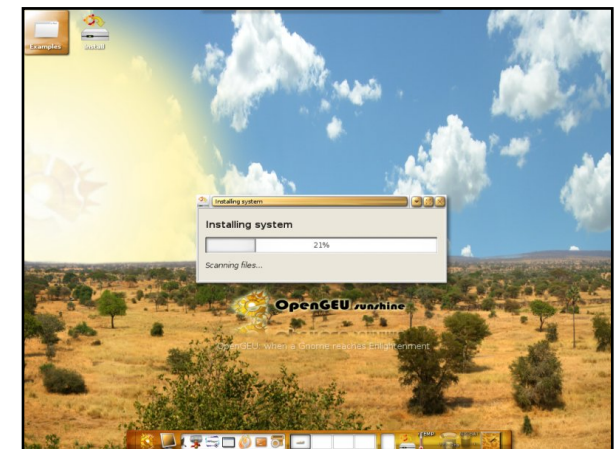The installer will display all your previous choices for you to double check and by pressing the next button again, the installation will start for real and you'll see a progress bar.
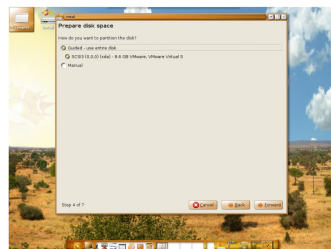

At the end of the installation process press enter to reboot, remember to remove the CD when asked.

After reboot, you'll see the OpenGEU Sunshine Usplash theme. After entering your username and password on the login window, you'll be logged for the first time on a virgin OpenGEU desktop.

Now you can customize it as you prefer, changing the E17 Theme, background, gtk theme, pretty much anything. Exactly like on the Live CD, you can change from the Sunshine to the Moonlight theme and vice versa by simply choosing the OpenGEU theme you prefer on the top panel 'Preferences' menu.

Conclusions

Remember that OpenGEU is completely compatible with any other official Ubuntu distros, so you can open Synaptic at any time and download the respective desktops, such as ubuntu-desktop, kubuntu-desktop, xubuntu-desktop or edubuntu-desktop. You'll just have some extra disc space filled and more boot options on the the login screen (under the 'Session' menu). You can install OpenGEU from packages too, see the wiki for this.

I hope you'll have fun with this Linux distro and enjoy its speed and eye-candy.

You can get OpenGEU from http://opengeu.intilinux.com

The KDE Community is thrilled to announce the immediate availability of KDE 4.0. This significant release marks both the end of the long and intensive development cycle leading up to KDE 4.0 and the beginning of the KDE 4 era.
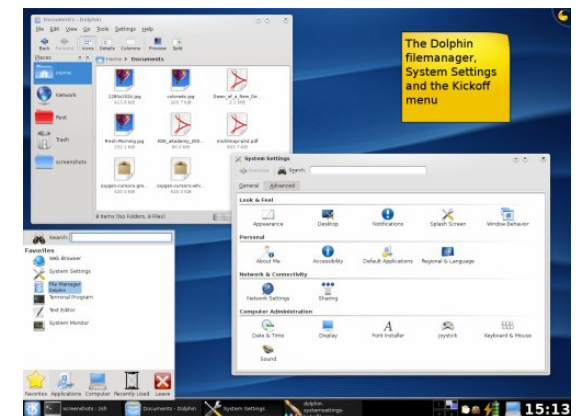
Many distributions are implementing software programs based in LDAP, in order to create a Directory Service like Microsoft offers with Active Directory. This is the first in a series of articles which will explain how to build a Primary Domain Controller (PDC). These articles attempt to offer all the features that Microsoft Active Directory can offer. In order to construct this PDC, several open source software programs are used: OpenLDAP, OpenAFS, Samba, Kerberos and OpenSSH.

The heart of the PDC will be OpenLDAP, it will be the database where the users´ accounts will be saved. In the users´ accounts we can save information about each user. This would include user name, password, mail, home directory, and so on. All the services of the PDC that will authenticate a user will have to authenticate it against that database.

OpenLDAP is a free implementation and open source of the protocol LDAP (Lightweight Directory Access Protocol) development by the OpenLDAP Project. OpenLDAP is liberated by its own license: OpenLDAP Public License.

LDAP is a protocol at application level which grants access to the service which the administrator of the net allows.

The LDAP database has a tree-like organization, as shown in the example below (although the drawing is a little elementary):
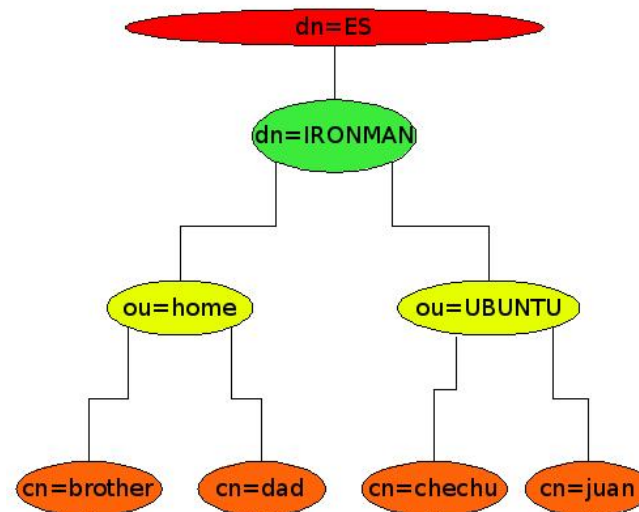
The meaning of the acronyms are:
CN : Common Name.
OU : Organizational Unit.
DN : Domain Name.

Later we'll see how we have to use these acronyms to identify the members of the PDC.

OK, let's go with the practice. We assume that we have a Debian server, or in this case Ubuntu Server (updated by apt-get, I'm using 6.06 version). We need to install some packets from the repositories of Ubuntu and follow some steps for the configuration. Personally, I find it useless to fill out the questions that make up the installation process; therefore, I do not answer the questions and

instead simply press 'enter'. Later we can rebuild the 'conf' file.

```
sudo apt-get install slapd
ldap-utils
```

```
sudo addgroup --system slapd
```

```
sudo adduser slapd --home
/var/lib/ldap —shell \
/bin/false --no-create-home -
-ingroup slapd --system
```

```
sudo /bin/chown -R
slapd.slapd /etc/ldap \
/var/lib/slapd /var/lib/ldap
/var/run/slapd slapd
```

With this we create the user and group who execute the daemon, and we give permission to execute.

Now we need to modify a configuration file; we can find this file at: '/etc/default/slapd', but we edit the file to look like this:

```
###################
SLAPD_CONF=/etc/ldap/slapd.conf
SLAPD_USER="slapd"
SLAPD_GROUP="slapd"
SLAPD_SERVICES="ldap://ubuntus
erver.ironman.es:389/
ldaps://ubuntuserver.ironman.es:636/
"
###################
```

In 'slapd services','ubuntuserver' is the name of the server machine, 'ironman.es' is our domain name, and we actually don't need 'ldap:...' because we encrypt all connections with SSL by 636 port.

Let's see another configuration file, '/etc/ldap/ldap.conf':

```
###################
HOST    ubuntuserver.ironman.es:636
BASE    dc=ironman,dc=es
URI
ldaps://ubuntuserver.ironman.es:636
PORT    636

#Certificados SSL

TLS_CACERT
/etc/ldap/ssl/ubuntuserver.pem

ssl start_tls

ssl on

TLS_REQCERT demand

    tls_checkpeer yes
###################
```

HOST: the name of the server with the port that we'll use.
BASE: The base of our domain, where we search the users.
URI: very important for the connection with SSL, the address where ldap has to search.
PORT: the port where we connect.
TLS_CACERT: The route to our cert file which we create later.

This conf file is the client's part. Let's start with the real conf file of ldap server (for parts):

```
#################
# Global Directives:

# Features to permit
#allow bind_v2

# Schema and objectClass
definitions

include
/etc/ldap/schema/core.schema

include
/etc/ldap/schema/cosine.schema

include
/etc/ldap/schema/nis.schema
```

```
include
/etc/ldap/schema/inetorgperson.sc
hema

# Schema check allows for
#forcing entries to

# match schemas for their
#objectClasses's
schemacheck     on

# Where the pid file is put. The
init.d script

# will not stop the server if you
#change this.

pidfile
/var/run/slapd/slapd.pid

# List of arguments that were
#passed to the server
argsfile        /var/run/slapd.args

# Read slapd.conf(5) for possible
#values
loglevel        0

# Where the dynamically loaded
#modules are stored

  modulepath     /usr/lib/ldap
moduleload     back_bdb
###################
```

The above is quite well commented, we'll just say that we just have to modify the 'schemas' later to add samba features and others.

```
###################
# SSL conexion:

TLSCipherSuite
HIGH:MEDIUM:+SSLv2

TLSCertificateFile
/etc/ldap/ssl/ubuntuserver.pem

TLSCertificateFile
/etc/ldap/ssl/ubuntuserver.pem

TLSCertificateKeyFile
/etc/ldap/ssl/ubuntuserver.pem

TLSVerifyClient never

###################
```

This is the part where we tell slapd server where to find the cert file.

```
###################

backend        bdb
checkpoint 512 30

###################
```

In this part, we specify the kind of database we are going to use. In this case 'BDB', which is the most used.

```
###################

database       bdb
suffix         "dc=ironman,dc=es"
rootdn
  "cn=admin,dc=ironman,dc=es"
rootpw        secret
directory      "/var/lib/ldap"
index         objectClass eq
lastmod        on
include     /etc/ldap/slapd.access

###################
```

suffix: it will be the base of our tree.
rootdn: the full address of our administrator user in the tree.
rootpw: the password of administrator user, which we'll change later.
directory: where the database will be stored.
include: the path to the access list, which says what users are allowed to use some attributes.
index: we do not touch it at the moment, we'll modify it later.

