



An Evolution of Linux Distributions



Be Selective

Tricky ways of selecting areas in GIMP

Gadget Guy

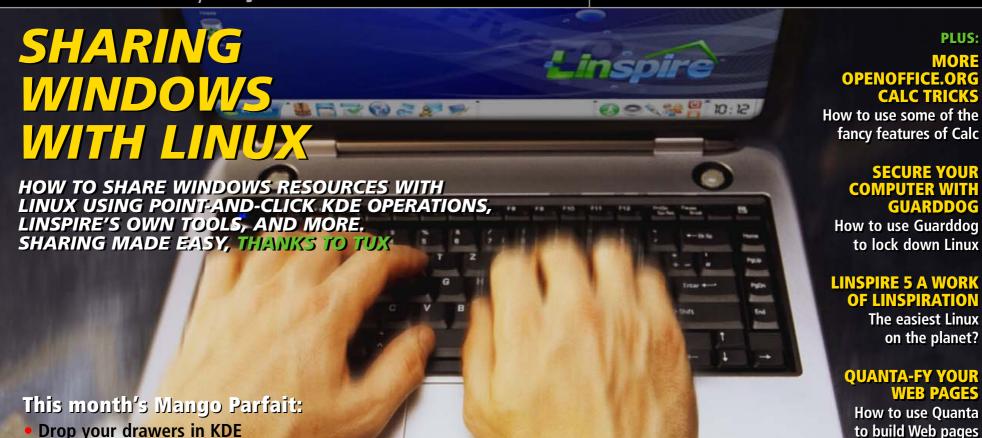
Cool Cameras from Fuji and Nikon

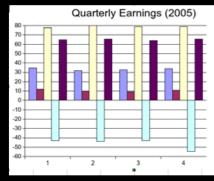


the first and only magazine for the New Linux user

Quick browser for Konqueror
 Cleanup is (almost) automatic
 Mango is not tech support

ISSUE 5 • AUGUST 2005





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ISSUE 5

AUGUST 2005

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FROM THE PUBLISHER

Drawing Upon the Community

Phil uses some drawing and publishing tools to illustrate yet another reason why Linux has a bright future.

PHIL HUGHES

This month, I want to talk about three things that I will group together as a movement. If people had asked me ten years ago if Linux was a movement, I would have said yes. Actually, they probably did. The movement I am going to talk about is not Linux-specific, but it is very Linux-like in nature. I chose it for two reasons. First, it may help newcomers understand how Linux happened. Second, it's some good stuff you should be aware of.

The three items on this list are: Open Clip Art Library, Inkscape and Scribus. Before we dive into Open Clip Art Library, I need to talk a bit about scalable vector graphics.

This can be explained without getting a computer involved. Grab your pencil and draw a straight line and a circle on a piece of paper. You have just created two vector graphics. Each can be easily and compactly described. For example, you need to tell someone where the line starts, where it ends and how wide it is. For the circle, its center, its radius and how wide the outside line is tells someone what it looks like.

We can get a bit more complicated. For example, the line could be blue or could be made up of dashes or dots. For the circle, the inside part could be filled in with a color.

What is important here is that there is nothing in these descriptions that will not scale. That is, if someone took the description of a 5cm circle with a 1mm

black border filled with red and decided he wanted to see it twice as big or 100 times as big, there is enough information to make it look just as nice at the new size.

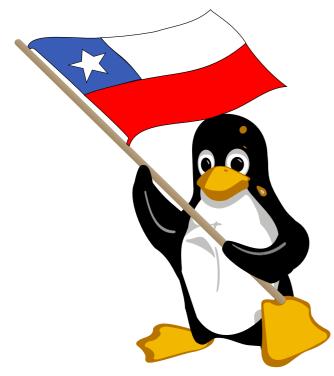
Contrast this concept with what you see on your television or computer screen. Here, everything is composed of a collection of dots. If you magnify the image, you just end up with the same number of dots, but each dot is bigger. Thus, if you are going to have a library of graphics to use, vector graphics are generally more useful.

That brings us to the first of the three projects I want to talk about, the Open Clip Art Library. This is a free and open collection of clip art files that can be used in anything. That is, they are all released to the public domain. You can find the collection at http://www.openclipart.org. The project is in its infancy, and there are only about 3,500 items available today, but it has a bright future.

I went out and grabbed the image you see here. It is titled "Tux is Chilean" and is by Lorenzo Luengo. If you don't happen to be Chilean, you likely see the potential to start with this image and change the flag to your country or state. Well, good news. The image is vectors, so you easily can do that, and there are no licensing restrictions.

If you actually went to the Web site and started looking around, you probably noticed the filenames





"Tux is Chilean", by Lorenzo Luengo

end in .svg. Why not .eps, .ps, .cdr or .ai, you might ask? Well, the question is the answer as well. There have been many vector formats. Beyond that, most Web browsers are not capable of displaying vector formats. The World Wide Web Consortium is addressing this issue with SVG, an open standard for vector graphics. You can read more about it at http://www.w3.org/Graphics/SVG.

At this time, there are some applications and some browser plugins that work with the SVG

format. It is clearly the format of the future. But, today is today, and you want to do something with that Chilean Tux. Enter Inkscape.

From the first paragraph on the Inskscape Web site (http://www.inkscape.org), you can find this definition: "Inkscape is an opensource drawing tool with capabilities similar to Illustrator, Freehand and CorelDraw that uses the W3C standard scalable vector graphics format (SVG). Some supported SVG features include basic shapes, paths, text, markers, clones, alpha blending, transforms, gradients and grouping." I don't think I need to say much more other than the fact that Inkscape can save what you create in a whole host of formats. Thus, you can start with that Chilean Tux, change his flag to that of Lower Sloblovia, convert him to a PNG and send him to your friend who doesn't know what an SVG is (until he reads this article).

That takes me to the third piece of the picture, Scribus. Scribus is an open-source desktop publishing program. Its Web site is http://www.scribus.org.uk, if you want to take a look. I have watched Scribus progress from a very basic layout program to something that rivals Quark Xpress and Adobe's inDesign as a professional tool for magazine layout. In fact, we are in the process of converting TUX from the Quark system we have used for Linux Journal since the beginning to Scribus.

Putting all these pieces together, you have a source of graphics you can freely use and two open-source programs. The first is a graphics editor that uses an open standard

format. The second is a professional-quality layout tool that uses an open format for input and produces standard PDF output.

Now, as I said in the beginning, this isn't really about Linux, other than you will see, for example, that Scribus development is happening on Linux systems. What it is about is that same type of cooperation that made Linux itself possible. Early in Linux development, you saw people all over the world with very diverse backgrounds contributing to the effort.

If there was a goal, it was to be able to see that they could put together something useful. Today, we know that was a success. But, beyond Linux being a success itself, it showed that it was possible for a distributed group of people to work cooperatively to produce useful software.

That concept, that attitude, is what has made other projects since Linux move forward. You could assign a lot of labels to it. One is self-management. That is, there is no big company or marketing team directing the effort, but rather, it is people producing what they feel is needed.

There is a big winner here—you. Efforts such as these mean there is no more software for you to buy. In the case of these three projects, they are free. That doesn't mean there will not be commercial products that enter these markets. but it does mean if a commercial enterprise wants in, they need to make something better. Either way, the consumer wins.

Phil Hughes is Group Publisher for SSC Publishing, Ltd.





FROM THE EDITOR IN CHIEF

An Evolution of Linux Distributions

Comparing distros is like comparing shoes—if it fits, use it.

NICHOLAS PETRELEY

Here at *TUX*, we get one request more than any other. People want us to write up a comparison of distributions so they can choose the right Linux distribution for their needs. One day, we will do our very best to fulfill that request, but I want to warn you that it is almost impossible (if not entirely impossible) to write such an article that will serve everyone perfectly.

This column is not meant to be a substitute for that article. It is meant to show that there is a trend afoot that will have a profound effect on which distribution you will choose in the future. It starts with a short history of Linux distributions.

Warning: this is not a complete history of Linux distributions. A full, accurate record would have to include distributions such as Caldera, Yellow Dog Linux, Turbolinux and many others, all of which are beyond the scope of the point of this story. This historical record starts with the time when Linux finally reached the awareness of corporate customers and normal users, when Red Hat became king of the hill.

Once upon a time there was Red Hat Linux, Linux lacked a good graphical desktop. Along came KDE, which was the most promising graphical desktop around. Red Hat was already becoming the most popular Linux distribution, but it decided not to support KDE. Instead, it went with a competing desktop, GNOME. People loved Red Hat but preferred KDE instead of GNOME. So an enterprising group of people started Mandrake Linux, which was basically Red Hat Linux that used KDE as the default desktop. Mandrake

thrived because it gave people everything they wanted at the time—Red Hat plus KDE. Eventually, Red Hat caved in to pressure and began offering KDE.

Somewhere in this history, SUSE began to accumulate a following. SUSE was neither Red Hat nor Mandrake, but it was a high-quality distribution that offered KDE. So it gained a reasonably good following. The one thing in common between Red Hat, Mandrake and SUSE is that they all used a package format called RPM. This did not make these distributions compatible. You could rarely install a SUSE package on Red Hat or a Red Hat package on SUSE. At first, you could install Red Hat packages on Mandrake and vice versa, but that changed guickly. So the fact that all three used the same package format became essentially meaningless.

THE RISE OF DEBIAN

Debian is a distribution of Linux that uses an entirely different package format than Red Hat, SUSE and Mandrake. Debian uses what is usually referred to as .deb packages. There is nothing about .deb packages that make them more universally compatible than RPM packages. So if you build two different distributions using .deb packages, they can be just as incompatible as Red Hat is incompatible with SUSE. The one advantage that .deb packages had over RPM packages is that Debian included a program called apt, which made it incredibly easy to find, install and update packages. (Red Hat and other distributions later added this ability in



the form of apt for RPM and a program called yum, but that came much later.)

Some companies saw many advantages to using Debian as the basis for their commercial distributions. Corel based its first distribution on Debian. Thanks to a big payoff from Microsoft, Corel sold its distribution and the distribution has now become Xandros. Other groups and companies tried to create unique distributions based on Debian (Progeny Linux is one example that comes to mind). They found that it was to hard to make money that way. I suggest that it is because their spin-off of Debian was too much like Debian itself. It was far too easy to turn Progeny Linux into a standard version of Debian Linux. After that, you didn't need Progeny anymore.

Since then, there have been many more spin-offs based on Debian. These include Knoppix (with a default KDE desktop), Gnoppix (with a default GNOME desktop), Ubuntu (default GNOME desktop), Kubuntu (default KDE desktop), Mepis, Xandros, Linspire and others. Most of these distributions either "accidentally" deviated from Debian so much that it is difficult to turn them into standard Debian distributions, or they deviated from Debian on purpose to make sure you keep using their distribution instead of converting to pure Debian. I recall turning Knoppix into a standard Debian distribution once. But I tried it again recently, and it was so much trouble that I finally gave up.

Mepis is another distribution that is based on Debian. I get the impression that it is, at least in some ways, closer to being true Debian than Knoppix. But it has a number of silly design flaws that I find to be very annoying. I have installed Mepis three times, and twice I have made silly mistakes during configuration that made the installation unusable and too difficult to recover to make recovery worth the effort. Granted, they were my mistakes. But aren't programmers supposed to write software that prevents people from making such mistakes? That is what computers are good at doing detecting combinations of settings that do not work together and telling the user that something must be changed otherwise the computer will not make the settings permanent.

WHEN DEVIATION IS GOOD

Sometimes the deviation from pure Debian has turned out to be a very good thing. Ubuntu/Kubuntu are more recent spin-offs of Debian. They get one very important feature right that I have never seen with any other distribution. You are

never asked for a root password (administrator password) when you install Ubuntu/Kubuntu. You cannot log in as root or the administrator. This means that unless you know Linux well, it is nearly impossible for you to damage your system by accident. (If you know Linux well, it is actually very easy to bypass the Ubuntu protections, but the assumption of TUX is that you are a new user and will not know how to do this.)

Ubuntu and Kubuntu have drawbacks, too. These distributions are mostly incompatible with pure Debian software. If you want some software that is available from Debian but not from Ubuntu/Kubuntu, you either will have to find the source code and compile it yourself (not a viable option for a new user) or just wait until the Ubuntu/Kubuntu folks add that software to their repositories. Perhaps the most annoying thing I personally experienced after installing Ubuntu was that it was stuck on version 1.0.2 of the popular Firefox browser. At that time. Firefox 1.0.4 was available. The reason this was annoying for my purpose is because many Firefox extensions I use (such as one that lets me synchronize bookmarks) will not work with version 1.0.2. I know there are some workarounds available, but I don't



want workarounds, I want Firefox 1.0.4 (or 1.0.5, which was just released). Maybe Ubuntu/Kubuntu has corrected this poor choice since I installed the software, but it was a terrible nuisance at the time.

Take Linspire as another example. This issue includes a review of Linspire. There's no question about it. Linspire is the ultimate desktop distribution for nontechnical users, especially those who are coming from a Windows environment. Linspire offers many enhancements that make it far more desirable than plain Debian.

AN INSPIRED DEVIATION

Some people may cringe at the thought of paying Linspire a yearly subscription fee to use a specially designed program called Click-and-Run (CNR) to download software, some of which is free to everyone else. Personally, I think this is a non-issue. It sounds like Linspire is adding a price to free software, but that's not what Linspire is doing at all. In return for the \$50 (or some much lower yearly price Linspire is considering for the future), you can use Click-and-Run to browse through available software more easily than anyone else, and you get steep discounts on many commercial software packages. You can install software with a single click of

the mouse. Even if the free package managers for Linux (such as Kpackage or Synaptic) ever get as sophisticated as Click-and-Run, it will be difficult, if not impossible, for free distributions like Debian or Fedora to make discounts available for commercial software unless they stop being free. You need to charge a yearly subscription fee to afford the luxury of making deals with commercial companies to offer discounts.

There is, of course, a trade-off you have to make with any distribution that "improves" your desktop experience by modifying the KDE or GNOME code. Both Linspire and Xandros use an older version of KDE, because they modify whatever version is available at the time. The latest version of KDE is 3.4.1. Linspire uses KDE 3.3.2 and Xandros is still stuck on KDE 3.3.0.

If any distribution threatens to come close to offering the convenience of Linspire, it is Xandros. But it is a hollow threat at best, and by "comes close" I measure it in light years. Xandros has the right idea, but it still has way too many deficiencies and problems to be comparable to Linspire. Their equivalent to the subscription download services just doesn't match the user-friendliness or convenience of Linspire's CNR. And Xandros modifies the boot loader in

such a way that it can fail for anyone who runs multiple distributions (Xandros is meant for those who want only one distribution, so this probably isn't an issue for most people).