Now we have to create the access list, in '/etc/ldap/slapd.access':

```
##################
access to attrs=userPassword
by
dn="cn=admin,dc=ironman,dc=e
s" write
by anonymous auth
by self write
by * write
##################
```

We allow these files to be seen by 'slapd':

    /bin/chmod -v 644
/etc/ldap/ldap.conf

    /bin/chmod -v 600
/etc/ldap/slapd.conf

Note: we have to add the name of the server to '/etc/hosts', in all machines, for example;
192.168.1.2 ubuntuserver ubuntuserver.ironman.es
or define in our DNS of our local network.

We now have to create the SSL cert, for the SSL connection between the server and client;

both the server and the client have to have a copy of the SSL cert. We'll need to install some packets.

```
sudo apt-get install openssl
```

And for creating the certificate:

```
sudo openssl req -newkey
rsa:1024 -x509 -nodes -out \
ubuntuserver.pem -keyout
ubuntuserver.pem -days 365
```

We are going to use a self-signed certificate. We can change the name of the files '.pem', but for the configuration I think it's easier if both of the files have the same name, and we can change the lifetime of the certificate with '-days'. I'm not an expert in SSL, but with these we can get a good idea of the PDC. This is going to pose some questions, we can type whatever we want. The only time we cannot type whatever we want is when the command asks about the 'Common Name', we then have to type the 'FQND' (Fully Qualified Domain Name), or rather, the name of the machine followed by the name of the domain (our domain is 'ironman.es').

Generating a 1024 bit RSA private key
...............................+++++
...............................+++++
writing new private key to 'ubuntuserver.pem'

You are about to be asked to enter information that will be incorporated into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank.
For some fields there will be a default value.
If you enter '.', the field will be left blank.

Country Name (2 letter code) [AU]:ES
State or Province Name (full name) [Some-State]:Cantabria
Locality Name (eg, city) []:Santander
Organization Name (eg, company) [Internet Widgits Pty Ltd]:IRONMAN
Organizational Unit Name (eg, section) []:IRONMAN.ubuntu

Common Name (eg, YOUR name) []:ubuntuserver.ironman.es
Email Address []:chechu@ubuntu.ironman.es

Now we have to store it where we told 'slapd.conf' that it would be. In our case, it will be in '/etc/ldap/ssl/'. And we change the owner of the file to slapd:

```
sudo chown slapd.slapd
/etc/ldap/ssl/ubuntuserver.pe
m
```

Let's start with the part of the client. We need to install some packets in the clients machines,(we press 'enter' to answer all the questions that the process make up), you'll have to add the 'universe' and 'multiverse' repositories to the 'sources.list':

```
sudo apt-get install libpam-
ldap libnss-ldap libpam- \
cracklib
```

The important files for the client machine are the following, which we are leaving like this. (we'll have to set up too in the server machine):

'/etc/libnss-ldap.conf'

```
#####################
host ubuntuserver.ironman.es:636
base dc=ironman,dc=es
ldap_version 3
rootbinddn
    cn=admin,dc=ironman,dc=es
port 636
ssl start_tls
ssl on
#####################
```

'/etc/pam_ldap.conf'

```
#####################
host ubuntuserver.ironman.es:636
base dc=ironman,dc=es
ldap_version 3
rootbinddn
    cn=admin,dc=ironman,dc=es
port 636
ssl start_tls
ssl on
#####################
```

host: this is the FQDN of our server.
base: The base of our tree. ldap
version: The version which is going to be implemented.
rootbinddn: The full address administrator user in the tree.
port: The port we are going to use

for the connection, 636 because the connexion is by SSL.
**ssl**: The lines needed for make the SSL connection possible.

We have to change the permission of some files, and change the file '/etc/nsswitch.conf', which contains the order that the services consult the databases, we must set LDAP after files, because it can generate problems with the 'root' user:

```
sudo chmod 644
/etc/pam_ldap.conf
```

```
sudo chmod 644 /etc/libnss-
ldap.conf
```

'/etc/nsswitch.conf'

```
passwd:        files nis ldap
group:         files nis ldap
shadow:        files nis ldap
hosts:         files dns
networks:      files
protocols:     db files
services:      db files
ethers:        db files
rpc:           db files
netgroup:      ldap nis
```
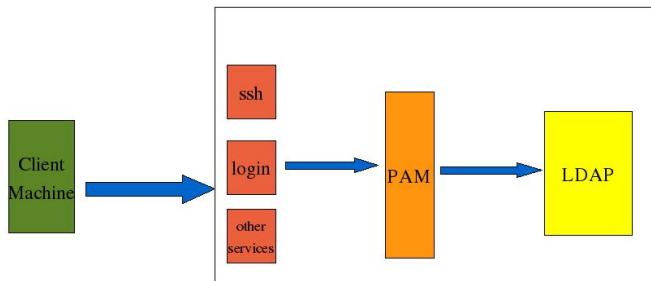
In order to connect with the daemon, 'slapd', we have to modify the 'pam', pluggable authentication modules. This is shown in the diagram above.

We'll change the following files:

'/etc/pam.d/common-account'

```
account required     pam_unix.so
account sufficient    pam_ldap.so
```

'/etc/pam.d/common-auth'

```
auth    sufficient    pam_unix.so
auth    sufficient    pam_ldap.so
    try_first_pass
auth    required      pam_env.so
auth    required  pam_securetty.so
auth    required pam_unix_auth.so
auth    required      pam_warn.so
auth    required      pam_deny.so
```

'/etc/pam.d/common-session'

```
session required        pam_limits.so
session required        pam_unix.so
session optional        pam_ldap.so
session required
    pam_mkhomedir.so
        skel=/etc/skel/ umask=0022
```

The module 'pam_mkhomedir' let us create a new home directory when an user authenticate the first time.

'/etc/pam.d/common-password'

```
password required
    pam_cracklib.so  retry=3
        minlen=8 difok=4

password sufficient
    pam_unix.so use_authtok md5
      shadow

password sufficient
    pam_ldap.so use_authtok

password required    pam_warn.so
password required    pam_deny.so
```

The module 'pam-cracklib' let us to handle the length of the password's user and how many letters have to be different in it.

Now everything is ready to restart the daemon:

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

We have to create the base of the tree and the users in the database. I recommend for doing this the software program ldap-account-manager, it makes the process of creating the tree so easy. I don't recommend trying to create the users now. I would wait until we get 'Samba' installed, but this will be in the next article If you want you can create and start work with LDAP, but just for Unix/Linux clients.

If you would like to read this article with a wider layout to better see the commands and config file entries, please visit:

http://url.fullcirclemagazine.org/d66214

My iBook G4 wasn't being used much, so I decided to install Ubuntu Feisty on it. Here's how it was done, and I give you the warts and all procedure as it happened in the hands of an average tinkerer.

First things first. Back up all critical files and extra applications on the iBook to another disk of some kind. Your existing OS X will be overwritten.

Then download the "Mac (PowerPC) and IBM-PPC (POWER5) desktop CD" from here:

http://cdimage.ubuntu.com/ports/releases/feisty/release/

You'll find it at the top of the page. Burn the ISO to disk.

Boot up the iBook using your Mac OS X setup CD 1. Once up and running, launch the Disk Utility program. This is going to be used to partition the disk so that you can put OS X on one partition and Ubuntu on the other. Remember, the present OS X is going to be overwritten—there is

no turning back once the disk is partitioned, so double check that you have everything you want.

Partition sizes will depend on you. I just split everything down the middle. Some people use around 10GB for OS X, but that doesn't leave any space to play around with, and you would have to omit or delete things like the Garage Band program.

Just make each partition Mac OS X Extended HFS or HFS+. Don't use HFS+ Journaled, as you won't be able to write to the OS X partition from Linux. But even if you do, you can disable journaling later, as I had to do, anyway (see below).

When it came to naming each partition, I named the first one "Ubuntu" and the second one "OSX". That was supposed to prevent confusion about where things were

going. Then I went straight ahead and installed OS X on the OSX partition.

Some people advise to install Mac OS X on the partition at the end of the disk. Well, I thought I was doing that by installing to the partition I had named OSX, but I may have misread the Disk Utilities setup, or it may have made up its own mind where it was going, because it ended up at the front of the disk. Not to worry, as it just doesn't seem to matter, in my experience.

Now the fun starts. Eject the Mac OS install disk and insert the Ubuntu Feisty install disk you burned earlier. Boot from this disk by holding Option + c during start-up. Type "expert" at the boot-loader prompt. This will

give you more control during the installation process. Also, make sure you have a network connection so that networking is automatically configured and the system can get any necessary downloads.

Go through the installation process as usual. Everything is straight forward, until you come to the partitioning section. I mean, if you don't accept the default, letting the installer auto partition for you, you have to put some thought into it to set up your own partitions. First, delete the Ubuntu partition you created earlier, then go back and choose to use maximum free space. Now, if you don't care to have customized partitioning, just accept the defaults and skip the next three paragraphs.

I have a confession to make at this point. I used what was the latest build of Ubuntu Gutsy PPC Server as part of my experiment—blame my tinkering gene. The Gusty install calculated the partitioning nicely for me, which desktop versions don't, as far as I know. I let it write the partitions. But then I reflected, if should things not work out, I don't what to be dealing with a command line. So, I stopped the install process and began again with a Feisty desktop CD, and when it came to the partitioning section, I simply reused what the Gusty disk had set up. I had to rename them, though. It was lucky I did install Feisty because I learned later after an upgrade that Gutsy is buggy and as slow as hell on an iBook. Abandon all hope ye who enter that zone of hell! I reinstalled Feisty after that little adventure.

Once past partitioning, Ubuntu will continue installing everything smoothly and will eventually install the Yaboot boot manager for choosing your preferred system to boot-up time, OSX or Ubuntu.

That should be it. It's time to restart. You can check that you have ended up with a disk structure something like is shown below.

Lovely. Boot into OS X, fire up a terminal window and type in "fdisk -l" to get the list. That was easy for me to do because it just booted into OS X all of the time.

```
/dev/hda
# type name length base ( size ) system
/dev/hda1 Apple_partition_map Apple 63 @ 1 ( 31.5k) Partition map
/dev/hda2 Apple_Bootstrap untitled 1954 @ 29302624 (977.0k) NewWorld bootblock
/dev/hda3 Apple_HFS Apple_HFS_Untitled_2 29040416 @ 262208 ( 13.8G) HFS
/dev/hda4 Apple_UNIX_SVR2 untitled 585938 @ 29304578 (286.1M) Linux native
/dev/hda5 Apple_UNIX_SVR2 untitled 10443360 @ 29890516 ( 5.0G) Linux native
/dev/hda6 Apple_UNIX_SVR2 untitled 5328126 @ 40333876 ( 2.5G) Linux native
/dev/hda7 Apple_UNIX_SVR2 swap 1494141 @ 45662002 (729.6M) Linux swap
/dev/hda8 Apple_UNIX_SVR2 untitled 781251 @ 47156143 (381.5M) Linux native
/dev/hda9 Apple_UNIX_SVR2 untitled 10667726 @ 47937394 ( 5.1G) Linux native
/dev/hda10 Apple_Free Extra 262144 @ 64 (128.0M) Free space

Block size=512, Number of Blocks=58605120
DeviceType=0x0, DeviceId=0x0
```

Yaboot's little menu screen should have appeared, where you can hit "l" to boot into Linux or "m" to boot into Mac OS X, or you can leave it for Ubuntu to start loading by default, but that isn't what was happening for me. For some reason, Yaboot just wouldn't kick in.

    That was no problem. If Yaboot is a no-show, open up the Mac's open firmware console. You do this by booting up while holding the Mod + Option + o + f keys. This will put you in "Open Firmware" mode. Once you have the console type this:

```
boot hd:2,yaboot
```

    At least, that's what I needed to enter. (The hd:2 here just means hda2, where Yaboot is loaded. You can see that hda2 is called Apple_Bootstrap untitled in the fdisk list above).

    After I did that it booted up into the Yaboot menu and after a few seconds, by default, Ubuntu started loading. Everything worked fine. Good, now's the time

to fix it so that Yaboot gives you a dual boot option, and you can tweak it a bit while you're at it. So open up a terminal and run these commands.

```
sudo yabootconfig
```

```
sudo gedit /etc/yaboot.conf
```

    That yaboot.conf is of course Yaboot's configuration file. Add the following lines to it:

macosx=/dev/hdXX
defaultos=macosx # add this only if you like MAC OS X to be the default

    Save the file. Most instructions say that you now type the following

```
ybin
```

    This loads the config settings for you. However, this wasn't enough for me. It worked until I booted into OS X again. After that Yaboot abandoned me, and I had to go into firmware mode again to get it back in the same way I specified earlier. This is the command that makes the Yaboot config settings stick for me.

```
ybin –b /dev/hda2
```

    Yaboot hasn't failed me once since I did that.

    Below is an example of what else can go in yaboot.conf

```
boot=/dev/hdc2
device=hd: # should be an alias check /proc/device-tree/aliases/hd (thanks <sourdough>)
partition=5
root=/dev/hdc5
timeout=50
install=/usr/lib/yaboot/yaboot
magicboot=/usr/lib/yaboot/ofboot
enablecdboot # Adds an entry to boot from a cdrom

fgcolor=yellow
bgcolor=blue
image=/vmlinux
label=Linux
macosx=/dev/hdc3
```

The box below shows what is presently in my yaboot.conf.

Those last two instructions add two more options to your Yaboot menu at startup, allowing you to also choose whether to boot from a CD or to bring up the firmware console.

The next step is to enable file sharing between OS X and Ubuntu. You should be able to

```
boot=/dev/hda2
device=/pci@f4000000/ata-6@d/disk@0:
partition=4
root=/dev/hda4
timeout=30
install=/usr/lib/yaboot/yaboot
magicboot=/usr/lib/yaboot/ofboot
delay=5
bgcolor=white
fgcolor=red

macos=/dev/hda3

image=/boot/vmlinux
label=Linux
read-only
initrd=/boot/initrd.img
initrd-size=8192
append="quiet splash"

enablecdboot
enableofboot
```

copy from OS X to Ubuntu already. But enabling file sharing in the other direction could be a problem. I was stuck on this for a while. However, I worked it out. To view the files in the shared partition, do this:

```
sudo mkdir /media/OSX
```

And then

```
sudo mount -t hfsplus
/dev/hda5 /media/OSX
```

My iBook's /etc/fstab has the following entry so that it is automatically mounted:

/dev/hda3 /media/OSX hfsplus rw,exec,auto,users,gid=31 0 0

Or just go through Administration > Shared Folders and make it a shared folder.

You probably still will not be able to copy files over to OS X from Ubuntu. So reboot into Mac OS X, then go to Utilities and fire up the Disk Utility program. Select and highlight the OS X disk icon. Go to menu and under File you will see the Disable Journaling option. Click that to

disable journaling. Reboot back into Ubuntu. You should now be able to copy files over to OS X. You can also disable journaling in OS X from the command line in Ubuntu with this:

```
sudo diskutil
disableJournal /Volumes/<OS
X Volume Name>
```

I've seen discussions on changing your Linux user uid and gid to match that of OS X to try and access the Mac partition. This also means changing all permissions system wide in order to match your new uid and gid. Seems like a big hassle to me.

I haven't checked support for Airport, but for now, everything I need is working on my iBook, plus things I don't need like fancy desktop effects.

I like my iBook even more now. It's got its cool back.

Proof that the old ones are the best is no further away than installing **OpenTTD** – the open-sourced version of the classic *Transport Tycoon Deluxe*. The game's creator *Chris Sawyer* opened the code when he moved on to developing Roller Coaster Tycoon.

The code is now actively developed as OpenTTD at: http://www.openttd.org.

The game is a simulation-type game based on transport. You are a tycoon and you have to build your business around transporting people, raw materials and goods while building roads, railways, harbours and airports. Monoplise, make money and eliminate the competition – sound familiar?

Installation

• Open System > Administration > Synaptic Package Manager

• Using the 'Search' button search for 'openttd'

Note: If nothing appears ensure that you have enabled the *multiverse* repository in Settings > Repositories

• Double-click the 'openttd' package displayed in the results.
• You may also want to install the 'rar' package while in Synaptic. You may need it later.
• Click on the 'Apply' button to install the software.

The important point to note when installing OpenTTD, is that for legal reasons the original *Transport Tycoon Deluxe* artwork cannot be distributed with OpenTTD. As a result you need to get the data files from your original CD version of *Transport Tycoon Deluxe*. If, like me, that original CD is gathering dust in a box in the roofspace you might want to obtain the data files from the web.

Details about the data files is available here:
http://www.tt-forums.net/viewtopic.php?t=3407

As discussed the data files can be downloaded from:
http://download.transporttycoon.net/files/ttd-graphics.rar

To download the data files and copy them to the correct location:

Open a terminal and enter:

```
mkdir tmp
```

```
cd tmp
```

```
wget http://download.transporttycoon.net/files/ttd-graphics.rar
```

```
unrar e ttd-graphics.rar
```

```
rm ttd-graphics.rar
```

```
sudo cp * /usr/share/games/openttd/data
```

If you have any difficulty extracting these data files you may need to install the 'unrar' package using your Package Manager'

Once the artwork is in the correct folder you should be able to run OpenTTD from Applications > Games > OpenTTD and play the game in all its 1990's glory.

Getting Started

When you begin a new game you should familiarise yourself with the buttons across the top of the screen.

• Click on the coin stack icon. Borrow as much from the bank as possible to get started
• Hold and drag with the right mouse button clicked to move around the map
• Click the road icon and in the 'Road Construction' dialog box that appears choose the first road icon and start clicking and dragging roads across the map. The second road icon in the 'Road Construction' dialog builds roads in the other direction. Aim to build

a road between two towns.

• Next click on the fifth icon in the 'Road Construction' dialog and build two Bus Depots – one in each of the towns you have joined with the road.
• Next click on the fourth icon in the 'Road Construction' dialog and build a 'Road Vehicle Depot' beside one of your roads.
• Click on the Depot you have just built and you should see a dialog which allows you to buy vehicles.
• Buy a bus by clicking on 'New Vehicle' button

• Once you have your vehicle a new window will open representing that vehicle. You need to give your vehicle some instructions so it can start making you some money. Click on the fourth icon down (broken yellow arrow)

• The 'Orders' dialog appears. Click on the 'Goto' button then locate your bus stop on your map and click on it. The name of your bus stop should appear in the vehicle's orders. Then find the second bus stop you created and click on it. Your bus should now have a route of two bus stops so click on the red 'Stopped' button on the 'Road Vehicle' dialog. Your vehicle should now be on the road (making money) so follow it for a while to make sure all is well.

Continue building your road fleet and look for subsidies, also when you have the funds move onto rail, ships and aircraft. By now I'm sure you're probably as addicted as I am.

If you like the game consider donating to www.openttd.org

This guide will begin at the very start, installation, and take you through all the steps to eventually having your own fully working Ubuntu server which could be used in your home or for a business of any size.