RED HAT RISES AGAIN

Statistics now show that Debian and its spin-offs are growing faster than any other distributions. The folks at Red Hat are many things, but they are not stupid. They created Fedora, an opensource version of Red Hat equivalent to the Debian approach to Linux, before anyone reported any statistics about how the tides were turning toward using Debian as the basis for new distributions. Red Hat hopes that more people will use Fedora as the basis for free and commercial distributions and fewer people will use Debian as the basis for free and commercial distributions. Any incompatibility with Red Hat (and Debian is entirely incompatible) is bad for Red Hat. Any compatibility with commercial Red Hat Linux is good for Red Hat. So if more people start with Fedora as their foundation. Red Hat potentially benefits. Whether or not spin-offs of Fedora start to appear remains to be seen.

Meanwhile, there is Fedora itself. I like Fedora a lot. If you have not tried it and



you are still looking around for a good distribution, I strongly recommend that you do try it. It might just be the distribution for you. It isn't an easy task for most people to try Fedora. You can download five CD images and burn them yourself (one CD is a rescue CD, and you may not want to create that one). I am sure you can order CDs from various sources for very little money. But it is not a commercial distribution, so you can't get a fancy box with a manual and so forth.

that I am not the least bit motivated to try it again. The latest version I have tried is the latest free version for download, and I still didn't like it (at least it was the latest as of a month or two ago). If someone from Novell wants to send me a commercial SUSE box for review. I'll install it and write about it. Until then, I have to go with my former impressions and say that I don't like it. I know a lot of people who practically worship SUSE, and maybe they have a

LINSPIRE OFFERS MANY ENHANCEMENTS THAT MAKE IT FAR MORE DESIRABLE THAN PLAIN DEBIAN.

THE BIG CHOICES

Let us finally consider the last big three. Yes, I know I will get hate mail for failing to mention someone's favorite, such as Slackware, Gentoo and others. But we editors are used to getting hate mail; it comes with the territory. So, I will insist that the big three are as follows: Red Hat, SUSE and pure Debian.

First of all, commercial Red Hat is not a desktop operating system. So if you are a true TUX reader, you should not be considering Red Hat for the desktop. 'Nuff said. I am sorry to say that I have disliked SUSE for so long

good reason for doing so. Maybe you will love it and find out it is the best desktop on earth. But I cannot reassure you that this is what you will experience because I have never liked it, myself.

Finally, there is plain-old pure Debian. Debian is not nearly as hard to install as it used to be. But Debian is still much more suited for geeks than it is for desktop users. Nevertheless, of all the distributions I have used. Debian is still my favorite. Debian has three branches: Stable, Testing and Unstable. The Stable branch includes software that is so old it needs a walker to get started. The Testing branch includes

software that has not been proven to work perfectly, but at least it includes some more recently released software. I use the Unstable branch. Despite the name. I have found the Unstable branch to be guite stable, and it has the most recent software of all three branches. It doesn't have the most recent software of all, however. You have to add some unofficial repositories to get things like KDE 3.4.1, for example. That is why Debian is a geekoriented solution. Typical newbie users don't want to add repositories they never heard about.

CONCLUSION

Well, there you have it. The above is certainly not the definitive comparison of distributions, and it is lacking in some areas (especially information about SUSE). But I hope it has enlightened you to some extent about how the current trend is to use Debian as the basis for desktop distributions. This trend, if it continues, might eventually help you choose one distribution over another. Good luck!

TUX Editor in Chief Nicholas Petrelev is an author. consultant, programmer, award-winning columnist and Linux analyst for Evans Data Corp.



LETTERS

TUX Delivers

In issue 3, someone talked about how easy Linux networks with other platforms. As a new Linux user networking, even to other Linux machines, has escaped my abilities. How about an article on how to network while using Linux?

nelson

This very issue contains an article on how to access Windows shares (page 38). How's that for service?—Ed.

Which Distro?

I would describe myself as a "Potential Linux User" in that I would like to start using it, but haven't yet. I did download the Debian OS and tried to install it, but I have to admit I gave up when it wanted me to choose all the applications (I believe) to install—I didn't have a clue! Anyway, my suggestion is a poll akin to this:

"What distribution would you recommend to potential Linux users, given that the main objective is to give them the best chance of a 'hasslefree' install and set up and keep them interested enough to try other distributions?"

I have tried asking that question before, but it seems that the answers are either:

- 1) Use XXXX (based on the reply being from someone who is using XXXX).
- 2) Choose anything—if you don't like it, then try something else.

The problem with 1 is that it is not really very objective (like a poll might be), and 2 definitely doesn't help—I haven't looked at Linux since my Debian introduction six months ago! Regardless, thanks for the magazine.

Alan

Alan, on-line polls are generally the least objective of all, and you're likely to get the same answers you listed as 1 and 2. See this month's "From the Editor in Chief" for a short take on where distributions are going and the admission that it is difficult to recommend one without considering each person's expertise and needs. By the way, Debian is much easier to install now. You don't have to select individual packages if you don't want to, but the installation still isn't perfect.—Ed.

Desktop Linux?

In the business desktop market, most studies show that the reason Linux still lags behind isn't quality or cost of purchase, but that the cost of implementation is prohibitive when it comes to downtime, that is, frustrated users, expected to be technically advanced enough to use Linux, instead of Linux being technically advanced enough to be intuitive. Linux is just not a neophyte's starter system. [...] My very successful friend Bob Robson of Robson communities, who is worth well over 100 million dollars says, "I don't want to know how it works, I just want it to work." [...]

The good news is that Linux developers are starting to realize this; just check out Sun's bold move of its new Java desktop system: http://www.sun.com/software/javadesktopsystem/index.xml. I know guys that refused to use Lindows, Xandros or even SUSE, because they felt that they were MS clones. I feel more like we are just coming into the times. Besides, we are not copying MS, we are copying MS's copy of Mac's copy of XEROX.

Brandon Thomas

Games, Please

I am a semi-experienced Linux user. I have been dual-booting SUSE/Windows for a few years now and use a Sharp Zaurus 5500 PDA (greatest Linux-based PDA ever). My problem, as well as that of many people I know, is that I enjoy my PC games. This has kept me tied to Windows. I know that Cedega by TransGaming is making leaps into solving this dilemma. I intend to make my next PC



(building sometime this summer) 100% MS free and would like to see TUX magazine's take on the gaming aspect. Do you all intend to check that out in the future?

Benjamin

Yes, we have definite plans to cover gaming on Linux in future issues!—Ed.

Thanks, from the Dominican Republic

Hello. I'm Valmis Di Carlo from the Dominican Republic. I have all of your excellent magazines. Thanks for *TUX* magazine. *TUX* is very important for GNU/Linux users in the Dominican Republic; here, all my friends read TUX. TUX is very essential for new users of personal computers.

Valmis Di Carlo

Tomboy Works with KDE

I want to thank you for TUX magazine. I have enjoyed every issue. I have been a Linux user for many years, using Mandrake, SUSE, Knoppix and, lately, Mepis distributions. I have also recommended your magazine to my friends who are newbies.

I wanted to comment on Shannon Baker's article on Tomboy in the July 2005 issue. I have decided to give it a try to see if it might help with those "quicky notes" that I like to take. Baker states, "Tomboy is a GNOME application. Although I am sure some longtime Linux users

out there could make it work with KDE, I have not been successful." Well, I have gotten it to work with KDF.

Since I'm currently using Mepis, I first installed Tomboy using apt-get (apt-get install tomboy). Then in KDE it is available from the K (start) menu under Utilities→Tomboy (Desktop Notes). To make it start automatically upon login, open the Konqueror file manager (the Home icon). If you do not see the "hidden" directory .kde, choose the View menu and check "Show Hidden Files". Navigate to the .kde folder and then into the Autostart folder. Right-click in the empty area of the right pane and choose Create New, then File, then Link to Application. On the General tab in the area that says Link to Application, replace this with Tomboy. On the Application tab, enter /usr/bin/tomboy in the Command field. If you wish to change the icon, go back to the General tab and click on the big icon. Change Icon Source to Other icons, and then scroll down through the selections. You should see an icon for Tomboy. Click on that icon, and vou'll be taken back to the General tab. Click Ok. You can now close the Kongueror file manager.

The next time you log in, the Tomboy process will be started in your start-up tray, ready for use! Thank you again for the great articles!

Jon Du Ouesne

Thanks also to Philipp Wolfgang Leitner who submitted another method to make Tomboy work in KDE. We chose not to print that letter since it is somewhat redundant.—Fd.

Drivers for Linux?

As Nicholas Petreley points out, one of the main limitations of Linux is the lack of drivers written for Linux. I have two computers, but I've installed Linux on only one. The other has a USB wireless adapter that connects to the Internet. It's a NETGEAR WG121, which doesn't have a Linux driver. I lack the skill to develop a wrapper, or whatever it's called, for this driver, so I just have to stick to Windows XP.

I'd like to encourage TUX to start to maintain a list of devices that are Linux-friendly. This would be a great benefit for newbies like me.

Tom Strickland

There is a workaround that allows you to use Windows drivers to get network cards running under Linux. It is called ndiswrapper and works very well for many cards. Newbies may be intimidated by what it takes to use ndiswrapper, but we plan to do an article on it because it really makes a huge difference in the number of network cards available for Linux.—Ed.



Reports?

I noticed in your discussion of what is or is not available for Linux, business/accounting apps were mentioned, and following up, a review of Quasar mentioned a shortcoming being the inability to modify the reports [June 2005]. Is there a report writer environment similar to (and hopefully not so damn guirky as) Crystal Reports that runs on Linux? And, is there an ODBC equivalent?

Bob

We don't know of much out there that fits this description. Kugar is a KDE report designer and generator, but we'd have to ask someone who knows about this type of software to find out if it does the job you want. Are there any readers out there who are using a report generator under Linux? Let us know!—Ed.

Hey *TUX*, Stick to Linux

I just got the latest issue of TUX and read the letter titled "Opinions" written by Bashar [July 2005]. I know that some people got offended by some of Mango's remarks and then she apologized. She was just joking around. However, Bashar's letter is filled with venom and hate! I don't see how his letter fits into a Linux magazine. It is the most out of place item I have ever come across in a publication. You seem proud that you published his whole letter. Again, Mango was joking and apologized. Bashar is spewing hate. I won't comment on his opinions; he is entitled to

them. But, I cannot understand why you published it. What does his letter teach me about Linux? I am seriously considering canceling my subscription.

Michael Paley

We published it only to balance the kudos for Mango. But you are right—we will make a concerted effort to stick with Linux topics in letters.—Fd.

OpenOffice.org

I have considered switching from Microsoft Office XP and 2000 for some time—here is what has held me back so far. In business, I constantly write reports. I have played with OpenOffice.org (Windows version) and like the operability compared to MS Word, but I have read that spell check is not very good. I assume that you must publish your magazine using a Linux word processor. Do you have a solution?

Mike Williams

We have had nothing but good experiences with spell check, so we're not sure what problems you are experiencing or have heard about. OpenOffice.org 2.0 is due out soon, and it has major improvements. Perhaps that will be more suited to vour tastes.—Ed.

XMMS

You know if you right-click on XMMS→Options, it lists guite clearly Ctrl-D, double size, under the menu. No need for a magnifying glass or ESP to read the displayed bumps. I thought everyone knew this!

My guestion is this, is it "Zimmz" as my wife pronounces it, or "X M M S"?

Gav

I have no idea how the authors pronounce it, and I didn't see anything about it in the XMMS Web site FAQ. But, for what it's worth, I pronounce it "Oglethorp".—Ed.

Help with Installing

The article by Phil Hughes was a nice little note on how easy it could be if you just want Linux to be used as a desktop OS [July 2005]. It took less then an hour to install and start using Mandrake Desktop 10.

I am trying to learn PHP programming. Installing software like this is not an easy task, I found. It needs so many configurations to be modified that I have not been successful in installing PHP. I have been struggling to install Apache, PHP and MySQL on my Mandrake 10.

It took 4–5 hours for me to learn how, and what files, to modify in order to install Apache, but when it came to PHP, I just gave up learning how to install.



I tried with Sun Solaris 10 before installing Mandrake. It took ages to install the OS, but Apache was easy to install, all preconfigured, but it was not the same story with the installation of PHP.

I would appreciate it if someone could cover software installation, especially those that require configuring and changing some filenames, moving to different directories and so on.

Manish Parmar

Different distributions handle installation of things like Apache and PHP differently, some better than others. I've had mixed results installing Apache, PHP and MySQL, but at least two distributions made the process a breeze. I wish I could remember which ones they were. If it comes to me, I'll mention it in my column.—Ed.

Tomboy

In the July 2005 issue of TUX you talk about a program for GNOME called Tomboy. Is there an application for KDE that will provide the same functions as Tomboy?

Andy

Not exactly. I use a KDE application called Kiots, which is great for recording and organizing notes. I prefer it to any type of post-it notes-based tool.—Ed.

John Knight on Piracy

In the July 2005 issue's "The Last Word", John Knight makes many statements that demand more careful thought. He seems guite happy to apply the label of "Pirate" to people who violate EULAs by making and distributing copies without payment to the copyright holders. At http://www.gnu.org/ philosophy/words-to-avoid.html#Piracy, the issue of whether to accept this term is dealt with like this:

Publishers often refer to prohibited copying as "piracy". In this way, they imply that illegal copying is ethically equivalent to attacking ships on the high seas, kidnapping and murdering the people on them.

If you don't believe that illegal copying is just like kidnapping and murder, you might prefer not to use the word "piracy" to describe it. Neutral terms such as "prohibited copying" or "unauthorized copying" are available for use instead.

Some of us might even prefer to use a positive term such as "sharing information with your neighbor".

It is difficult to equate unauthorized copying with plunder and murder, but it is unethical, nonetheless. An end-user license agreement is still an agreement, and violating it, at the very least, undermines one's integrity.

Now, let's consider the rest of his statements.

If cost alone were the motivating factor [for piracy], free (as in speech) software, which is easily had at zero cost, would have overrun proprietary software already.

[...] Often, an overpriced item is desirable to a buyer simply because it is unaffordable. It's the ego factor. Since software is so easily copied, it is easy to see how a high price helps create a desire for it in the minds of consumers. Both Microsoft and Adobe were willing to overlook unauthorized copying for many years in order to set their programs up as ubiquitous standards.

But, he continues pressing this point beyond the limits of reason, claiming that unauthorized copying "removes the cost factor, leaving the biggest and best as the only viable choice." What a mouthful. First, he implies MS Office and Adobe Photoshop are the best, and then suggests that because price is not a factor [if you pirate copies], that consumers are left with no choice but to use those two packages! That's some logic—that given the removal of price as an obstacle, consumers will be forced to use one free-as-in-beer package over another.

He says that because [Photoshop pirates] did not pay for Photoshop "none of them are able to make a proper comparison" of it to The GIMP, which need



not be paid for. Their ability to think is somehow impaired by getting the fantastically ultra-superior Photoshop for nothing. And it's outrageous!

"Unpaid volunteers are competing against paid software designers and are being unappreciated by the masses." He is implying that different standards should be applied when evaluating proprietary versus free programs.