We will start by downloading Ubuntu 7.10 from http://www.ubuntu.com/getubuntu/ download and select **Ubuntu 7.10 Server Edition** for 'Standard personal computer' and chose the most appropriate mirror for you from the drop down menu.
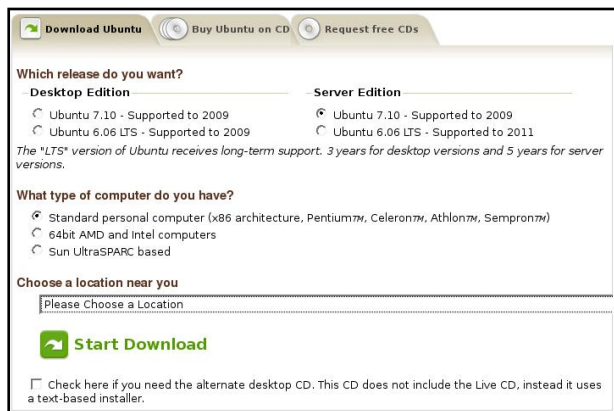
I am choosing Ubuntu 7.10 (Gutsy Gibbon) for various reasons but the main reason is

support of most modern hardware and it will also support the newest Raid systems and Gigabit network cards which currently 6.06 LTS (Long Term Support) does not, however with version 8.04 LTS this should be re-assessed.

After downloading Ubuntu 7.10 Server you need to write the image to CD using your favorite CD burning program, if you are on windows you can look at using Infrarecorder which can be downloaded from http://infrarecorder.sourceforge.net/.

Once you have written the image to CD place your Ubuntu Server CD into your drive and boot from it, ensure that your system is set to boot from CD. You will then see this screen (above right).
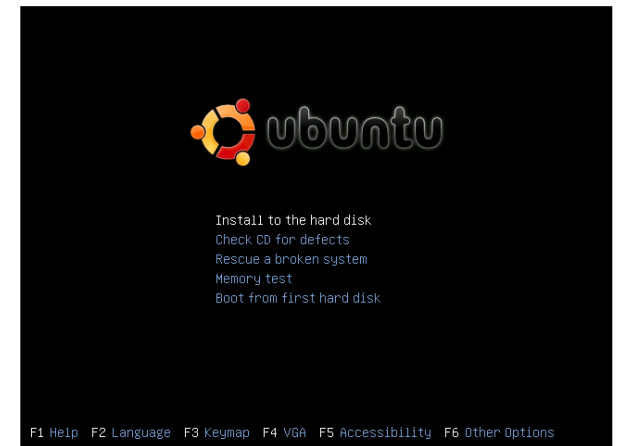
Choose 'Install to the hard disk'.

The installation will now start. First you will have to choose your language, then select your location. Next choose a keyboard layout, you will need to press a few keys so the installer can detect your keyboard layout based on the keys you pressed,

or you can manually chose what keyboard you have.

The installer checks the installation CD, your hardware, and configures the network with DHCP if it is connected to the network, or you can configure this manually.

Now enter the 'hostname'. My system is called 'server.domain.local', so I enter 'server'.
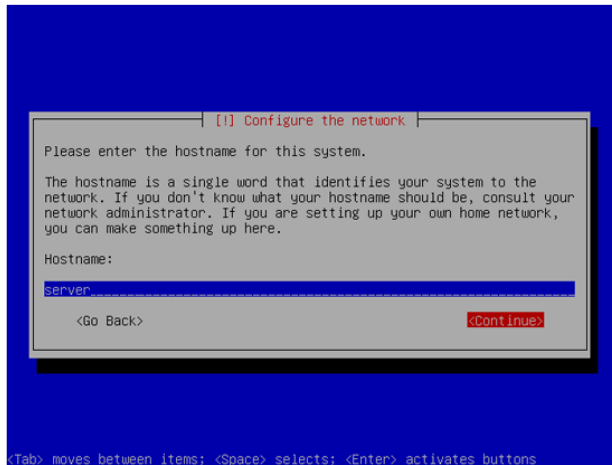
Now you will need to partition your disk, let the setup create the partitions (swap and root) automatically unless you are confident on doing this manually.
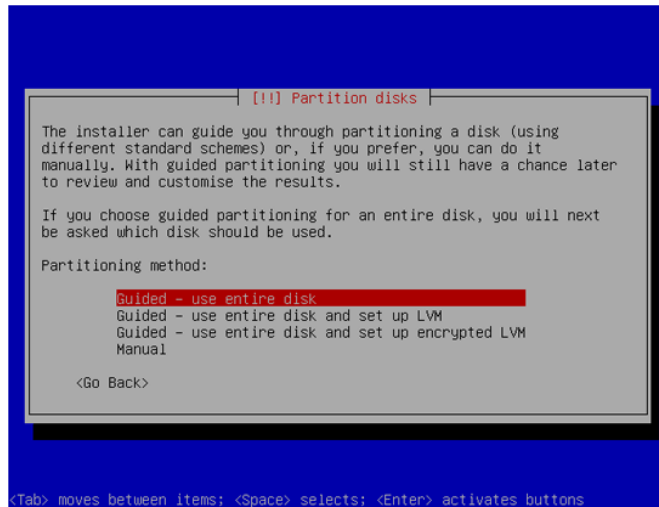
When you are ready, hit 'Yes' to 'Write the changes to disks?' Now your partitions will be created and formatted.

Setup the system clock. Normally UTC is a safe choice.

Next create a new user, I use the name 'Administrator' with the user name 'administrator'. Don't use the user name 'admin' as that is a system name in Ubuntu.

The base system will now be installed.

Now we get the option of what extra software gets installed, we are going to choose DNS, mail, LAMP,

OpenSSH, print and SAMBA servers. Select the different servers using the space key then continue.
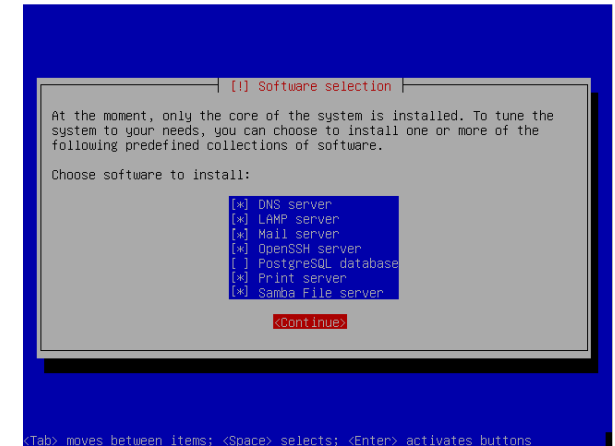
The GRUB boot loader will now be installed.

The installation is now finished. Remove your CD from the drive and hit 'Continue' to reboot the system.

That is the first part of the Ubuntu server installed. Next issue, we will cover updates, installing the Xubuntu desktop and also the webmin install.

REVIEW
Written by Ronnie Tucker
and Robert Clipsham

KDE4.0 DUAL REVIEW

In the blue corner is Ronnie, a KDE 3 user since Dapper Drake and still using KDE on his current install of Gutsy. In the brown corner is Robert, a GNOME user since he started using Ubuntu in the days of edgy, tried several other options such as KDE3, XFCE and Openbox but currently using Gnome on his Gutsy install.
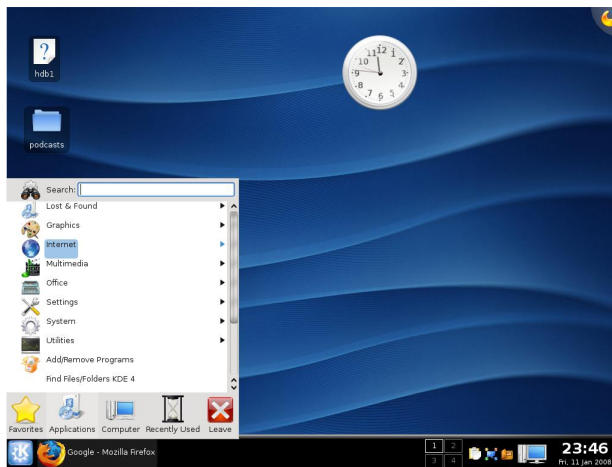
From Wikipedia:
"KDE was founded in 1996 by Matthias Ettrich, who was then a student at the Eberhard Karls University of Tübingen. At the time, he was troubled by certain aspects of the UNIX desktop. Among his qualms was that none of the applications looked, felt, or worked alike. He proposed the formation of not only a set of applications, but rather a desktop environment, in which users could expect things to look, feel, and work consistently."

INSTALL

Ronnie – My install of KDE 4.0 went flawlessly. In Kubuntu Gutsy (7.10) I currently have KDE 3 installed, so I was quite unsure how KDE 4.0 would fit in. Would it 'upgrade' my KDE 3? Would it live beside and separate from KDE 3? Well, it seems it can live separately but still share date with KDE 3 so I bravely opened up Adept (Package Manager in Kubuntu) and added the repository URL given on the Kubuntu.org site [1], chose to install kde4-core, clicked to install it, and actually went off to work leaving it to download. Eight hours later, I came home from work and the downloading and installing was done. I didn't even have to make one decision! Time to log out and hopefully log back in using KDE 4.0.

Robert - Installing KDE 4 was simple, a quick amendment of /etc/apt/sources.list, and a couple of commands in the terminal (sudo aptidude update && sudo aptitude install kde4-core). No sooner was it installed I got a notice about 35mb of kde4 updates, which I thought was odd, considering I had *just* downloaded it.