Sure, unauthorized software copying should be stopped. Yes, we should resist giving it to our friends (assuming we even have any to give—software that is, not friends). And yes, it's easy to see software "piracy" as hurting open source.

However, we should definitely hold all software to the same standards of quality, whether proprietary or free. And we should be willing to give people more credit for intelligence than John Knight seems willing to do, by allowing that their thinking will not be impaired by the unstoppable force of zero cost.

[...] He is right when he says "a proper view of open source is the right alternative to piracy", but then promotes a distorted view of the forces driving unauthorized software copying, mis-characterizes the quality of both free and proprietary software, and completely discounts the intelligence of users.

Scott Bicknell

More John Knight on Piracy

Outstanding! Great article—cuts right to the heart of the issue, without unnecessarily defending MacroShaft, or whatever the name is. I have at least one very good friend who is/has been part of the M\$ developers network, and this is an article we can both agree on. The sooner everyone who uses M\$ products can be dunned for the "benefit" they've received, the sooner M\$ will lose major market share to open-source products. That, in turn, will create a much larger base of expertise in the Open Source community, and the wheel will turn!

handydan918

Pizza, Anyone?

In Phil Hughes' article on living in Linux ("Easy Does it", July 2005) he laments that there is not a way to make food in Linux. He has missed out on one of the most geeky programs out there: pizza party. This is a command-line tool for ordering pizza. For instance:

pizza party -pmx 2 medium regular

That orders two medium regular-crust pizzas with pepperoni, mushrooms and extra-cheese. I tried it. Thirty minutes later a delivery guy showed up with two pizzas. It works. This is the URL: http://www.beigerecords.com/cory/pizza party. So now you can do ANYTHING in Linux, Phil.

Chuck Graf

SimplyMepis

I just wanted to let Bob [from the July 2005 issue's Letters] know that I've just installed SimplyMepis on a machine with Windows 2000. I installed on hdb (which for me was a separate HDD) and then installed GRUB in the hda MBR (which is the default). I have never done anything like this before, and...it worked. So, Bob, back up everything and, as Australians like to say "have a go, mate!"

ED: if you can let him know to check out the mepislover site, he'll get really good support to any questions he asks.

Well done all TUX'ers.

Patrick Elliott-Brennan

Text Size

GREAT MAGAZINE! Tell your reader L. D. Matteson [Letters, July 2005] who complained so loudly about not being able to adjust text size to scroll down and read Adobe instructions. It's so easy; just press Ctrl+. You can get text as large as you want. Some old farts (I'm one) just like to complain.

Richard Davies

Stop OS Discrimination

I'm by no means a computer professional; in fact, I'm a chemist. I am, however, a raging computer nerd and Tux-o-phile. I am in charge of the com-



puters in our lab (and a couple of Web sites), and I have dropped Fedora Core on one of the lab computers, which people have really taken a liking to—especially after two WinXP boxes crashed and almost took someone's thesis with it (I had to boot a live Linux CD to recover the data too). I ditched Windows (except for non-Cedega-compliant games, grumble, grumble) a while ago and run Gentoo on my laptop, FreeBSD on my work desktop, Gentoo on my home desktop and Fedora Core 4 on my home "server". I preach Linux (and FreeBSD) to all who will listen and have discontinued my "free technical support" for Windows (I refuse to fix Windows computers at work anymore). <obligatory plug> I love your magazine because I can recommend it to the neophytes around here, and I agree 100% with Phil Hughes' take on "Can Anyone Use Linux?" in the May 2005 issue. That is, my Windows "Power User" friends are impossible to turn to the Penguin side, but most people don't even notice they're using Linux when they log in to the Fedora box in the lab (yes they are that clueless), and many have asked me to help them install Linux on their personal computers after using Fedora. Anyway, I read Linux Magazine and Linux Journal, but they are geared toward professionals (not that I don't learn a lot from reading them). I really appreciate your approach to Linux advocacy through journalism, and I hope you stick around for years to come.</obligatory plug>

Today though, there is a thorn in my flipper:

the Web. A few years back, when Internet Explorer dominated the browser market (more so), there were a lot of "IE-only" Web sites. This, as I understand it, was attributed to the IE engine, which had a "special" (read: non-standards-based) way of rendering certain—especially JavaScript-based—pages. This has been curbed in recent years, especially since the Mac version of IE was discontinued and Firefox showed up on the local news (or as we call it in LA, gossip). But recently I've seen a resurgence of this unforgivable behavior. I pointed my 64bit Gentoo/Firefox/Plugger/Mplayer setup at a variety of news sites and sites that offer previews, clips and whatnot from TV shows, and found that *none* of the streaming video worked. I stuck my nose into the page source and found that it was detecting my browser as "Netscape" (or Gecko) and my OS as "other" and thus denying me Windows Media (WMA) streaming formats. I switched my browser ID (Llove Firefox) and the site detected me as IE/Windows, but still no streaming. I edited my plugger config file to use mplayer32 and installed every Win32 CODEC I could get my hands on, tested it with WMA files and simple embedded media, and everything was fine. Heading back to these sites, I again was confronted with a blank white box. I repeated the exercise on my 32-bit laptop, different Linux distros—nothing. After digging around on the Web, it seems that JavaScript-based "streamonly" sites (that is, sites that prevent download-

ing of the media directly) simply do not work with Linux (well, with Plugger, but what other choice do I have?). You guys have touched on the reason for wide-spread Linux adoption "behind the scenes"—that the switch from UNIX was natural and painless—that has led to most of the Web being run on BSD or Linux systems, but the irony remains. Much of the front end of the Web is still Windows-only. I gather this is the result of Microsoft positioning WMA as the de facto standard in streaming multimedia, which is only going to get worse if the EU patent laws go through, but this sort of nefarious behavior could cripple Linux desktop adoption if it is not stopped.

With broadband spreading like wildfire, more and more sites are offering streaming multimedia content. I'm having to answer to my Windows Power User friends who point and laugh when I can't stream Yahoo News or clips from the Daily Show with Jon Stewart. If there is a way to make Gentoo (or any Linux distro) work correctly with this rapidly spreading implementation of streaming multimedia, PLEASE TELL US! If not, we nerds have to start a public-awareness campaign to end this OS discrimination before Microsoft delivers the death blow and forces us to run Bloat-. I mean. Long Horn, inside a virtual machine just to use the Web—Our Web.

Ryan Chiechi



We agree this is an extremely important topic. We will do our best to deal with streaming video over the Web in a future issue.—Fd.

Believe

I stumbled upon *TUX* magazine about a month ago at a very interesting time. Almost ten years ago now I started my professional writing career with you when you headed up Linux Journal. For the last ten years, I've remained orbiting the Linux world while solidly rooted, lately, in Mac OS X.

Recent developments in the direction taken specifically in Mac OS X 10.4 caused me to begin a pilot project to see if I could effectively and productively use GNU/Linux on a day-to-day basis. TUX dropped onto my radar at that exact moment, and I was very happy with what I saw.

Lam a new member of the Ithaca Free Software Association. The Association exists to support and promote Free Software within the community and has had such successes as building and giving Linux computers to community youth as well as starting a significant Linux presence in the local school system. I am highly recommending your magazine to this group in helping with its mission. The magazine is filling a vital niche.

Truth to tell, my recent experiences have not pointed to the conclusion that Linux is ready for normal people to use. It took me two weeks to get a wireless card working on an Inspiron 7000 laptop, and this involved several kernel recompiles—something that we simply cannot expect normal users to do. I look forward, however, to a monthly argument from TUX magazine in convincing me that the Goal is not lost. I Want To Believe!

Richard Kinne

Hang in there, Richard. Driver support is improving, but slowly.—Ed.

Multiple Distros?

Thanks for putting out such a great resource for Linux beginners like myself. In the first issue, Nicholas Petreley mentioned all of the Linux distros he has running on his box. I couldn't help but drool, because I have been researching how to install multiple Linux distros for seriously over six months. Only a few articles address a Linux-only, multiple-boot setup. It seems there are many wavs to do it, and I've gotten thoroughly confused. Also, I don't have nearly enough experience to put together all the useful bits of information and apply them to my needs.

So, what I am requesting is a straightforward, authoritative guide to installing multiple Linux distros. I think this would serve many beginners by allowing us to explore many distros without having to un/install every time we want to try something new.

Thanks and keep up the good work!

PS. I have no idea if this is true, but I have the impression that installing multiple distros was so 2000—like there was a period of time when people figured out how to do it and now no one really talks about it anymore. Or maybe I just have crappy Google searching skills.

John

Thanks for the Free Subscription

I thought it might be of interest how I happened to acquire a copy of your fine magazine (digital). Like many digital-hungry individuals on a limited budget, I often look to torrents to find magazines. Although some would consider this theft, I feel the cost of the magazine is due to printing, and the advertising pays for the company's expenses. If it's digital, then costs are reduced. In exchange, however, I try to take the time to write to advertisers if I feel their ad (in a magazine) helped me to make a purchase. Never using this system have I seen a magazine that freely offers its subscription digitally (something I feel all magazines in the computer field should do). Thank you for doing so.

In closing, I would like to say I originally downloaded your magazine because of a budding interest in Linux. Like your editorial opening, I'm not interesting in building, but rather in being an end user. Your magazine is the only one of its kind I've



seen that fills that void.

PS. I'm very interested in the Pepper Pad due to your magazine.

Mike Smith

Wireless Options

I'm just starting to check out the wireless options for my FreeBSD box and thought that you might find this link interesting if you commission an article on wireless: http://www.mervin.net.au/ wireless/template/index.php.

TUX is da wheel in the wheelhouse. The compass is dead on, the radar enlightening and the format outstanding.

Henry Kaminski

Yay *TUX*

What a wonderful magazine—at last, a magazine about Linux I can understand. I wish there was something similar dedicated to my BMW R65 transport system.

Anyway, I'm happy you guys exist and have put something understandable together for all the reasons you have already mentioned in your first issue.

I stumbled on TUX accidentally, and feel only now that I belong to the Linux community, because

there are others speaking my language about Linux. My Internet searching has been reduced considerably.

I've been trying to use Linux on and off for some time now, with mixed results, but recently I bit the bullet and said farewell to Bill on my Toshiba laptop. I have two computers—a laptop with Mandrake 10.1 and a desktop with XP. I have to have this as I bring a lot of work home.

What I'd like to learn about is how to get these two computers connected; when I was using the laptop with XP Pro and the desktop with XP Home and a simple crossover cable, it was guite simple and worked fine. But I cannot get it working now with Linux on the laptop, simply because I just do not know enough about Linux yet.

But I'm sure you will cover this kind of issue in TUX sometime in the future, and I shall wait patiently.

I read the other letters and comments, and I wish some would have a little patience for TUX to develop further, before starting their bashing. Hell, I bet they are not perfect.

There is nothing wrong with the layout or the reason for the style/format. Some of us just have to work a little harder to get what we want; you cannot please everyone all the time. I have no criticism, just praise and thanks for thinking of us

"Linux eager-to-learn chaps".

After all, it's free, isn't it? Let those who wish to complain, do so when they are paying for it, in the mean time don't spoil it for us, be guiet, read, learn and contribute by giving the authors ideas and don't force the authors to start getting too geeky.

Thanks, TUX magazine, you are doing us a favour, a very good service and we are grateful. Eagerly looking forward to the next issue.

Darryl

More GNOME?

I think that you have a great publication in TUX, and I can see a lot of potential in the magazine. One thing I noticed though is that you guys seem to review a lot of KDE-based apps. I'm guessing that is your preference, which is cool, but I was wondering if you could also include some articles and screenshots of GNOME apps and desktops. It would be great if you could.

Cecil

It isn't our preference that matters. KDE is the preference of most new Linux users, the target readership of TUX, which is why we cover it more than GNOMF.—Fd.





Q&A with Mango Parfait

Mango explains how to drop your drawers in KDE, trim down, get your Canon fired and shoot Mandriva.

MANGO PARFAIT

Hello again to my many friends who send questions. There are many excellent questions this month. They are, of course, followed by my even more excellent answers. Maybe you do not think my answers are excellent, but you will say so anyway. Nobody wants to insult such a humble, pretty girl.

I am sorry to remind you that I do not answer e-mails directly. I select guestions and answer them here. I did send a couple of guestions to the editor in chief for him to answer directly. Just between us, I am trying to make more work for him to do as revenge for overediting my columns. [Don't worry, Mango, I'll keep it a secret.—Ed.] Maybe someday he will get the hint. Now, on to the excellent questions.

I like the look of KDE, but I have never mastered manipulating the menus. I don't like a desktop cluttered with icons—and I have been using **GNOME (Red Hat 9) because it makes** available "drawers" to hold my program icons in groups I choose. Mostly I ignore the menu icon in the left corner of the panel and select my programs from the panel drawers I've created. So, how would I make groups of programs available from the KDE panel without a lot of clutter?—Harry Bump

If you do not use a very old version of KDE, it is easy to make a "drawer" of your favorite applications in KDF. KDF calls this drawer a OuickBrowser. It works like a drawer.

It takes a few steps to make a QuickBrowser. Number one: right-click on the KDE desktop and select Create New→Folder... from the pop-up menu. Name this folder Apps or some other name you like better. Open the new folder.

Number two: go do number one if you had too much coffee this morning. Are you back? Okay, then do number three: click on the main menu for KDE and select (highlight) the menu item for an application you like to use often. If you click on this selection, it will start the application. Do not do that. Do this instead. Click on the selection and hold down the mouse button. Drag the selection to the empty space in the open Apps folder. Now let go of the mouse button. You will see a little pop-up menu. Select Link Here from the pop-up menu. Now you see a link to your favorite application in the Apps folder.

Do this again with a few more of your favorite applications. Now you can close this folder window if you want to. It doesn't matter.

Drag the Apps folder icon to a spot on the panel where you see other icons to start applications. A pop-up menu will show up. Choose Add as OuickBrowser from the pop-up menu. Now click on the



Apps folder icon that is on the panel, not the one on the desktop. You should see a menu list of your favorite applications. Click on any selection in the list to start that application.

If you want to add more favorite applications to this list, take the same steps and add more links to the Apps folder. The new links will automatically show up in the OuickBrowser.

If you are good at using the mouse, you can skip one step. You do not really have to open the Apps folder. You can drag any menu selection to the folder icon. Choose the Link Here choice, the same as if you have the folder open. The link is added to the folder and shows up in your QuickBrowser.

If you do not like the folder icon for your QuickBrowser on the panel, rightclick the folder icon on the panel. Then, select Properties from the pop-up menu. Click on the icon button. You can choose a new icon from the icon picker. There is a drawer icon in my set of icons, but I do not know if you have a drawer icon on your computer.