FIRST TRY

Ronnie – So far, so good! On my login screen, I chose to use KDE4 rather than KDE, gave my usual name and password and in a few moments up came a shiny new KDE screen with nice pulsating icons showing me what parts of my Kubuntu were being loaded. On the desktop, I was surprised

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to see two icons, the very same two icons I have on my KDE 3 desktop (one for accessing my second hard drive and one, a short cut, to a folder containing my podcasts) so it certainly hasn't just dumped me in to a blank KDE 4.0. That's a good sign.
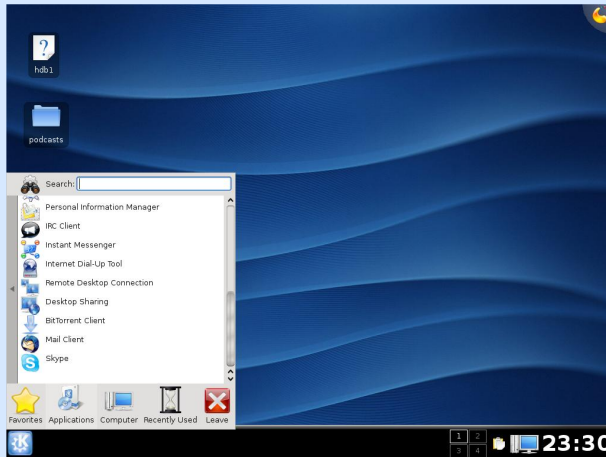
I checked the K menu to see if my other applications that I installed in KDE 3 would be there, Scribus, GIMP, yes they all seem to be there so I'm relived at that. I had the horrible vision that I would log in and have to reinstall all my applications!

Eye candy time! Time to try some widgets. The first one I tried was the analogue clock which worked fine, but there is really little else

to try. Most are already loaded in one way or another, but I'm sure there'll be more widgets on the way.
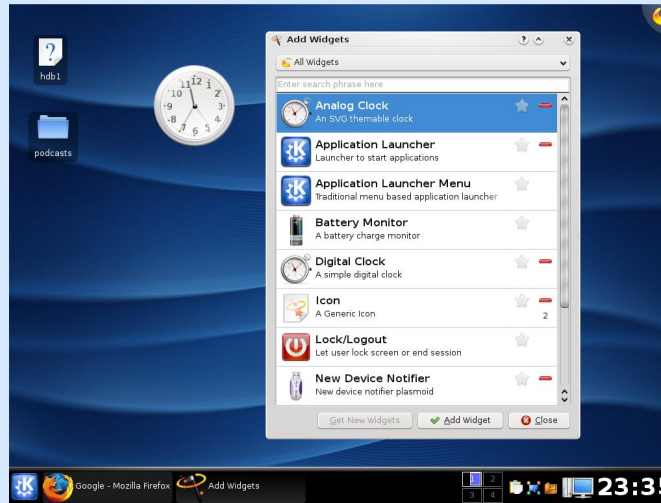
Tinker time, System Settings. There's not much different here. It's all the usual KDE settings but the one addition is, of course, the Desktop Settings, these control the new effects such as window animations and drop shadows. After enabling the effects, the desktop slowed quite a bit. Moving windows became slow and the animations were pretty much non-existent due to lag. Needless to say, I soon disabled them but I'm sure they just need some tweaking and will be great in KDE 4.1. The theme for window borders and icons is beautiful and

well polished. Very professional looking. The default background is a bit bland, but there are several new wallpapers to choose from.
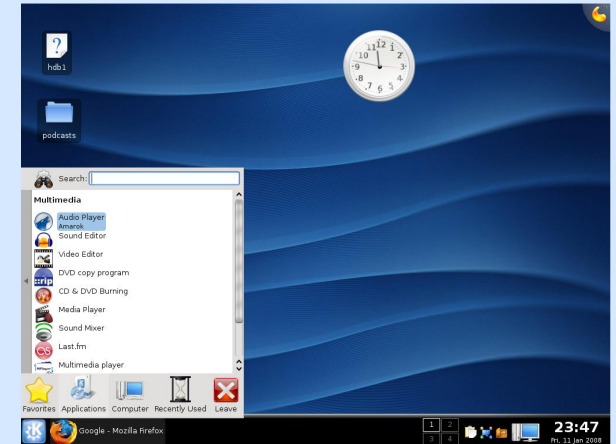

The K menu has changed quite dramatically. It is now shown in, what I can only describe, as a window of sorts. You choose the category (Internet, Office etc.) then the items in that category slide in from right to left and you choose the application you want. A strip down the left of the applications list allows you to return to the category list. It takes a bit of getting used to, but I do like it. It certainly takes up less screen space than the usual pop up and pop out menu.

Konqueror was the Swiss army knife of KDE. It was a file manager, an Internet browser, everything! Now the KDE team have created Dolphin, a trim and svelte file manager which made a brief appearance in KDE 3 under Kubuntu Gutsy. Two things here: first is that no matter how I browse my files, Konqueror always seems to be the default file manager. Odd considering Dolphin was the default in Gutsy! Second is that since I'm using KDE 4 hand in hand with KDE 3, I now have two entries in the K menu for Dolphin and can use either the shiny new KDE 4.0 Dolphin or the old Dolphin (below). Best of both worlds I suppose.
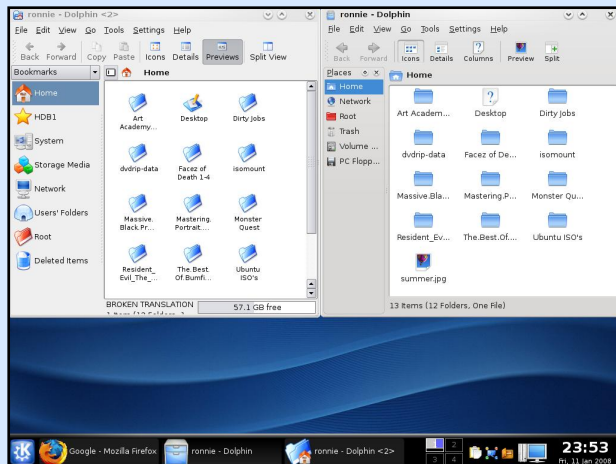
Dolphin has some nice new features such as file rating, comments and tagging (below). So you can rate your files with stars (out of five) and add a comment which will be there next time you select that file. Nice! Tags work in the same way as they do on the Internet. It's more of a 'find helper' of sorts.
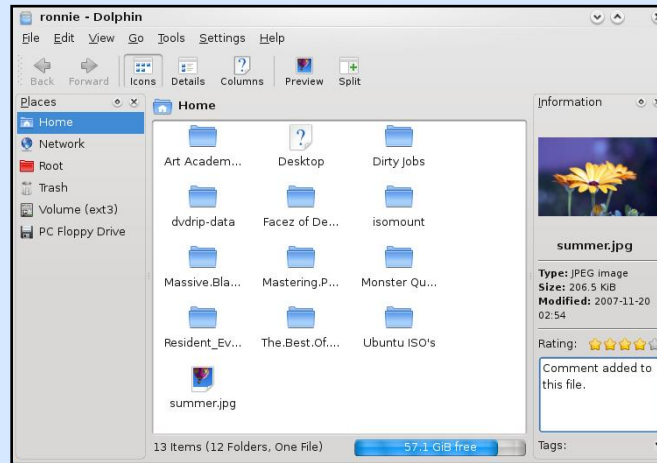

I was now wondering if it was possible to resize a widget as I quite fancied having the clock a touch smaller. Took me a while, but I found it eventually and it wasn't exactly glaringly obvious. Beside the widget are three icons. One is a small spanner for properties, one is similar to a rotate or undo icon and one is a red cross for closing the widget. Seems that clicking and holding on that rotate/undo type icon and

moving the mouse up and down will, as expected, rotate the icon but moving the mouse left and right is where the enlarge or shrink comes in (below). Sneaky!

One gripe I have is that some of my applications, for reasons unknown, may have a fancy KDE 4.0 border, but the application itself looks like it just emerged from Windows 95!
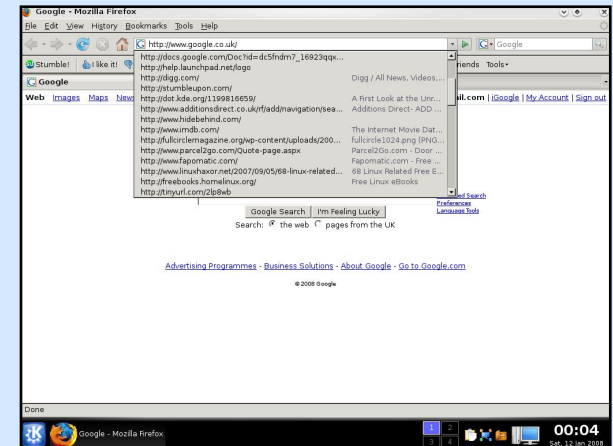
I think it's something to do with themes but I'm really no expert there, I noticed it most in Firefox and GIMP. My other niggle is with the task bar, for the life of me I just can not find a setting or option to have my windows become unique to a desktop. An application on desktop one will show on the task bar for all desktops which is a bit annoying.

KDE 4.0 did scare me once. On loading Adept (KDE Package Manager) I was asked for the root password (as normal). Entered my password and it tells me it's the wrong password! Oh dear. After a quick Google it seems as though KDE 4.0 seems to 'forget' the root password so in a Konsole you should type:

```
sudo passwd
```

and you will be asked for your current password then what you would like to change it to. I just kept it the same password. Reloaded Adept, gave it the root password and all was well. Phew! That was close!

Robert - Once installed, I logged out of my beloved Gnome and proceeded to my XFCE log in screen. I changed the session to KDE 4 and logged in, hoping for the best. Success! Nothing broke. I was in KDE 4.0. After enduring the KDE logon sound (I hate all the KDE sounds), the first thing that struck me was all the hideous icons cluttering my desktop. Over the time I've had Gutsy I've downloaded all sorts of rubbish which I've never bothered to tidy up, and as the percentage of my time using Gutsy has been with OpenBox, which doesn't have a desktop as default, I've never had a motive to remove them. When I recently switched back to gnome (my desire for Compiz Fusion had grown too much for me to handle) I just disabled the desktop straight off. I disabled the icons, and looked into KDE 4.0 some more.