You can make as many QuickBrowsers as you want. If you want to organize your favorite applications into different OuickBrowsers (drawers), create a folder for every category and drop links into the folders according to the category. To give

an example, create an Office folder, and drag links to your office applications into it. Then drag the folder to the panel to make it a OuickBrowser. Create an Internet folder and drag Internet application links into that folder. And so on. Easy as pie. Speaking of pie, I bet you are glad I did not say anything about bran muffins and number two.

How do you set up special Konqueror profiles and choose them from a QuickBrowser menu?—Mango Parfait

I asked myself this question because Harry Bump reminded me of this trick. By an amazing coincidence, I happen to know the answer.

Right-click somewhere blank on the KDE panel where you see icons to launch applications. Select Add to Panel→Special Button→Kongueror Profiles. A new Kongueror icon will show up on the panel. It looks like the regular Kongueror icon, except it has a little pointer like any QuickBrowser. Click on the new icon. Select from the list to start Kongueror as a Web browser, file manager, a Midnight Commander-style file manager and more.

You can stop here and enjoy this feature. But it is even better if you

make your own custom profiles that help you work faster.

You can decide what kind of profile helps you. For an example, here is how to make a profile I made that saves me a lot of time. It lets me sort out files that I download and put them in the right folders.

Open a Kongueror File Manager window. Select Window→Split View Left/Right. This makes two file manager panels in the same window. Click on the left panel to make it the active panel. Select Window→Split View Top/Bottom. Click on the right panel. Select Window→Split View Top/Bottom. This makes four open panels in one window.

Each panel can point to a different directory. Click on the upper-left panel and use the navigation buttons to make this panel point to the folder where you download files. Click on the upper-right panel and change it to point to the folder where you keep music files. Click on the lower-left panel and change it to point to the folder where you keep movies. Click on the lower-right panel and change it to point to the folder where you keep pictures.

Now select Settings→Save View Profile File Management. But do not save this profile as File Management or it will overwrite your normal File Management pro-



file. When the save window pops up, change the name File Management in the top edit field to something like Download Mover. Check Save URLs in profile. This means the profile will remember to open the same folders in the same panels. I also check Save window size in the profile, because I like the window to look the same each time. Then, click the Save button and save this new profile. This new profile now appears in the profile OuickBrowser list.

After you download songs, movies and pictures, you can use the Kongueror QuickBrowser to open the Download Mover profile. The window with the four panels opens up. Drag and drop the music files from the downloads folder to the music panel, movies to the movie panel and so on. It is so easy.

I am running Mandrake and the sound card doesn't work right. I am running SUSE and Konqueror doesn't start. I am using Mandrake/SUSE and XYZ doesn't work.—John Q. Public

I am too lazy to do real statistics, so 73% of the time I make up my own. I say 60% of guestions and complaints in my inbox come from people using Mandrake or SUSE. I do not think I

exaggerate too much. The problem is I cannot make your sound card work from here. I cannot make Kongueror work from here. I cannot solve most of your technical-support Mandrake and SUSE problems from here.

I can give some advice. If you use the free version of Mandrake or SUSE, vou have a choice. First choice: buy the official version and call the company for support. Second choice: stop using Mandrake or SUSE, and install something else that does not give you so many problems.

You can install Linspire, Ubuntu, Kubuntu, Knoppix, Debian, Fedora Core 4, Mepis or others. There are many alternatives to Mandrake and SUSE, and most of them are free. I do not get so many complaints about sound cards not working and software crashing with any of these distributions. Maybe it is because more people use Mandrake and SUSE than these others. Maybe. Research companies say most people use Red Hat. So maybe not. Why are there so many complaints about Mandrake and SUSE but not so many for Red Hat?

I have recommended Mandrake and SUSE many times. Maybe it is time to stop.

I desperately need to get my printer, a Canon PIXMA iP4000R up and running to be able to leave my old Wintel machine to do experimental work on tinv Linux OS distros. Printer driver PLEASE. I have USB 2 and RJ 45 ports on both notebook and printer.—Brian

If you do not have the latest version A of CUPS (Crappy UNIX Printing System) on your system, make sure you install it or upgrade it and start it up.

Now you can use the KDE Control Center to add a printer. Find the Control Center in your KDE menu, and open it. Click on the plus sign next to the word Peripherals, Click on Printers, Click on Add, and then select Add Printer/Class.

If you want to use the CUPS Web tool instead of the KDE Control Center. open a Web browser and go to the URL: http://127.0.0.1:631.

No matter which method you use, go through all the obvious steps to add a printer. Make sure you specify the USB port you will use (USB printer #1, if this is the only USB printer).

You will get to a step where you will have to say which Canon printer you want to use. You will not find your printer anywhere on the list. Do not worry. If you are using the KDE Control Center, you



should see a printer called BJC-7004. Pick the printer BJC-7004. It should work fine.

If you are using the Web control program for CUPS, the printer will probably show up in the list as Canon BJC-7004 Foomatic/bjc800 (recommended) (en). Pick that one. It should work fine.

There are also Japanese driver packages made for your printer. Some people say they give you more control over the printer. I do not know if this is true, and I do not know which packages you need. What I hear is that it will not hurt to install the packages bifilter860, bifiltercom, bifiltercups and bifilterpixus. At least one of these is supposed to be useful. If you want to try them out, you are on your own. You can get them from this URL: ftp://download.canon.jp/pub/driver/bj/linux.

Hello Mango. I just started using Linux two months ago. Using Mandrakelinux 10 with GNOME, I wonder if I have to empty my temp files on a regular basis. Like, for instance, after Web surfing. One has to do this in Windows, but I don't see the possibility for this in Linux (other than cleaning up surfing history). Won't my computer slow down if I don't empty temp files every now and again?— **Ton Smits**

There are different kinds of tem-A porary files. Linux keeps many temporary files in the directory /tmp. You do not need to clean this yourself. All of the popular Linux distributions clean out the /tmp directory on a routine basis. Debian and most Debian spin-offs (Knoppix, Ubuntu and so on) clean up the /tmp directory when you start up the operating system. Fedora and some other distributions schedule a program to clean up the /tmp directory once a day. I have Mandrake, but I do not like Mandrake, so I do not use it. But. I know Mandrake cleans the /tmp directory with the "schedule the cleaner to run once daily" method.

Your browser or browsers also keep temporary files in a cache. Do you run Firefox? Select Edit→Preferences and then click on Cache. This is where you control how Firefox stores temporary files. My Firefox uses 50 megabytes for a cache. There is a Clear button to empty this cache, but you do not need to use it unless you have been naughty and are rightfully ashamed. Don't surf porn. Get a real girl. We are much better than pictures or live Webcams. Anyway, the cache does not slow down the computer, because the cache

never gets bigger than 50 megabytes. If you do not want your browser to use so much disk space, make this number smaller.

Even if you do not run Firefox, your browser has a cache. Just find the right menu selection and preferences screen to set the size of the cache you want to use or clear it. If you use the latest Opera (8.x), select Tools→Preferences from the menu and click on the Advanced tab. If you use Mozilla, select Edit→Preferences from the menu and click on the plus sign next to Advanced. Then click on Cache. If you use Kongueror, select Settings→Configure Konqueror and then click on the Cache icon.

There is another set of temporary files you may want to clean. Linux distributions keep package files on the disk even after you install them. Some distributions automatically manage this cache of packages, others don't. You can clean them with the Kpackage program if you have it. Run Kpackage (it is in your KDE menu, somewhere different for each distribution). Select Cache→Clear Package Folder Cache from the menu. Then select Cache→Clear Package Cache. Now all the old package files are gone.

If you use Synaptic, select



Settings→Preferences, and then click on the Temporary Files tab. You can tell Synaptic to clean up after itself every time you install packages. You can click on the Delete Cached Package Files button to clean up right away.

You are using Mandrake 10? I have Mandriva Linux 10.2 Limited Edition installed (it is the free version). As far as I know, it is the latest version of Mandriva, yet it includes KDE 3.3.2. I stopped using KDE 3.3.2 when I saw someone present it on the Antiques Roadshow. If Mandriva upgrades KDE from 3.3.2 to 3.4.1 before the next KDE version comes out. I will consider using Mandriva.

Do not write to me about cooker. Mandriva/Mandrake has a cooker branch with more up-to-date software. This is like the unstable branch of software in Debian. Here is the difference. The unstable branch of Debian usually works. I think Mandriva calls their unstable branch cooker because people who use it are likely to get burned. Last time I updated files from cooker, I spent more time fixing problems than using the updated software.

I am done with my Mandriva rant.

Back to the topic. If there is an easy point-and-click way to delete cached package files in Mandriva/Mandrake, I don't know it. Log in as root and run this command to clean the package cache:

urpmi --clean

That is the only way I know how to clean out the package cache in Mandriva, Mandrake, Mandolin, Mandingo, or whatever they call it tomorrow.

I just installed a new 40GB hard drive in my HP Pavilion xt375 laptop. I had to buy a new hard drive because the old one died. The most convenient one for purchase was from CompUSA (a Sony)...the old one was an IBM hard drive. The problem I'm having is that I cannot get the laptop to boot into any distribution that I install (Debian, Fedora Core 3, Mandrake 10, Symphony OS, KnoppMythTV, Ubuntu and so on). It always can boot from the CD and install the software. but it hangs during reboot at the GRUB prompt or the LILO prompt. —Tony Freeman

It is too hard to solve this problem A without more information. My advice is to enter the BIOS setup (CMOS setup) when you boot your laptop. Look at how the BIOS detects your new hard drive. You may need to change some of these settings. Experiment. If the BIOS has a special option to "discover" the drive, try that. To give another example, the BIOS may let you turn on and off something called LBA. If it is on, try turning it off. If it is off, try turning it on. It is possible that your BIOS is too old to work with this new drive. If you can update the BIOS try it. Does it sound like I am guessing that your problem has to do with the BIOS? You are right. That is my guess. I hope I guessed right.

I am a sweet, humble, delicate and very cute genius who is at your service to answer your Linux questions. Send your questions to mango@tuxmagazine.com. I am deeply sorry that I do not have time to respond to anyone directly by e-mail, but I will select as many guestions as I can and answer them here.

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How to Use the OpenOffice.org Calc Spreadsheet, Part II

Kevin explores OpenOffice.org Calc in greater depth in this follow-up article to last month's introduction to spreadsheets.

KEVIN BROWN

So, you know what cells are, and you might even be familiar with a specific spreadsheet application that you've used in the past. This month's article shows you how to start using OpenOffice.org Calc to produce spreadsheets that use charts and formulas. The article is broken up into sections, so that if you're not interested in one of the two topics, you can read only what applies to you.

CHARTS

Charts are commonly used during presentations, reports and in many other areas of life. Charts allow you to represent graphically two sets of numbers that relate to each other. In simple terms, I'm talking about bar charts, pie charts and scatter plots. This is not all that OpenOffice.org can do in this area, but that's what we're going to focus on for now. Good examples of data that work well for charts are temperature over time, gas prices over time and mathematical functions. With a little work, they even become effective and beautiful at the same time.

To get started with a chart, the first thing you need is the data that's going to be represented in the chart. I'm going to start with the spreadsheet we used in our last article, which is shown in Figure 1. If you are reasonably familiar with spreadsheets, you can reproduce this basic data even if you didn't read last month's article and save your work. If you need help, follow the instructions from last month's article, save your work and return to this tutorial.

Now, we've already labeled some of our data, which will come in handy quite shortly. Here is the goal. You will make a chart that looks like Figure 2 with this data. This is a bar graph that shows the earnings for each department per quarter.

To start, we need to select our data and labels. This is actually a relatively picky process, because everything we select, Calc will place into the chart. Because of this, we want to select the cells as shown in Figure 3 to include only the necessary data.

If you don't have labels on the data, it's fine to select only the numbers, but

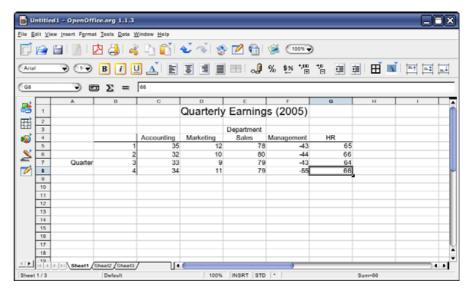


Figure 1. Spreadsheet from the Previous Article

in most cases, they're already there anyway, so you might as well save yourself the work of retyping them. If you're more familiar with math terms, it's good to know that most spreadsheet applications, including OpenOffice.org Calc, assume that if you're plotting two sets of data against each other, the list on the left is the x axis, which refers to the horizontal axis.

Select Insert→Chart, and you are presented with the dialog box shown in Figure 4.

What we're concerned about on this screen is ensuring that our chart gets placed on a different sheet (a page in our multipage spreadsheet) than the one we're using for the data. The default is to put the chart on the sheet you're currently using. I prefer to have the chart on a separate sheet. You

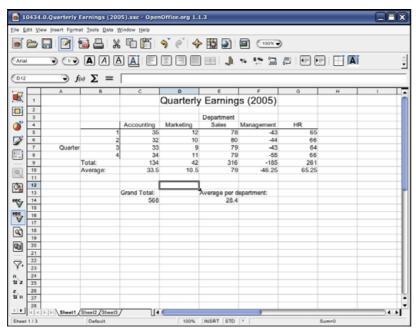


Figure 2. Finished Chart Using Last Month's Data

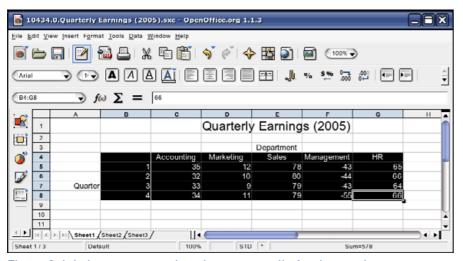


Figure 3. It is important to select the correct cells for the graph.



Figure 4. The Beginning of the Chart Wizard

might want the chart on the same sheet as the data if you want to watch how the chart changes as you modify your data, but for now we'll do it my way. For this example, drop down the list labeled Chart Results in Worksheet and select Sheet2. Ensure that you check the box labeled First column as label, because the first column in the selection is going to be the labels for the data along the x axis. Click Next.

The next screen you see lets you choose what type of chart you'd like. You also get to see a rough view of what that type of chart would look like with the data you've provided on the section to the left. Select the bar chart and click next.

Now you are asked more specifically what type of chart you'd like to create. We don't need to change any of the settings, so click Next. Now you need to enter a chart title. Enter the title we had on our previous spreadsheet (Quarterly Earnings 2005) and click Create. Figure 5 shows this process.

Once you've clicked the Create button, Calc goes to work and creates the chart shown in Figure 6. We want it to appear larger, so use the mouse to click on the bottom-right corner of the chart and drag it down and to the right until you're happy with the proportions. You also may want to move the chart around a touch on the sheet until you're happy with where it is. Simply move the mouse to the border of the chart. When you see a cross with arrows pointing up, down, left and right, click the mouse and drag the chart to the location you like best. If you make any mistakes, don't

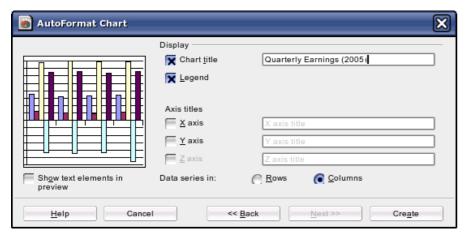


Figure 5. Adding a Title to Our Chart

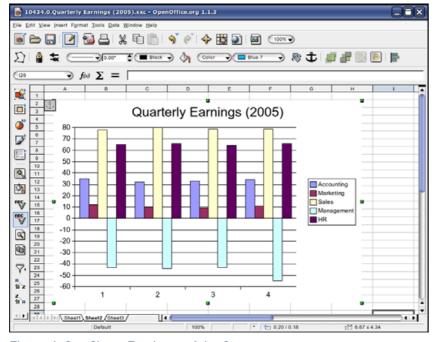


Figure 6. Our Chart, Fresh out of the Oven



Figure 7. Adding Axis Titles

be afraid to use the Edit→Undo command. You also can hold down the Ctrl key and press Z (Ctrl-Z), the keyboard shortcut for undo.

At this point, we need to improve the labels for the rows and columns. You can do this when you first create the chart, but it is easier to experiment if you make these tweaks afterwards. Click on the border of the chart in order to select it. Then click on Insert—Title and you should be presented with the dialog shown in Figure 7. It is important to click on the border to select the chart first, otherwise the option to insert a title will not appear in the menu.

Check the boxes next to the X and Y axis titles, and type Quarter and Euros (Thousands) respectively. Click OK, and you'll see your new axis titles. At this point, you can change the font styling on any font in the chart by looking at the options under the Format or right-click menus. Feel free to stylize your charts to ensure they look professional and attractive.

Also, a side note here is that you can rename and delete sheets in the workbook you're working on by right-clicking on the sheet tabs. You can use the pop-up menu to remove Sheet3 entirely, since we are not using it. You can use the pop-up menu to name Sheet1 Report, and Sheet2 Chart.

FORMULAS

Formulas are the most powerful feature of any spreadsheet application. They allow you to perform simple or complex calculations on numbers in the spreadsheet. The results appear in the cell where you entered the formula. You can then create another formula that uses the result as part of its calculation—and so on. If you change any data that affects the first formula, the spreadsheet recalculates everything so that all the results reflect your changes.

This makes a spreadsheet a powerful tool for asking, "what if?" Change data here or there, and the entire spreadsheet recalculates the affected cells, redraws affected charts and updates the information it's showing, allowing you to try out various hypothetical situations.

Let's start this exercise with the spreadsheet from the previous article, shown earlier in Figure 1.

There are different ways to enter formulas. First, you can simply enter them with the keyboard. Whenever you type an equal sign (=) as the first character in a cell, this tells the spreadsheet that what you are about to enter is a formula. For instance, to make cell A1 show what you get when you add the contents of cell C6 to the contents of cell C7, enter =C6+C7 into cell A1. The plus and minus signs are obvious mathematical operators. If you are not used to spreadsheets, note that you need to use the asterisk (*) to multiply and the slash (/) to divide. For example, =C6*C7 multiplies the contents of C6 by the contents of C7, and =C6/C7 divides the contents of C6 by the contents of C7.

There are many built-in functions to make your life easier. For example, you don't have to type = (C5+C6+C7+C8) to add the contents of these four cells. You can use a function called SUM to add all the cells in a range. You can type =SUM(C5:C8), which gives you the same result as =(C5+C6+C7+C8).

If you want to explore the various functions, use the OpenOffice.org Help feature and look up Mathematical Functions.

Now, let's use a few functions to add useful data to our spreadsheet. To see just how much money the company made for the entire year, click on cell C13 and enter the label Grand Total: In the cell below it (cell C14), type =SUM(C5:G8) and then press Enter. Calc just summed up the entire table for us.

Now, let's see how much each department made for the year. Go ahead and label row 9 as Total: for the chart (enter the text Total: in cell B9). We'll start with Accounting. In cell C9, enter =SUM(C5:C8) and press Enter. The column is now summed up.

It would be a lot of work if you had to enter a similar formula for every column. You don't have to do that. Calc has a very useful feature that allows you to extend your formulas to apply to other rows and columns. Click on cell C9. Notice the little box at the bottom-right corner of the cell? When you point to that box, the mouse cursor changes. Click and drag that small box to the right, until you have selected all the cells from C9 to G9.

You also can use this fill function to create lists of numbers by typing the first number of the list and then filling in as far as you need. For example, you could type the number 1 in a cell, then click and drag the little box to highlight a range of cells. Calc will fill the rest of the cells with an incremental series of numbers starting with 1. then 2, then 3 and so on. Calc is even smarter than that. Type January or even the abbreviation Jan into a cell. Click on the rectangle and select a range of cells. Calc fills that range with labels for the following months.

There is a way to enter formulas that is easier from time to time. Whenever you need to specify a certain cell while you're entering a formula, you simply can click on the cell you need or use your arrow keys to move to it. Once the cell you're looking for is in the formula where it needs to be, simply continue typing your formula. You also can drag to

form ranges like what SUM is looking for. For example, go back to cell C9. Type =SUM(and stop there. Now click on cell C5. hold down the mouse button and drag the selection until you have selected cells C5 through C8. Notice that Calc filled in part of the SUM formula for you. Finish the formula by typing the final parenthesis), and press enter.

Finally, let's use another function to figure out what the average per-quarter income was of each department. Click on cell C10 and enter =AVERAGE (C5:C8). Use the fill technique to fill it across the columns. Now that we know what each department averages, we can figure out what the average income per department for the year was. In a cell that's out of the way, such as E14 in the example, enter =AVERAGE(C10:G10). This is the average of the average that each department took in. If you're feeling a little wishful, and you think to yourself, "It would have been really nice if the Marketing department had gotten the TUX Magazine account during the second guarter. They would have made at least 10,000 more Euros that guarter. I wonder what the numbers would look like then?" You can simply modify the number you need, press Enter or navigate away from the cell, and all the cells that refer to that will update to reflect the new information.

At this point, you should be ready to create some pretty impressive spreadsheets, complete with graphs and charts to help you visualize the data.



Kevin Brown is 22 years old and is proud to help others join the Open Source movement. He lives in rural Oregon with his partner of three years, where he studies Software Engineering.

TUX EXPLAINS

Guarddog Firewall Configuration

Your very own guard dog against malicious crackers and "script kiddies".

PHIL BARNETT

Does the name Guarddog bring an image to mind? A brown leather collar with spikes around the neck of a large, muscled, snarling canine? Perhaps we need to reduce your anxiety about having a guard dog. This one won't eat you out of house and home, and it won't be aggressive with the neighbors. It will sit when you tell it to and will roll over only on your command. What we are talking about here is a guard dog for your computer.

Firewalls are now installed on just about every computer, and for good reason. The Internet is not a safe place to go barefoot. It hasn't been for a long time. Geeks have been making firewalls for years. Really geeky firewalls. Firewalls that almost nobody understands. A guestion often asked is, "How well can a firewall protect me if I don't understand how it works?" Probably not as much as it could if you had better control of it.

In mid-2000, Simon Edwards put the first version of his firewall configuration tool, Guarddog, on the Internet for everyone to use. Since that time, Simon has released a new version once or twice a month. This series of improvements has culminated with his most recent stable release, the December 16, 2004 2.4.0 version.

I wrote to Simon to get a little background on why he started the project. Here's his response:

I've had a strong interest in usability and GUI design for a long time, and about the time that Guarddog started, I was also very interested in computer security. What I learned from computer security is that many security problems are simply caused by errors in the configuration of the software by the user, what people might refer to as a "human error".

Another important principle in computer security, this time directed more toward the design of network firewalls in particular, is whitelisting. This idea is simply, "Better to block everything and allow what is known to be good through, instead of the other way around, for example, filtering with a blacklist "

Looking at the firewall programs and scripts available for Linux at the time, I saw that for securing a small network, all available programs failed one or both principles.

So that is how Guarddog started. It is my attempt to create a really paranoid firewall that also tackles the difficult configuration error problem with good user-interface design. Guarddog was designed starting from the point of view of the user, and not from the underlying network filtering system. This is why Guarddog is so different, and easier to use than every other firewall program or script on Linux.

Simon has done a great job of removing the complexity of configuring a firewall. Instead of using an editor to make changes to a cryptic looking text file that the firewall uses, you use a graphical interface and you tell it what tasks you want to accomplish. The Guarddog Project motto is: "Protecting your computer with a cute little dog".

INSTALLATION

If you are running a Linux distribution that has a package management system, your first stop should be to find out if your distribution already has Guarddog installed, or a Guarddog package on the CD or in an Internet repository ready for you to install. If you can install Guarddog that way, you will save time. If this is the case, you can use that install method and jump directly to the Planning section of this article.

If your distribution doesn't support a Guarddog install, you can download an installation file for several distributions at http://www.simonzone.com/ software/guarddog/#download.

FOR GEEK EYES ONLY

And, of course, the ultimate installation file is there as well, the tarball. The tarball file has been a longtime method of distribution of source code that is packaged in

TUX EXPLAINS

a way to be installed on many different platforms. Installing a tarball is a five-step process. Download, uncompress, configure, compile and install.

If you didn't find an install by one of the two easier methods above, then you'll have to download and install the tarball file. As I write this article, the name of the current tarball file is http://www.simonzone.com/software/ guarddog/guarddog-2.4.0.tar.gz.

You need to be logged in as root to install this kind of system utility. In my last article [July 2005], I talked about logging in only as a regular user most of the time. This is one of those times that you need to be a system administrator to perform the install. To become the system administrator, open a command shell and run the Switch User command (note the hyphen):

su -

After you enter this command, you'll be asked for the root password. Enter it correctly, and you are now the system administrator and you'll be in the /root directory. Most systems change the prompt from \$ to # when you are logged in as the system administrator.

Almost all systems now have the wget command available, and it's a great way to grab a file. So, here's the command (you'll need to correct it if a new version is available):

wget http://www.simonzone.com/software/guarddog/guarddog-2.4.0.tar.gz

This command fetches the file and brings it to your local directory. If you don't have wget, be creative. There are dozens of ways to fetch a file. Use one of them.

Next in the process is to uncompress the tarball:

tar -xzvf guarddog-2.4.0.tar.gz

This will uncompress the files into their original layout as the author created them. In this case, the author put his files into a directory, so we need to move into it to continue:

cd guarddog-2.4.0

Once this is done, the next step is to run a script that determines how

your machine is set up and configures Guarddog to be ready to compile on your machine. This is typical of the tarball compiling process. Run it now:

./configure

When the script completes, you are ready to compile. If the script stopped early, it will tell you what is missing from your system. Generally, you go get the missing package and try again. Most systems will have everything needed. After you have successfully run the configure script, it's time to compile Guarddog. So. do it:

make

Now, that wasn't too hard was it? Your computer compiles all of the Guarddog source code. The amount of time this process takes depends on how powerful your computer is. It took about a minute on my Athlon XP 2500+. You've just compiled a tarball, but it's not installed yet. The final step is to run the installer. In a tarball, the installer is generally part of the make process. You add a parameter and the files get installed to their final destination. In this case, the command is:

make install

And you are done! You can type:

which guarddog

to see where it is installed. The default installation is /usr/bin/guarddog. You are done with the system administration part of this install, so it's time to exit from your root login by running the exit command now:

exit

If you installed from a tarball, you will need to create an icon to run Guarddog. In KDE, right-click the desktop and select Create New→File→Link to Application. This pops up the application link wizard.

You need to fill in four things here to make the icon work properly. First, you need a caption for the icon. Replace the words Link to Application with







Figure 1. Creating the Guarddog Icon

Guarddog. To the left of that, you will see a Blue Gear. When you click on it, a screen opens that allows you to select a new icon (Figure 1). More than a hundred icons are available here, or you can download an icon from the Internet and link it in here. Look and you'll find the one named Guarddog. If it's not there, your installation may have put one on the disk somewhere. I did find one in the System icon files, but when I looked around, I also found a copy of the Guarddog icon that the installer put in /usr/share/icons/hicolor/ 32x32/apps/guarddog.png. If you didn't find one from your install, you can select any icon.

Next, click on the application tab and put /usr/bin/guarddog in the command field (Figure 2).

Because this tool needs to run as root, you need to tell the icon to ask you for the root password and to run it as root. To accomplish this,

Figure 2. Entering the Command

click on the Advanced Options button (Figure 3). Mark the box for Run as a different user and fill in the user name root.

Select Ok to save the icon configuration.

BACK TO THE NON-GEEKS: PLANNING

Remember what Simon said about whitelisting? Guarddog is designed so that nothing can access into or from the network unless you specify it. Guarddog assumes you will be implementing a default block all policy.

With that in mind, we should make a small list of the things we expect to do with our computer.

From my computer, I browse Web pages, do on-line banking, send and receive electronic mail, send and receive files using FTP, use VNC to view other computer screens, use secure shell and set the time on my computer. Your list will

Figure 3. Using the Advanced Options Tab

be different, and that is not a problem for Guarddog. That list can be translated directly to the services I want to allow to operate from my machine to the Internet (listed in the order as mentioned above): http, https, pop3, smtp, ftp, vnc, ssh and ntp.

We need to tell Guarddog that it's okay to do those things from our computer.

How about the things I want to be able to access on my computer from the outside world? I have a Web server I would like to be able to see from browsers at client locations. I would like to be able to access my computer via secure shell. These translate to the following services I want to allow in from the Internet: http and ssh.

We need to tell Guarddog that it's okay to do those two things from the Internet.

TUX EXPLAINS

CONFIGURATION

Now that you have your planning done, you'll need to configure Guarddog for your plan. Let's start up Guarddog by clicking the icon you built earlier. If you set up the icon properly, it will ask you for the root password. Enter the root password and press Enter.

Guarddog should start up. If you have never started your firewall before, Guarddog will ask you if you want to start it now. Go ahead and start the firewall. If you want to shut the firewall off at any time, it's easy in one of the Guarddog configuration screens.

When you start Guarddog for the first time, you will see the default zones in the Zone tab. The Internet and the Local zones are the only zones we will use in our configuration (Figure 4).

The real action happens on the Protocol tab (Figure 5). When you select the Protocol tab, you will see the two zones in the Defined Network Zones box. Select the Internet Zone. To the right, you will see a window labeled Zone Properties. This is a tree view of all of the protocols and software that you can teach Guarddog to allow you to use on the Internet.

In Figure 5, you can see how I have checked the http and https services. This allows my machine to reach Web and on-line banking pages.

You need to scan through the different protocols and software packages represented in Guarddog and check the boxes that you want your machine to have access to. When you get to mail, if you are not sure, check them all. Once you get mail working, you can uncheck things one at a time until you get to a minimum that it takes to get it working.