The next thing I felt needed investigating was the symbol in the corner, which highlighting revealed was for adding widgets (right). At the
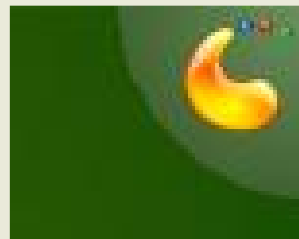
moment KDE 4.0 is just one big bucket of widgets. Everything is a widget. The task bar is a widget, the clock is a widget, the menu is a widget, everything is a widget. I added an analog clock and re-sized it to use up the majority of the desktop, then realised it was blurry, so changed it back to the standard size. I played with some of the other widgets (below) that were already there then decided to move on.

The next thing that needed doing was to enable some graphical effects. I clicked on the K menu and searched for 'pref', and by that point the preferences had already been moved to the top of the search list. It wasn't obvious that I had clicked in the search box as there was no flashing cursor, but it worked nonetheless. I enabled all the graphical effects I could find, then tested out the effects. I didn't see a lot of difference having enabled them, other than the minimising and restoring effects.
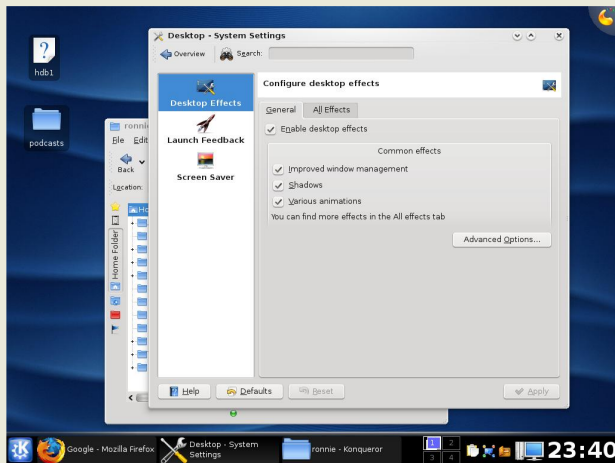

I tested a couple of the applications briefly, but not long enough to comment fairly on them. At this point something odd happened. I did some sort of a clicking combination and the desktop partially moved off the screen, leaving a white block where it was. I tried a few things to move it back, but it was no use.

CONCLUSIONS

Ronnie – I've only been using KDE 4.0 a short time and it will definitely take a lot longer to get a more definite feel for it, but I'm happy with it and will certainly be using it on a day to day basis. The KDE team deserve a standing ovation for KDE 4.0. It's mind boggling to think that such a beautiful and complex piece of software can be written by a group of people who rarely see each other! Had the Desktop Effects worked smoothly, I'd easily have given this top marks.
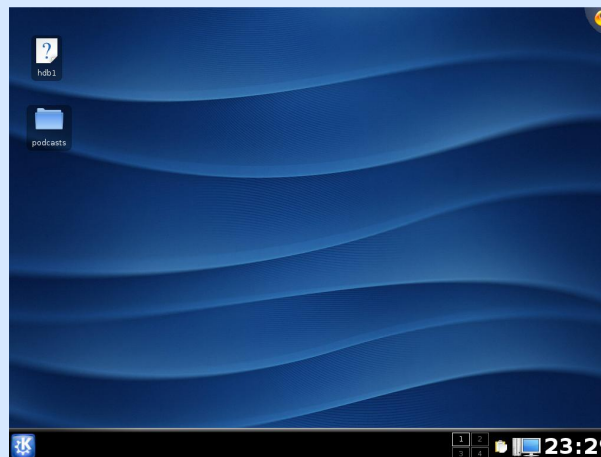
Robert - I used KDE 4.0 for only a short amount of time, and can see it's potential. However I don't believe it is ready for everyday use yet and still has a long way to go. I'll look forward to testing later versions of KDE 4, but at the moment it doesn't have the flexibility/ease of customisation my desktop needs.

[1] deb http://ppa.launchpad.net/kubuntu-members-kde4/ubuntu gutsy main

Ronnie's Rating:

Robert's Rating:

Top5 writer Andrew Min has written his opinion on KDE4.0 which you can read on the **Full Circle** web site at:

http://url.fullcirclemagazine.org/316441

OpenGEU Moonlight Edition (above)

In the endless panorama of Ubuntu distributions OpenGEU is a very interesting one, and by Luca de Marini, a fellow Italian.

I am proud to introduce you to this Italian distribution and that is because first of all, it is the second famous Italian distribution to ever see the light of day (no pun intended to OpenGEU's two editions) also, Italy is known to be somewhat technologically primitive if related to other countries, therefore I believe that this beautiful initiative gives luster to my country. Thank you to Luca and thank you to the whole OpenGEU community.

I'd like to share with you a little of my thinking about distributions and Linux. In my humble opinion, distros are an immense treasure for our community, since they allow every person to set free his imagination and creativity. Distros are also the main part of the Free Software concept itself: everyone has the right to modify and personalize free software. This is really a great concept. If I may, however, make one personal observation: I think that maybe a better coordination between different distributions of the same family (eg: Ubuntu) would be a nice solution since diversity is surely a good thing but only if it would come together with a larger view of the whole distro panorama. In other words: I hope that in the future there will be more and more distributions, but perhaps they should be all be grouped on a single Internet site, with a unique forum and so on. In short, all together but each different from the other.

For more information on OpenGEU (formerly Geubuntu) please see our Flavor of the Month (on page 6) written by the creator of OpenGEU Luca De Marini

OpenGEU Sunlight Edition (below)

The virtual world is finally at my fingertips. Alt-Ctrl-LeftArrow: New workspace.

Although I sit in my living room/office with its chairs, couches, TV screen, tables and bookshelves, I can't shake the feeling that I have two apartments. Over here from my laptop I glance over at my wooden couch across the room wondering if I should move it to the adjacent wall and at the same time push SuperButton-Tab giving me a virtual overview (the Shift Manager app) of my current workspace on Gutsy so I can use the window I want.

I remember about six years back when Halle Berry starred in that "hacker" movie: Swordfish. And the main character, Hugh Jackman (Wolverine) has a graphical representation of a program that's meant to hack into a government database. It looked like a massive rotating orb. I'm starting to get that feeling with Gutsy. I mean, I can see through my current workspace to other workspace across the graphical cube! Next thing you know I'll stick a few Sims with furniture etc. inside the cube and watch them interact from time to time while I do my work on one of my workspaces.

So I'm fascinated. I'm waiting for the day when we have Ubuntu running off a dodecahedron or more. Or maybe it could be a mansion that you virtually walk through to your next workspace? Or, somehow each workspace could look like or be a planet?

I mean right now, when I turn on my computer, I actually get the feeling that I'm entering an apartment, like I opened a door. Before it was just that I "flipped it on" and could use its applications. Now my applications are like furniture that I move around at will. I walk through my computer.

I'm not sure how far this could go (especially given the exactitude of tweaking I can do, down to how slowly the cube flips) considering the power of preferences in Gutsy and the strength of user input in the Ubuntu community. And thinking about a few of my ideas makes me wonder what everybody who's using Ubuntu wants to see or wants it to be able to do (coders and non-coders).

Finally, with all this protocol-thinking proliferating, the lines between desktop and web, between documents and video games, between chatting and multimedia, etc. are all blurring so much that I wonder when I'm going to need to feed my laptop virtual food to get new upgrades to my system like tamagotchi (remember tamagotchi?). Any ideas?

UBUNTU WOMEN

Written by Cathy Malmrose

Women may currently rank in the low single-digits in the Ubuntu population, but I hope, for my daughter's sake, that it won't always be so. Building for the long-term, what we can do to help the upcoming generation prepare for the rigors of mass collaborative creative efforts? Specifically, what can we do now to foster the specific skill set of the girls who will eventually contribute to the Yodeling Yak version of Ubuntu?

For starters, we can help potential future contributors develop sufficiently strong voices. From my own little corner of the market preparing Linux hardware for Ubuntu, I have discovered that I need to speak more firmly than I ever have before. I recently taught my daughter, Anna: "Think first, speak clearly, and constantly re-evaluate."

In order to build this resilience, I purchased a "spine-building

Barbie doll". When Anna carries her highly controversial Barbie in public, it elicits strong feelings (similar to the intensely strong feelings we see in Linux development). It helps her practice saying, "I hear what you are saying and I still disagree" or "You have a good point." The Ubuntu team currently has and will continue to need women on-board who can handle controversy well. There is intense beauty in those who can disagree in a way that leaves everyone's dignity and grace intact.

We can help tomorrow's developer-girls to develop a high frustration tolerance. Spend a few minutes watching children on a playground and you will see some who give up at the slightest sign of difficulty. You will also see children who persist. Those with an indefatigable ability to maintain focus are those who are currently writing drivers and reviewing patches.

Specifically, what can we do to foster this? Cindee Madison, a programmer at UC Berkeley helped her daughter, Kora, develop a high frustration tolerance through one specific, pivotal act. Cindee told Kora she could have her ears pierced if she climbed to the top of a mountain. Little Kora did it, pushing past the physical pain, frustration, and other "limits". Every time Kora puts in her earrings that sense of persistence is solidified. She doesn't give up. She pushes through to the final deadline. She's the type of girl I want on the future Ubuntu team.

UBUNTU YOUTH

Written by Alvin Gao from www.TeensOnLinux.org

The future of Open Source is in the Young People of today; that's why this corner of the magazine is for young people or simply those who are young at heart.