After you have checked all of the protocols that you want to allow out to the Internet, you need to select the protocols you want to allow in from the Internet. Many of you will not do anything in this step, but in our scenario above, we are going to allow http and ssh protocols to access our machine from the Internet. First, select the Local zone. Then, in the protocol window, select http and ssh (Figure 6). You will find http under File Transfer and ssh under Interactive Session.

Guarddog also allows you to control how you log blocked and rejected packets. If you select the Logging tab, you will see that you can adjust these and

Firewall Configuration - Guarddog ? _ = x Protocol Logging Advanced Zone Zone Properties Protocols served from zone 'Internet' to clients in zones Defined Network Zones Network Protocol Local AudioGalaxy - Music Sharing \square -BitTorrent Peer Local $\overline{\mathbf{v}}$ - BitTorrent Tracker - Blubster CVS - Concurrent Versions System ColdFusion Standalone Server - Direct Connect Click on the name of a protocol to - FTP - File Transfer Protocol view information about it. FastTrack - File sharing -Gnutella - File Sharing Network (Advanced information can be turned abla-HTTP - World Wide Web on using the "Show advanced protocol $\overline{\mathbf{z}}$ -HTTPS - World Wide Web over SSL help" checkbox on the Advanced tab.) - Legato NetWorker - Network backup П - NCP File System - Novell NetWare(TM) protocol = protocol is blocked. protocol is permitted. = protocol is rejected <u>H</u>eb About Apply

Figure 5. The Protocol Tab



Figure 4. The Zone Tab

other options in

Guarddog (Figure 7). The defaults

seem quite sane.

of them, but you

need to change any

may want to experi-

ment with the way

ignore the logs, you

these logs are rotat-

ed and compressed

weekly, so it's not a big deal if you leave

them on. You may need them to pros-

ecute an attempted

can turn them off

entirely. In Linux,

logging occurs. If

you intend to

and I found no

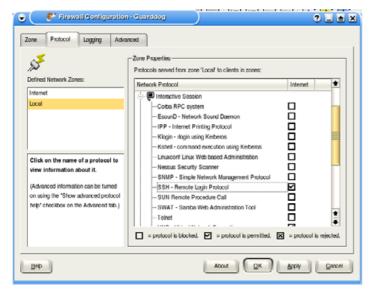


Figure 6. Enabling SSH

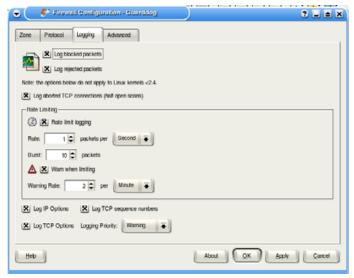


Figure 7. Logging



Figure 8. The Advanced Tab

break-in. Personally, I have better things to do.

I did tell you that there's an easy way to turn the firewall on and off in Guarddog, so let's discover that and our tour is over. On the Advanced tab. you will see a selection for Disable Firewall (Figure 8). If you check that box and confirm with OK, your firewall is off.

GETTING HELP

On every Guarddog screen, there is a Help button in the lower-left corner. This leads to The Guarddog Handbook, which contains extensive help, concepts and tutorials. If you are having problems or feel you need help, be sure to read the

excellent help files and perform the tutorials.

There is a support mailing list for Guarddog you can join if you have guestions about installation or configuration. I have found that asking questions directly into support groups for the programs I am using gets me guick and accurate answers. If you do this, make sure to describe your installation in detail, like what distribution you are using and how you installed as well as what problem you are having.

The more details you include in your requests for help, the better the answers you get will be.

You can access the Guarddog support list at https://lists.sourceforge.net/lists/listinfo/guarddog-user.

There are many advanced features in Guarddog, but what I've shown you will get you on your way. It's a great program that lets you have total control over your personal firewall without having to invest years in the study of firewalls and security.

Phil Barnett is a Senior Programmer-Analyst at Walt Disney World where he has spent the last ten years working with corporate software and computer security projects. Six years ago, he helped incorporate the popular Florida Linux User Group, Linux Enthusiasts and Professionals, which he considers his greatest Linux accomplishment (http://www.leap-cf.org). Besides Linux and computers in general, his other hobbies include woodworking and amateur radio communications.





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Introduction to Quanta

A comprehensive guide to getting started with Quanta to create Web pages.

RYAN PAUL

The Internet facilitates communication and allows us all to share our ideas. Individual users need not be passive spectators on the Web. Participation is no longer limited to those with technical expertise or the ability to afford costly, proprietary Web development software. With Linux and opensource software, anybody can make a Web site.

Do you want to share your digital photos with friends and family or make a Web site dedicated to expounding the virtues of your favorite Linux distribution? Or perhaps you already have some experience with Web design and you are looking for a quality open-source alternative to replace your favorite commercial Web development environment? Quanta may be the application you need to get the job done.

Quanta is a versatile Web development environment with a flexible interface and many compelling features. A terrific tool for the Linux learner or the ambitious adept, Quanta will scale to accommodate virtually any project. Unlike many commercial Web development environments, Quanta emphasizes HTML entry rather than visual manipulation of page elements. Although this unconventional approach may make Quanta seem intimidating and counter-intuitive, many professional and amateur Web designers appreciate the advantages of this innovative model. Quanta introduces a number of unique development idioms that empower users and contribute to quality design.

In this article, I show you how to produce your very own Web site with Quanta. Basic familiarity with the structure of HTML will give you an advantage, but it isn't particularly necessary if you keep a close eye on the screenshots. If you have trouble following along, you might want to spend a couple of minutes glancing through the first few pages of the W3Schools HTML introduction (http://www.w3schools.com/html). Don't worry; this isn't going to be difficult, and there won't be a test at the end.

Quanta is considered to be part of KDE, so many modern KDE-based distributions install Quanta for you (you might see it listed as Quanta Plus, but it is the same program). Some distributions do not install it for you because it is a developer tool, and the distribution assumes you are a desktop user not a developer. The latest version of KDE generally calls the package

Kdewebdev, so that is what you want to install to use the latest version of Quanta.

to install to use the latest version of Quanta. Some older versions of KDE (and some distributions) still call the package quanta, or some variant of that name. You can run Kpackage and

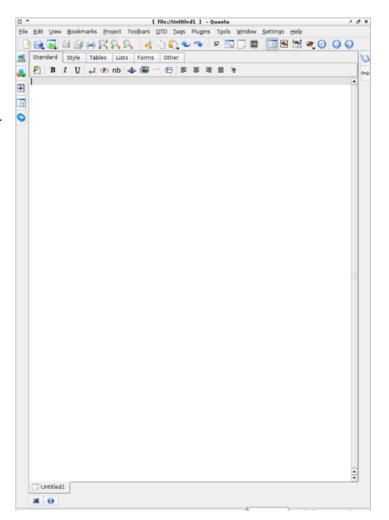


Figure 1. Quanta Interface

search for webdev or quanta, and I am sure you will find the package you need if you don't have it installed already.

THE INTERFACE

The Quanta interface (Figure 1) contains toolbars, sidebars, the document view and the tag palette. It is highly customizable, so complete coverage is well beyond the scope of this article.

The blank space in the middle of the window is the document view, where the active file is visible. If you are working on more than one page at a time, you can use the tabs at the bottom of the document view to switch between open files. To close a file, click the icon on the tab.

The tag palette is the tabbed toolbar that appears right above the document view. Each tab contains various buttons that either insert HTML content into the document directly or first prompt the user for information and then insert generated HTML. All of the items on the tag palette also appear in the Tags menu.

By default, Quanta uses the KDE IDEAL mode interface for sidebars. In IDEAL mode, the buttons in the vertical bars on the left and right sides of the window open various sidebar panes that expose different kinds of program functionality. Sidebars obscure document content and disappear when you click inside the document view. Each sidebar pane has three small icons in the top-right corner. If you click the first icon, which looks like a diagonal arrow, the sidebar detaches from the interface and appears in a separate window. If you click the second icon, which looks like a square, the sidebar becomes sticky and embeds itself in the main window next to the document view rather than on top of it. When a sidebar is in sticky mode, it does not close when you click in the document view. The third button, which looks like an X, closes the sidebar. In IDEAL mode, you can have only one sidebar open on each side at any given

time. To move a sidebar, drag the stippled bar that runs along the top of the sidebar pane.

STARTING A NEW PROJECT

Project management is one of Quanta's many strengths. You can allow Quanta to help you manage your project or you can eschew assistance and edit individual pages without an actual project. To start the New Project Wizard, select New Project from the Project menu.

On the first page of the New Project Wizard (Figure 2), enter the name of your project and set the main directory field to the directory in which you would like to store your Web site. After you have set the project name and main directory,

click the Next button to move to the next step. On the second page of the New Project Wizard, you can select files to add to the project. Because we are starting a Web site from scratch, you should just ignore it and click Next to move to the third page, where you can optionally set the Author field to your name and the Email field to your e-mail address. DTDs are used to validate HTML content, so the DTD you specify determines the version or dialect of HTML that your site uses. In this tutorial, we use HTML 4.01 Transitional. Now, click Finish to generate the project.

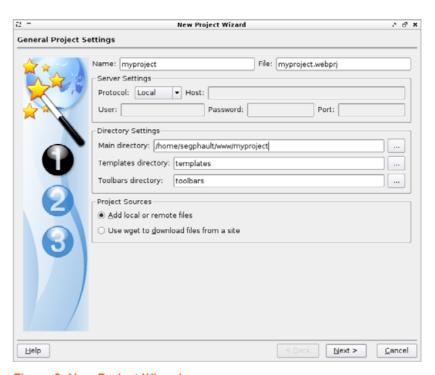


Figure 2. New Project Wizard

CREATING A NEW PAGE

To create a new page, select New from the File menu or click the New toolbar button. Then, click the first button on the Standard tab of the tag palette to open the Quick Start dialog (Figure 3) where you will type the title of your new page in the Title text field and make sure that the Style area check box is selected before you click Ok. The Quick Start dialog inserts HTML for a default, blank Web page into your empty document. Select Save from the File menu or click the Save toolbar button to save the page. Now give it a filename, click the Save button in the save dialog and then click Yes to add the new page to your project.

OTD / Schema:	HTML 4.01 Transitional
Show DTD	CVS tag in comment
⊈ <u>H</u> ead area	
Title:	My Page
☐ <u>B</u> ase directory:	
Meta author:	
☐ Meta character set:	koi8-r ▼
☐ Meta keywords:	
Linked style sheet:	
▼ Meta Quanta	
🗷 Style <u>a</u> rea	JavaScript area
Body Area	
PHP header include:	
□ PHP footer include:	

Figure 3. Quick Start Dialog

ADDING CONTENT

Now it's time to add some content! Click on the line below the opening <body> tag. When you click inside of the document view, it places the text insertion point (TIP) at the position you have clicked. Now, select the Style tab of the tag palette and click the H1 button to insert a large page heading. Each H button inserts a heading of a specific size. The higher numbers indicate smaller headings. When you click the H1 button, Quanta inserts an <h1> tag in your document and places the TIP inside of it (Figure 4). Now type in your page title. You have added a heading to your page! Let's see how it will look in a Web browser. To

enter preview mode, click the toolbar button that looks like an eve. or select Preview from the View menu. You should see your page heading in large bold type. To get back to edit mode, click the toolbar button that looks like a window with text in it or select Source Editor from the View menu.

Now, let's add some text below the heading. Start by making a couple of empty lines after the line with the heading tag. To insert a paragraph tag, select the Standard tab, and click the button with a P in it. Quanta adds a tag to your document and places the TIP inside of it (Figure 5). Paragraph tags are used for blocks of text.

Type a few sentences, and then click the preview button to see how it looks (Figure 6).

Let's try something a bit more interesting. How about a table? Add a few extra blank lines after the end of the closing tag, and click the first button on the Tables tab of the tag palette to start the Table Editor (Figure 7).

You can use the Rows and Columns input boxes to change the number of rows and columns in your table. Set both to three and observe the Table Editor's behavior, You

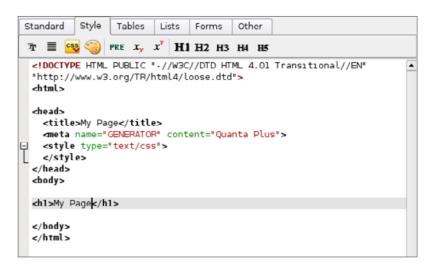


Figure 4. Adding a Heading

```
Standard
          Style
                Tables
                                       Other
                        Lists
                               Forms
     B I U 💷 🕩 nb 🎄 📳
 <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"</pre>
 "http://www.w3.org/TR/html4/loose.dtd">
 <html>
 <head>
   <title>My Page</title>
   <meta name="GENERATOR" content="Quanta Plus">
   <style type="text/css">
   </style>
 </head>
 <body>
 <h1>My Page</h1>
 This sample page contains no content of significant value. I'm
 just typing some text here for demo purposes. I hope you are
 enjoying my article as much as I enjoyed writing it.k/p>
 </body>
 </html>
```

Figure 5. Adding a Paragraph

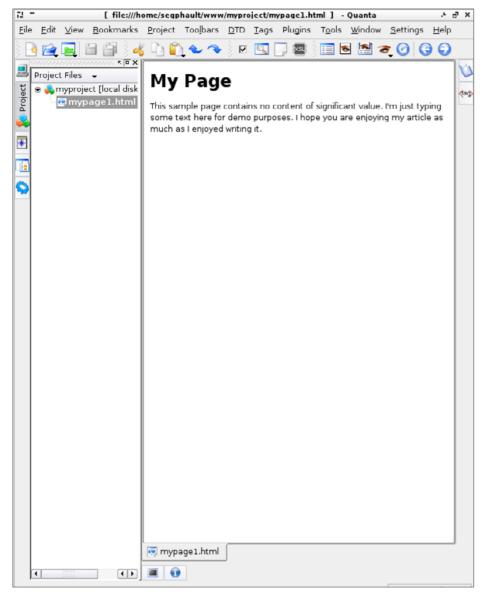


Figure 6. Preview Mode

now have an interface that vaguely resembles a spreadsheet. Click one of the cells, type in a value and then click the Enter key to move to the next cell. You also can use the arrow kevs to navigate between cells, and vou can use the actions listed on the right-click context menu to add and remove rows and

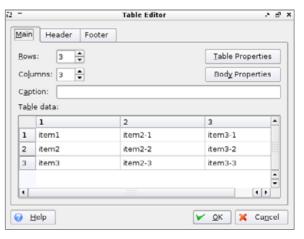


Figure 7. Table Editor

columns at a specific point in the table. When you finish adding data, click the Ok button to add the table to your page. If you want to alter the table, place the TIP anywhere inside the table HTML tag, and click the Table Editor button on the tag palette.

I'm sure that many of you would love to know more about the HTML that Quanta adds to your document. You are in luck, because Quanta has an excellent context-sensitive help system. You can right-click anywhere inside of any tag, and select Context Help from the menu to view the WDG documentation associated with the tag.

ADDING STYLE

What do you think of your page so far? It looks a little dull to me. Let's snazz it up a bit and give it some style! Place the TIP anywhere inside the tag, and click the CSS button on the Style tab to launch the Cascading Style Sheet (CSS) editor. Quanta's CSS editor provides a powerful and effective mechanism for page styling. The left side of the CSS editor contains the CSS property tree, which lists the individual style properties associated with the current tag. The right side contains the CSS preview pane and the content pane. To start with, let's change the paragraph background (Figure 8). Click the plus next to the background item in the CSS property tree, and then click the background-color property. A

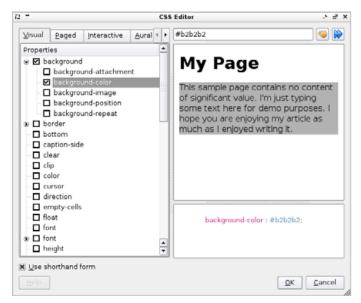


Figure 8. Setting Paragraph Background with the CSS Editor

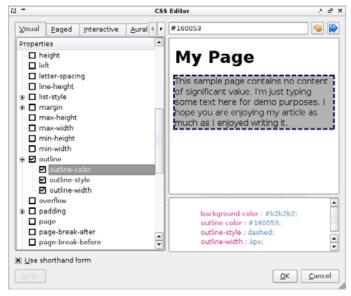


Figure 9. Adding a Paragraph Outline

color input text box appears above the preview pane. Click the button to the right of the text box to open the color-selection dialog. Pick a nice color for your paragraph background and then click Ok. The preview pane should instantly reflect the style change. You also should see a check in the check box next to the background-color item in the CSS property tree. If you want to remove the background color, you can just uncheck the background-color item.

Now, let's add an outline (Figure 9). Click the plus next to the outline item in the CSS property tree, and then click the outline-style item. The drop-down menu above the preview pane lists all the available outline styles. Try them all and see if you can find one that you like. To change the color of the outline, select the outline-color item in the CSS property tree and use the color selection dialog. You can change the outline-width property to set the size of the border.

When you are satisfied with your style changes, click Ok to close the CSS editor. Quanta adds a style attribute to the current tag to implement your style change.

It is also possible to establish a universal page style for a specific kind of tag. Remember when I had you click the Style area check box during page creation? You can use the <style> tag inside of the <head>

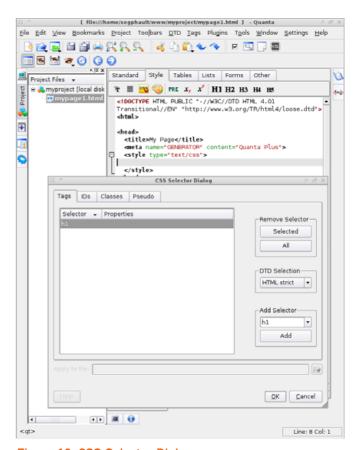


Figure 10. CSS Selector Dialog

tag to add styles that affect the entire page. Place the TIP inside of the <style> tag and click the CSS button in the Style tab of the tag pallete. When you are inside the <style> tag, Quanta displays the CSS selector dialog instead of the CSS editor (Figure 10). Let's add a default style for H1 headings. Select h1 from the Add Selector drop-down list and then click Add. The selector dialog adds the h1 tag to the selector table.

Double-click the h1 item in the selector table to start the CSS editor. Change the color property and then click Ok in the CSS editor and the selector dialog. Switch to preview mode and take a look. Now all the <h1> tags on your page will automatically inherit the style established in the <style> tag. To remove the style, go back to the selector dialog, select the h1 item in the selector table, and then click the Selected button in the Remove Selector space.

Some tags have special style attributes that cannot be modified with the CSS editor. To add a border to all the cells of a table, you have to click the Table Properties button in the Table Editor and then set the Border value to the width (in pixels) that you want the border to be.

There are many useful CSS features that I have not covered here. CSS is immensely powerful, and true mastery of the art can take quite a bit of time. I learned CSS primarily by example. There are many Web sites with excellent tutorials that will show you how to use div tags and CSS to achieve a wide variety of elegant page themes.

ADDING FILES TO A PROJECT

What would a Web site be without pictures? To include images and other files in your Web site, you must import them into your project and allow Quanta to copy them into your project directory structure. First, we add an images directory to our current project. Click the sidebar button with the cubes to open the project management sidebar. Next, right-click the project item (the first item in the project management tree) and select Folder from the Create New submenu. Quanta asks you to name the new folder. Type in images and click Ok. You should now see your new images directory listed in the project management sidebar.

Now, let's put an image in our new images directory (Figure 11). Select Insert Files from the Project menu and Quanta will present you with the familiar KDE file selection dialog. After you select the files you want to add and click the Open button, Quanta asks you to select which project directory it should copy the files to. Click the button to the right of the location text box, select the images directory and then click Ok in both dialogs.

Quanta has now copied the file into your project. Now, you have to tell it to update the project management sidebar. Right-click the project item and select Rescan Project Folder from the context menu. Next, click

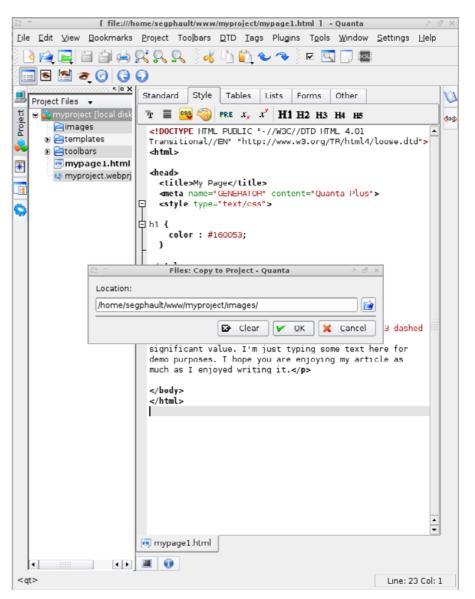


Figure 11. Adding a File

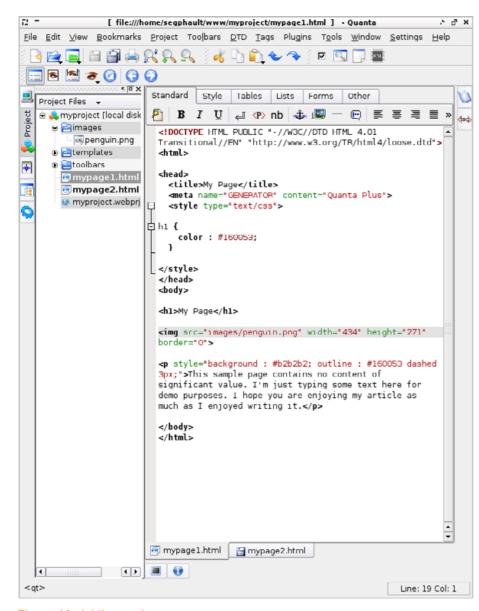


Figure 12. Adding an Image

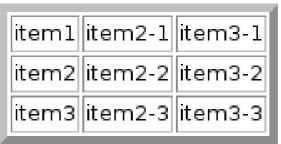
All and then Ok in the dialog that appears. Now, if you click the plus next to the images directory in the project management sidebar you should see that it contains the image you have added. To include the image in your Web site, drag it from the project management sidebar into the document view and drop it in the document where you want it to appear. Try dropping it into the line above your first tag. When you drop an image into your HTML document, Quanta automatically inserts the necessary tag with all the correct attributes (Figure 12).

ADDING LINKS

Links are easy to add. Use the procedure presented in the Creating a New Page section to make a second page. Now, use the tabs at



Figure 13. Adding a Link



My Other Page!

Figure 14. A Link and Table in Preview Mode

72 =	Tag Properties: A	⊡ ×
Main Cor	re & i18n Events	
HREF:	http://www.tuxmagazine.com	Ţ
Name:		
Rel:	▼ Rev:	•
Type:	▼ Target:	•
OnFocus:		
OnBlur:		
	<u>o</u> K	<u>C</u> ancel

Figure 15. Link Creation Dialog

My Other Page!	
I'm going to add a link to Tux Magazine, one</a 	
of my favorite Linux publications! <a>k/p>	

Figure 16. Placing a Link in a Paragraph

the bottom of the document view to switch back to the first page. You should see both pages listed in the project sidebar with the other project files. Drag the second page from the sidebar into an empty line in the document. Quanta inserts an <a> tag and places the TIP inside of it (Figure 13). Type in the text that you want to link to the second page and click the preview button to see what it looks like (Figure 14).

Now, let's add a link to an external Web site. This time, we will place it in a paragraph of text. Add a few empty lines and then create a tag using the tag palette. Type in a sentence or two and then click the button that looks like an anchor on the standard tab of the tag palette to open the link creation dialog.

In the HREF textbox, type (or copy and paste from your Web browser) the URL of the Web site you want to link to and then click Ok (Figure 15). Quanta inserts the link and places the TIP inside of the <a> tag. Type in the text that you would like to link to the URL, and then use the arrow keys or the cursor to move the TIP to the end of the closing tag, where you can continue to type your paragraph (Figure 16).

FPII OGUE

We have now constructed an entire Web page in HTML without having to type in a single tag. I hope this article has helped you understand the power and flexibility of Quanta and its unique design paradigm. There are many features I could not cover here, and I urge you to continue exploring its capabilities on your own. Don't be afraid to experiment with buttons on the tag palette and use the context help to learn more about the tags. If you make a mistake, you always can use the Undo feature. Use the preview mode often; it will help you visualize your page and better understand the implications of various tags and attributes. For downloads and more information, visit the Quanta Web site (http://quanta.kdewebdev.org). I look forward to your comments and guestions. Don't hesitate to send me an e-mail!



Ryan Paul is a systems administrator, a freelance writer and an ardent proponent of opensource technology. He welcomes your questions and comments. Ryan can be contacted at segphault@sbcglobal.net.

Dancing with Windows

Various ways to access Windows files and printers from your Linux desktop.

ALLEN MERCER

If your home computer situation is anything like mine, not everyone in your household has jumped in as an open systems convert. There may be several reasons for this; however, the three that I heard most often when I tried to convert my family were "but I can't play *Battle Zone 3000* like Suzi", "Why can't I play this movie trailer off msn.com?" and, of course, "I'm not going to have to learn something new, am I?"

Whether these concerns are justifiable is for the most part irrelevant, because ultimately, even if you try to take the intellectual high ground, the whine factor becomes intolerable and you end up beating a hasty retreat, tail tucked and offering up a plethora of apologies for ever suggesting something so blatantly insensitive.

And now, your spouse and children have laid claim to your best PC and printer (generously conceded to assist you out of that hole you dug). You labor away in your dungeon—I mean basement office—on that old laptop with too little disk space and the dot-matrix that saw you through college. Even if this isn't your particular predicament, you should be thankful that Andrew Tridgell created Samba in 1992 for the sole purpose of helping you out of this particular jam. (Well, perhaps it wasn't his sole purpose; I tend to get a little carried away working alone down here. But I

am sure it was one of the top five motivators.) Through Andrew's help, you can now take advantage of the wealth of space residing on your kid's PC and use your spouse's color laser printer. Just to be fair, I should mention that there are a lot of sung and unsung heroes who helped create and improve Samba, such as Jeremy Allison, John Terpstra and too many more to name here.

So what is Samba? Assuming you know that it is not a Brazilian ballroom dance, Samba is a program that allows non-Windows PCs and servers to communicate with PCs and servers running Microsoft operating systems. The name is loosely connected to the fact that Microsoft uses what is called the SMB (server message block) protocol to share things. These days, SMB runs on top of TCP/IP to provide near seamless integration with Windows-based computers and their peripherals, and like the rest of the industry, it too has evolved over the years.

From the early days until the not too distant past, it was hard to configure Samba on Linux. You had to use your favorite text editor and adventure into the mysteries of the smb.conf file—not an especially hazardous journey but, at the same time, not for the technically squeamish either. However, now it has become so easy to implement Samba on Linux that several Linux dis-

tributions, like Linspire and Ubuntu, integrate Samba into their installation process, giving you immediate access to all your Windows shares with



Figure 1. Windows has something to share.

the same trivial effort that a browser lets you access the Web.

THE WINDOWS SIDE

Of course, a prerequisite for having Windows resources available on your LAN is that your Windows system has something to share. Just because a Windows PC exists on your network does not, by itself, give you access to all of its resources. Each resource you want to have available must be configured so it can be accessed by other network clients, whether or not they are Windows-based. This can be accomplished relatively easily by going to My Computer (from your start menu or desktop, depending which version of Windows you are running) and using its explorer to locate or create a folder you want to share with other computers on your LAN. Right-click on the folder you want to share and select the Sharing and Security option. Once in the Shared Document Properties Dialog box, check the Share this folder box and provide a Share Name, linuxshare, for example (Figure 1).

Next, configure a printer by going to your Control Panel (also available from the Start Menu), clicking on the Access the Printers and Other Hardware option, and then View your installed printers or fax printers. Right-click on the printer you want to share on your network to bring up the Properties menu, and then click on the Sharing menu item. Indicate your desire to share this printer by clicking on the radio button so labeled, and give it a Share Name, colorlaser.

THE LINUX SIDE

After telling your Windows PC to share with its neighbors, your shared resources should be visible from your Linux workstation.

If you have the latest version of KDE (3.4.1), you should see a computer icon on the main KDE panel. Click on that icon and choose Remote Places. This opens up a file browser that includes a Samba Shares icon (Figure 2). Another method is simply to click on the Konqueror icon on the KDE panel. The latest versions of KDE will show a page that includes a Network Folders link. Click on this link, and you will be taken to a window much like the Remote Places window.

You can click on the wand to mount a network folder. For most people, this will be the hard way to access your Windows shares, because you need to know the names of servers, workgroups and so on in advance.

Let's explore an easier way to access your Windows shares. In this case, you don't mount a network share, you simply add a shared folder to your desktop. Somewhere during this process, you may be required to enter a user name and password, depending on what kind of Windows share you are accessing and how it was configured.

First, if you have the option to open up a Remote Places folder or have the Network Folders link, you can use them to get to the Samba Shares icon. Click on this icon to start your journey.

If you don't have a Remote places folder or Network Folders link, you can open up a Konqueror window and type smb:/ in the location field.

Either way, this should take you to a set of

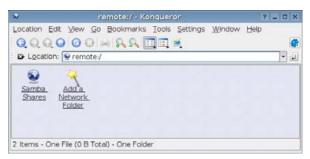


Figure 2. Remote Places

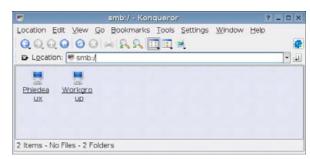


Figure 3. Windows Workgroups in Kongueror

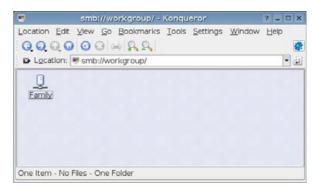


Figure 4. The Family Computer

icons for each Windows workgroup (Figure 3).