Most of you out there most likely have an MP3 player. I'm willing to bet that some of you out there have one of these:

• **Apple**: 1st through 5.5th generation iPod, iPod Mini and 1st generation iPod Nano (not the Shuffle, 2nd/3rd gen Nano, Classic or Touch)

• **Archos**: Jukebox 5000, 6000, Studio, Recorder, FM Recorder, Recorder V2 and Ondio

• **Cowon**: iAudio X5, X5V, X5L, M5 and M5L

• **iriver**: H100, H300 and H10 series

• **SanDisk**: Sansa c200, e200 and e200R series (not the v2 models)

• **Toshiba**: Gigabeat X and F series (not the S series)

If so, your mp3 player can run **Rockbox**. Rockbox, available at http://www.rockbox.org, is an alternative, open source, firmware that provides many features that you would normally not get with the default firmware. Included are the normal things you would expect from an MP3 player plus many other things including a movie player, a GameBoy emulator, a GPL version of Doom and much much more.

Installation: The iPod installation was relatively straight forward, drag a few files to the iPod, execute a script and you're done. I was able to quickly get up and running.
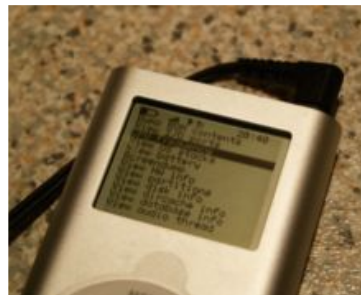
Theme: Ugly! The default Rockbox theme looks awful (left). Fortunately, you can download themes from http://www.rockbox-themes.org/. There's even an Ubuntu theme!

Usability: The Rockbox interface is very easy to figure out, there was really no significant learning curve involved. The settings were (for the most part) where I expected them to be.

Extensibility: Rockbox has a multitude of plug-ins, games and apps. Some work better than others. While some are useful others are not so useful, such as the battery benchmarking tool. I don't know about you, but I'd trade the battery benchmarking tool for a packaged Perl interpreter. But, I digress. The games on Rockbox are certainly much better than the ones that came with my iPod, and the fact that I can watch movies on my first generation Nano is also a big plus.

Overall: In my humble opinion, Rockbox is a great alternative to the firmware on your MP3 player. I strongly recommend that you install it. Believe me, you'll be happy that you did.

Here are some things you may hear on the next episode of the podcast. If you have an idea or want to take part then email our host, Matthew Rossi, at podcast@fullcirclemagazine.org

Having released the Full Circle podcast pilot the verdict is in. One of the biggest complaints aside from the repetitiveness of The Christmas Cheese Polka was the quality of the recording. The sound quality was atrocious due to Gizmo which is a SIP-based VoIP service which was used to record the show. The reason we chose it was because it had something that other software VoIP providers don't: a built in conference recording feature. At a press of the button, the sound is recorded (as a WAV file) then loaded in to Audacity to go through editing. This has worked reliably for The Penguin Central podcast, but somehow the quality of the audio wasn't as good as it has been in the past. One of our panelists, Emmanuel Morales, and myself went out on a quest to find a replacement VoIP service to record the show.

We have a criteria for the VoIP services:

• Platforms Supported (Windows, Mac, Linux, BSD, Windows Mobile, etc.) - Not everyone has access to a Linux computer. For example: Emmanuel was having problems with the audio on his Linux box, and joined us from a Windows box on episode ten of the Penguin Central podcast.

• Software License - Not so important. I'm more concerned about call quality over morals.

• Sound Quality - If it sounds bad, it's not worth it. Sorry, but we don't want another episode that sounds like the pilot.

• Recording Features - It needs to have software based recording available. Even a third-party solution is acceptable.

• Ease of Use - This is very important. If the guests can't quickly and easily use the software then that will impact heavily on the recording.

•Registration - It should be quick and easy and not require personal details.

•Ability to Call Landlines - This is also very important. Sometimes it isn't convenient for a person to use a VoIP client on their PC to connect, and it helps when they have the option of using their landline or mobile phone.

We hope to bring Episode 1 of the Full Circle podcast to you sometime in mid-February. And don't forget to check out the new Penguin Central website: http://penguincentral.unixpod.com/

We are also looking for a regular co-host who can be available, every first and third week of each month, to record audio, early Sunday morning, between midnight and 0100 UTC.

The format of the show is quite laid back, not too geeky and not live, so fear not, you won't be on the spot with the world listening to your every word. The show will be recorded via VoIP, edited and released approximately six or seven days later

Interested? Contact me (Matt) at: podcast@fullcirclemagazine.org

LETTERS

Ubuntu is hot nowadays, so i installed it on my computer which already had Windows Vista installed. The hardware support really surprised me, although my ATI X1950GT video card didn't work properly. But then I started to have some trouble with Ubuntu:

1. My Firefox dies quite often.

2. For some unknown reason my Ubuntu began to run very slowly.

3. Even though i'm not using any 'large' applications, Ubuntu runs at a rather slow speed. My PC is a P4 3G, 1.5G of RAM, 80Gb hard drive, ATI X1950GT with 512Mb of RAM.

I really expected the speed and stablity of Linux, but why is it not what I expected? I only installed a few themes and Mplayer from the outset, and i didn't think it would affect the system so much.

LETTER OF THE MONTH

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

First of all I want to thank you for this magazine. I am quite new to Linux and these articles help me a lot to understand this world. The Scribus tutorial series is probably the most useful.

I am living in a block of flats surrounded by a garden. The tenants are very proud of it. We have won a Landscape Architecture Award four times in the last few years from the mayor of our town.

Most of the tenants are my friends and we have spent a lot of time with gardening. And I wanted to thank them for their work with a little Christmas present. I wanted to make a calendar with photos of our garden.

I have never made such a desktop publishing before. So I had to learn a lot. I have read the whole Scribus tutorial series from the first issue. After that it seemed to be a piece of cake.

The result is simple but great. My friends like it, so do I. I could give them something special. And they asked me to create another calendar about our neighbourhood next year, too.

Attila

Though i use Vista as my primary OS, I still hope that people will like Ubuntu which represents Linux.

Urio

I just "stumbled" onto your magazine today. I love it. I'm a new Linux convert and find that a lot of the readings on Linux are well over my head, your magazine is the perfect solution.

I'll be reading every issue, and look forward to the day when I may even be able to contribute in some fashion.

Keep up the amazing work! You are being appreciated!

Dave Connor

I really appreciate your magazine especially the News and the Top5, it's also nice to read about the people that have change from win to Linux. That's a swap I also would like to do, unfortunately I still have some issues and need to dual boot.

I've only run Ubuntu for around 6 months and earlier I've been in contact with RedHat, Fedora, Mandriva and PCLinuxOS but there has always been something that made me keep Windows. This time I'm really close to taking the plunge, everything is more or less ok, but not perfect...

The sound is low, even though I've followed the help on the Ubuntu site but I can live with that

it only catches me out when I boot up XP and I think that my speakers will explode.

The printer, a Canon Pixma IP4000, is only able to print 600 x 600 dpi with cups (even though it should be able to print at 4800x1200 dpi) so when I would like to print a photograph I need to go to XP.

And last but I believe it's the most annoying: I cant use my **Polar Vantage NV** watch (left) or my **Garmin Forerunner 301** (right).

As I mentioned I've only been running Ubuntu for about 6 months and I'm still a bit of a newbie but even though I searched the Internet during that time I still haven't found a single app that is close to what I want in concern of training logs. So I now ask for your help readers!

I've tried to run the Polar Vantage software under WINE with some success, it starts but isn't able to load the data from the watch. 'Hac4Linux' isn't able to find my

watch and I'm not able to reach the developer (looks like the project has closed down). TCX converter can read some data from my Forerunner 301 (below), but I'm not able to view it and it doesn't have any statistics or calendar function. KPersonaltrainer and Kipinä are far from what I want.

Are there any good training log applications with good statistical analysis? A nice calender and the possibility to read data from my Polar Vantage watch and/or Forerunner 301?

Thank you all for the help, and it's ok to display my email if you believe that someone can give me some ideas in any of my problems (the watch, the printer, the graphics and the sound)

Lars Modig

eb99lamo@kth.se

Q&A

Written by Robert Clipsham

Q Where can I find some video tutorials for the GIMP?

A There are a lot of places with video tutorials, including http://meetthegimp.org/, http://www.designyourownweb.com/gimp-tutorial.htm, http://www.gimp.org/tutorials/, http://jimmac.musichall.cz/gimp2demos.php and http://wikivid.com/index.php/GIMP. Searching on Google will give you even more sites if that isn't enough!

Q How can I convert .avi or .mpg files to a format that can bve read on DVD players?

A There are several applications available to do this with, including *DeVeDe* which is available in the multiverse repositories, and *ManDVD* which you can download from http://freshmeat.net/projects/mandvd

Q I want to try out KDE 4.0, how do I go about it?

A Before you start, make sure you have removed any previous KDE4 packages, as they are incompatible with the final release. Once this is done, add the KDE 4 repositories. To do this enter 'gksu gedit' or 'kdesu kate' in kde either at a konsole/terminal or in the run dialog box (alt+f2). In whichever program you are using, open the file '/etc/apt/sources.list', and append the line '*deb http://ppa.launchpad.net/kubuntu-members-kde4/ubuntu gutsy main*' (without the quotes) to the end of the file. Save the file and exit, then you can install KDE 4 from adept or synaptic (you need the package 'kde4-core'). You will get a security warning as the repository is not autenticated, this is normal, just click OK. Once installed you can log out, and change to a KDE 4 session.

Q How can I customise my Usplash?

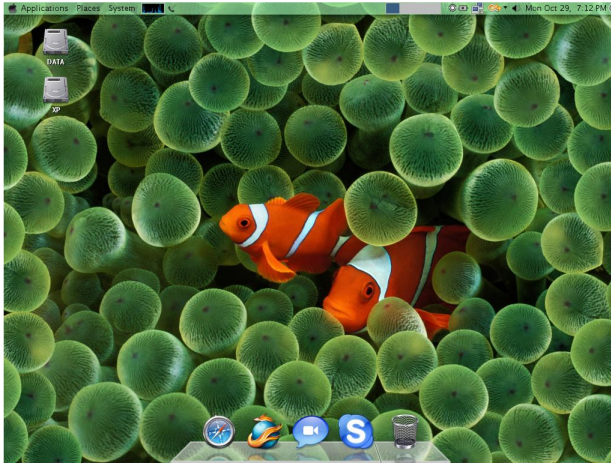**A** You can try using '*StartUpManager*' from getdeb (http://www.getdeb.net/release.php?id=1908), or usplash-switcher from http://www.getdeb.net/release.php?id=917.

> I want to try out KDE4.0

> Where can I find video tutorials for The GIMP?

MY DESKTOP

As with many students studying design, I love a beautiful desktop. I tried to customize Windows XP and I also tried to use Windows Vista and Macintosh/OS x86. But what I could do did not satisfy me at all. After getting the Ubuntu Live CD, all I have to say is: Impressive!

Everything I can do is unlimited. At first, I thought that with the integrated Intel GMA 900 I could not have the fancy visual effects. But all I needed was to install Beryl and I was able to enjoy my work. With the package from the Mac4Lin project, my desktop looks just like Mac OS X Leopard. One important thing I want to note is that I will never have to worry about virus risks.

Lewis Vu
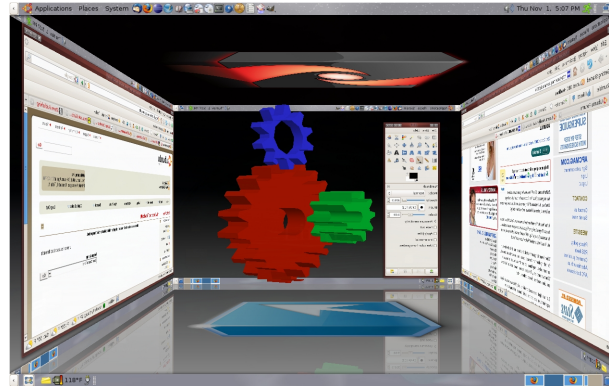
This might sound like a oxymoron but here are two screen shots of my Desktop on my Laptop.

Since I upgraded to Ubuntu 7.10 I have been trying different things with the 3D effects using Compiz. I am very impressed with this wonderful add on to this latest version of Ubuntu.

Since I have been showing off a little I have some Windows user saying 'ooh ahh' with their mouth open.

Irv Risch
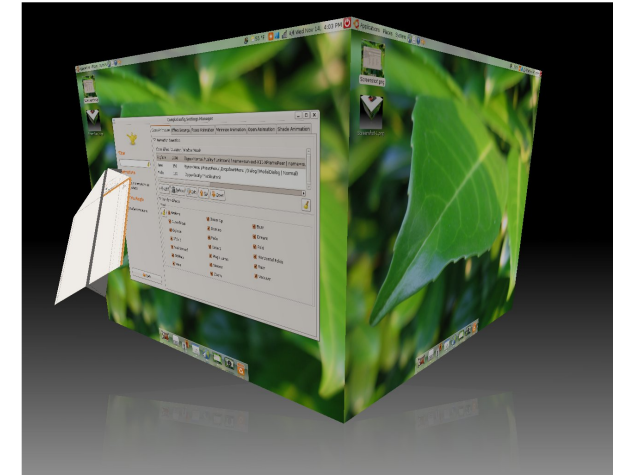
I am using Gutsy with Compiz Fusion and Emerald. I use the human-ubuntulooks window theme, which has all the Compiz effects. The top bar has reduced opacity, and the bottom dock is an Avant Window Navigator dock. It uses the theme 'Milky'. The background is black, with a reflection, and the cube has the default cube caps. The wallpaper is called Leaf Stagger.

Yuval Levental

TOP 5 DOWNLOAD MGRS

Written by Andrew Min

Your monthly list of Linux games or applications from the depths of the Internet. If you have an idea for a list, please email: misc@fullcirclemagazine.org

Gwget

Homepage: http://www.gnome.org/projects/gwget/

Gwget is one of the best download managers for Gnome around. Like most download managers, it supports features such as resumable downloads, recursive downloads, speed limiting, and drag-and-drop. But what sets Gwget apart is the special Gnomeish features it boasts, like Firefox and Epiphany integration (using FireGet), GConf integration, Gnome Proxy support, and Gnome notification area support. You also have the ability to run it from the command-line, read MD5 Sums, and use multiple translations.
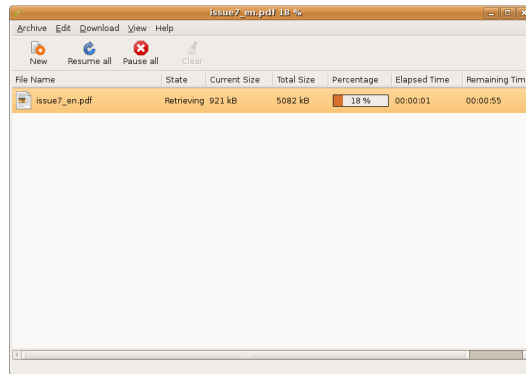
To install Gwget, grab the gwget package in the universe repositories.

Freeloader

Homepage: http://code.google.com/p/gnome-freeloader/

This Python-based manager not only boasts features like multi-part downloading but also has one key feature that almost no other download manager has: BitTorrent support. So instead of having to download the .torrent file with one download manager and downloading the actual torrent with another, you can do it all in one shot. It also includes a handy tray icon, similar to Gwget's. And if you want integration into Firefox, you can manually add support for Freeloader using FlashGot (instructions at http://flashgot.net/features#customdm).

To get Freeloader, download and install the freeloader package in the universe repositories.

KGet
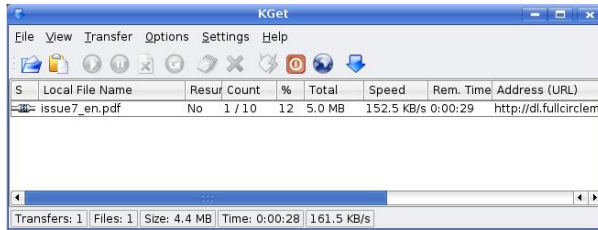
Homepage: None (contact the authors at kget@kde.org)

KGet is to KDE as Gwget is to Gnome. It's a simple download manager that was started way back in 1998 and is now the official download manager for KDE. It can import lists of download links, log everything it does, queue, time, auto-shutdown, and have a handy "drop target" that you can drop links onto. It can also integrate into Konqueror and, using FlashGot, Firefox.

Although KGet is an official part of KDE, it is not installed by default in Kubuntu. However, you can easily install it with the kget package in the universe repositories.

Downloader for X

Homepage:
http://www.krasu.ru/soft/chuchelo/

Downloader for X (or D4x as it is affectionately known) is a fairly old download manager (made around the same time as KGet). But don't let that fool you: it has more features than almost all of the other download managers listed here. It supports queues, scheduling, download limits, user agent switching, proxies, sounds, themes, and clipboard integration. It may not be the prettiest app out there, but it's jammed packed with tools for the power downloader.

To install Downloader for X, just download d4x in the universe repository.

downTHEMall

Homepage:
http://www.downthemall.net/
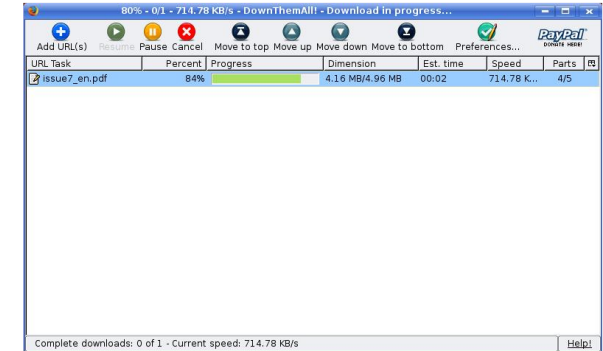
This cross-platform Firefox extension is by far my favorite. Not only does it present all the details in a simple GUI, it's also one of the fastest. It supports batch downloading and spidering, multi-part downloading, auto-renaming, and is blazing fast. In fact, in my informal tests, it was the fastest downloader of the five listed, especially for big files (like the Ubuntu CD image).

To install downTHEMall, you need Firefox. Then go to the install page at http://url.fullcirclemagazine.org/dfbe0a and click the *Install Now* button.

HOW TO CONTRIBUTE

We are always looking for new articles to include in Full Circle. For article guidelines, ideas, and for issue translation, please see our wiki:
http://wiki.ubuntu.com/UbuntuMagazine

Please email your articles to: articles@fullcirclemagazine.org

If you would like to submit news, email it to:
news@fullcirclemagazine.org

Send your comments or Linux experiences to:
letters@fullcirclemagazine.org

Hardware/software reviews should be sent to:
reviews@fullcirclemagazine.org

Questions for future interviews should go to:
questions@fullcirclemagazine.org

Lists and desktop/PC photos should be emailed to:
misc@fullcirclemagazine.org

If you have questions, you can visit our forum:
www.fullcirclemagazine.org

Deadline for Issue #10:
Sunday 03rd February.

Release date for issue #10:
Friday 29th February.

HAVE YOUR SAY

If you want to have your say in how Full Circle develops, please attend our monthly IRC meeting.

You can find our next Agenda at:

http://url.fullcirclemagazine.org/f2ba08

We want the input of you, the reader, to help us make decisions that affect the magazine.

Next general, all welcome, meeting:
Sat. 09th February

Meetings take place in the IRC channel **#fullcirclemagazine**, which is on the irc.freenode.net server. Or you can use our webIRC page which is at http://irc.fullcirclemagazine.org and it will allow you to interact with our IRC channel from within your web browser.