Click on the workgroup your family uses. In this case, I clicked on Workgroup, which is the default for Windows installations. This takes me to the computer icon called Family, which is the name of the family computer (Figure 4).

Click on this icon. Now you should see the Windows shares set up on your family computer (Figure 5). In this case, it shows the default names for the shared disk drives C: and D:, which it represents as C\$ and D\$.

I clicked on the drive D\$ icon, and now I can



Figure 5. Shares on the Family Computer



Figure 6. Shared Folders on the Family Computer

see all the shared folders on that drive (Figure 6). If there is a particular folder you want to access frequently, drag the folder icon to your desktop, and when the menu pops up, click Link Here. From this point on, all I have to do to get to the Windows folder is to click on the icon on the desktop. Just as a reminder, the next time you boot up Linux and try to access this folder,

you probably will be asked to enter a user name and password.

THE LINSPIRE WAY

From Linspire, the self-proclaimed "world's easiest desktop Linux", you should be able to view them from the Network Share Manager located on your desktop. This utility is easy enough to

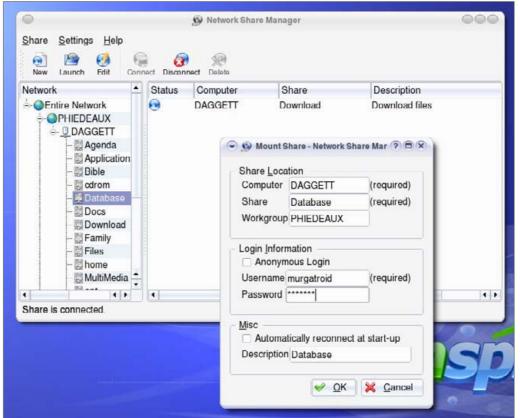


Figure 7. The Linspire Share Manager

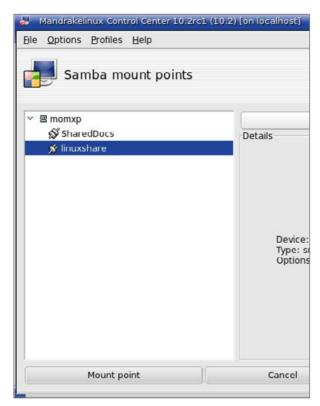


Figure 8. Configure Your Computer with Mount Points in Mandrake

use that it doesn't require a tutorial. It is similar enough to the Windows Network Neighborhood that it should be intuitive for any Windows user. Even if you are not a Windows user, it is fairly obvious that you simply drill down, from Entire Network to the workgroup, to the computer and to the folder. Double-click on

the folder you want to mount, and a dialog box pops up that is self-explanatory (Figure 7).

You also can access Windows shares from the Kongueror Web browser in Linspire by using the techniques described above. But Linspire doesn't make Konqueror your default browser, so you are probably better off using the Network Share Manager.

THE MANDRAKE WAY

If you are running Mandrake 10+, you need to configure your computer by following the System menu entry to the Configuration item and clicking on the Mount Points option. Once there, you are given the opportunity to Set your Samba Mount Points, providing a utility to search your available servers and identify the computer containing the data you want to share (Figure 8). Double-clicking on that entry, entering your user name and password and then

clicking Ok should get you access to your Windows PC. Clicking on the small arrowhead to the left of your computer's name displays the shared folders existing on that server. Highlight the folder you want to access, push the Mount Point button and complete your mount point definition. Once you have it defined, you actually have to mount the drive before you can access it. Not necessarily a complicated process, but a little more work than installing your system and finding your shares already there.

Printer configuration is a little more standardized, especially if you are running KDE 3. Simply go to the KDE configuration menu (System→Configuration→KDE), select the Peripherals option, and choose the Printers entry to use the Add Printer Wizard; the same wizard you use when you add any printer. Advance past the introduction screen to Backend Selection where you can indicate you are adding an SMB shared printer. On the next screen, click on the Normal Account radio button and enter your user name and password. Advance to the next screen and use the scan button to get a list of Windows Work Groups. You can follow the arrows on the left. sequentially clicking on them to bring up a list of PCs and then a list of printers and identify the printer you want to use. From this point on, the process is the same as a routine printer configuration. You select the make and model of the printer, set your banners, give it a name, and now you too are able to use the color laser.

Hopefully, you now are more than confident that you can once again have a happy home with all of your computers playing nicely together. If only there were a Samba implementation for siblings.



Allen Mercer is a Systems Analyst working for a hospital conglomerate in Fastern Tennessee

A Matter of Choice (or Selections, That Is)

Michael explains many ways to be selective with GIMP.

MICHAEL J. HAMMEL

In the big-top circus that is the typical office desktop, chances are you've already become familiar with the show's three rings: word processor, spreadsheet and presentations.

Having used a word processor, you know that one of the first things you learned was to format paragraphs: set the font size, apply bold or italic emphasis, change colors and adjust the justification. These are the basics of the word processor, without which most documents might just as well be plain-old text.

The GIMP has some basic tools too, and some basic processes to go with them. Without a doubt, the most important of the basic tools is the selection. Selections are to GIMP what the whip is to the lion tamer—a tool for you to maintain control over your project.

This month, I show you how selections are more than mere squares and circles. They are the trapeze from which you'll swing your mighty act. Grab a bag of peanuts, find a good seat, sit back and relax. It's time for the show to begin.

SIMPLE SHAPES

The most simplistic use of a selection is as a space to fill. Filling with color is one option. Filling with a gradient is another. Both are easy to do and form the basis of many effects.

Open a new window (File→New from the

Toolbox). Click on the Rectangular selection in the Toolbox. In the Options dialog, make sure the Mode is set to Replace (the left-most button). Click and drag from the upper left of the canvas window to the lower right to create an upright rectangle (Figure 1).

Click on the Gradient Tool in the Toolbox. In the Gradient Options, click on Shape to Bi-linear and click on the Reverse button to turn it on. Starting somewhere on the left side of the selected rectangle, click, hold down the mouse button and drag the mouse to the right edge of the selection, then release the mouse button. Voilà—instant cylinder (Figure 2).

Be sure to drag straight across. You can turn on Snap to Grid (right-click on picture, View→Snap to Grid) before dragging, and that may help.

RING SELECTIONS

Open a new window. Create a new layer (rightclick on picture, Layer→New). Click on the Elliptical selection tool. Holding down the Shift key, click and hold down the mouse button as you drag it in any direction to create a circular selection. The Shift key forces the selection to be circular. If you do not hold down the Shift key, you can create elliptical or oblong selections.

Notice that the selection expands in the direction you are dragging the mouse. So, if you plan to select a circle in the middle of your drawing

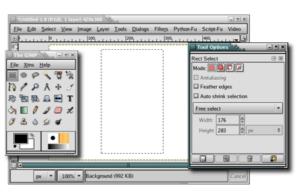


Figure 1. Toolbox, Options, Canvas and Selection

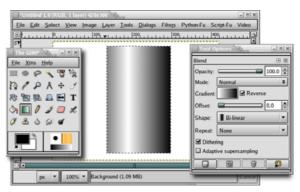


Figure 2. Toolbox, Options, Canvas

area (canvas), you would not start by clicking the mouse in the middle to create your circle. You are more likely to get the circular selection you want by starting somewhere that you expect to be the edge of your circle. For example, start at where you expect the upper-left edge of the circle will be, and drag the mouse down and to the right as you hold down the Shift key.

Now, back to gradient fills. Click on the Gradient Tool in the Toolbox. In the Options dialog, click on the button that shows the gradient and let go of the mouse button. A list of gradient

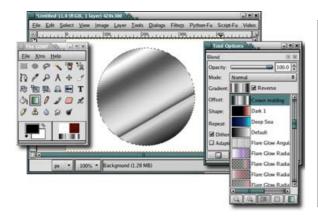


Figure 3. Toolbox, Gradient, Options, Canvas

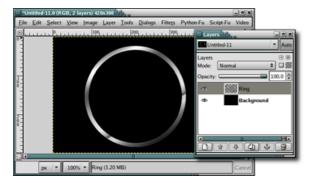


Figure 4. Canvas, Layers Dialog

types opens up. Scroll through the list and choose the Crown Molding gradient. Set the Shape to Linear. Click and drag across the selection to fill it with this gradient. Click on the layer name to name this layer Ring. See Figure 3 as an example of how your work should appear.

Now, reduce the size of the selection by 10 pixels (right-click on picture, Select→Shrink). Use Ctrl-X (or right-click on picture, Edit→Cut) to cut the selection out of the gradient you just applied. You should now

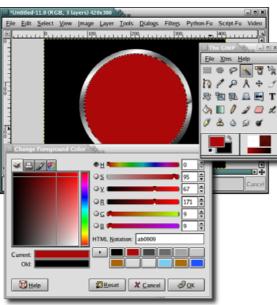


Figure 5. Canvas, Toolbox, Layers Dialog, Change **Foreground Color**

see a ring instead of a gradient-filled circle.

Click on the Background layer in the Layers dialog to make it active. Fill the Background layer with black by dragging the foreground color onto the layer in the Layers dialog. Because you made the background active, you also could have dragged the foreground color onto the picture itself, and it would have given you the same result. You should see something like Figure 4.

Click on the Ring layer in the Layers dialog to make it the active layer. Select the Fuzzy Select tool from the Toolbox. This is the button that looks like a wand and says Select Contiguous Regions if you hover the mouse pointer over it. Click inside the Ring in the canvas, and it automatically selects the inside of the ring.

Now, create a new transparent layer. You do this by clicking on the button in the Layers dialog that looks like a single new sheet of paper. A dialog pops up. It should have Transparency selected by default. Click Ok.

Double-click on the Foreground color box to open the Change Foreground Color dialog. Click in the part of the color box that makes the foreground color reddish or maroon. You can experiment and click around until you get the color you want. Close the color dialog.

Drag the new Foreground color into the selection. Instant metallic-edged button—like the one you see in Figure 5.

ODD SHAPES

You can create complex shapes by transforming and joining common selections. This sounds more complicated than it is. Here's how you do it. Open a new window. Click on the Rectangular selection tool in the Toolbox. Hold down the Shift key and drag through the canvas to create a small square selection (Figure 6). (Holding the Shift key forces the rectangle selection to be a square, just as holding the Shift key for the elliptical selector forces the selection to be a circle.)

Click on the Rotate Transform tool. You can find it by letting the mouse pointer hover over the tool buttons until the tooltip says Rotate the layer or selection. In the Options dialog that appears, set the Affect option to Transform Selection (it is the middle button). Click on the canvas to open the Rotate dialog (Figure 7). Type 45 in the Angle field, because that is the most accurate way to rotate the selection 45 degrees. Click on the Rotate button.

Click on the top ruler, hold down the mouse button and drag a Guide line from the top ruler down

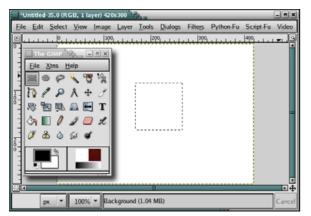


Figure 6. Toolbox, Canvas

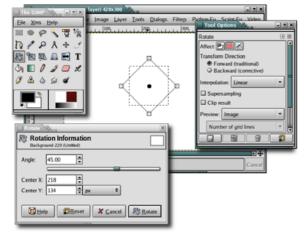


Figure 7. Toolbox, Canvas, Options

until it intersects with the left and right corners of the rotated box. Click on the Rectangular Tool in the Toolbox. In the Options dialog, click on the Subtract Mode (third button). Point the mouse to the left end of the guideline, and drag a selection downward whose top runs along the Guide and completely through—left to right—the bottom half of the rotated selection. This should leave you with a triangular

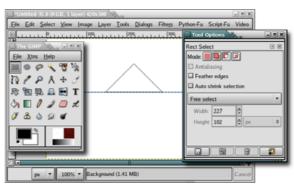


Figure 8. Canvas, Options Dialog

selection on top. Scale it and squeeze it using the other Transform tools in the Toolbox (Figure 8).

SHAPING YOUR VIEW

We're now going to make a picture of a magnifying glass.

Click on the toolbox to make it the active window. Type the letter D, which resets the color boxes to black and white.

Open a new window and create a new laver (right-click on picture, Layer→New, then click Ok). Choose the Rectangular Selection tool from the Toolbox. In the Options dialog, click on the first rectangle button to reset the mode to replace the current selection. In the same dialog, find the button that says Free Select, click it and change it to Fixed Size. Set the width to 30 and the height to 10. Click and drag in the canvas. A presized selection appears (Figure 9).

Open the Gradient tool. Click on the gradient button and select FG to BG (RGB) from the list of possible gradients. Set the Shape to Linear if it is not already set that way by default. Drag through the small selection from bottom to top. Remove the selection (right-click on picture, Select→None,

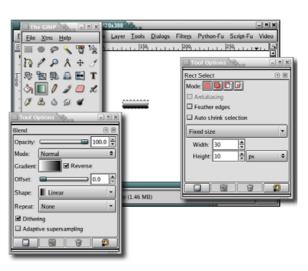


Figure 9. Canvas, Options Dialogs

or Ctrl-D). Click on the Move tool (the crossed arrows button), and select Move the current layer in the Options dialog. Drag the layer to the right side of the canvas.

Create a new layer. Choose the Rectangular Selection tool from the Toolbox. In the Options dialog, set the type to Fixed Size, the width to 175 and the height to 30. In the canvas, click and drag. A presized selection appears. Open the Gradient tool, set the gradient to FG to BG (RGB) and the shape to Linear. Drag through the small selection from bottom to top. Remove the selection the same way you did before (right-click on, picture Select→None, or Ctrl-D). Click on the Move tool (the crossed arrows button) and select Move the current layer in the Options dialog. Use the Layers dialog to activate the two layers with the gradient rectangles, and work with them until the large rectangle overlaps the small as shown in Figure 10.

Click on the top layer in the Layers dialog and merge the two gradient layers (right-click on pic-



Figure 10. Canvas, Options Dialogs

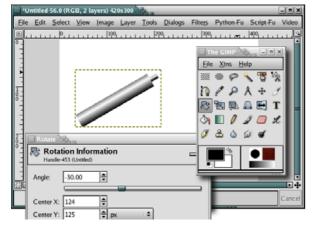


Figure 11. Canvas, Toolbox, Rotation Dialog

ture, Layer→Merge Down). Double-click on the layer name, type Handle and press Enter.

You want to select this handle such that you can move it around. Here's how to do that. To select only the handle, right-click on picture, Layer→Merge Down Layer→Alpha to Selection. Copy this selection (Ctrl-C) and then paste it

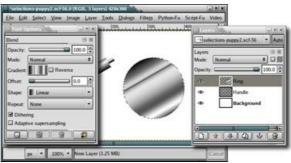


Figure 12. Ring Layer



Figure 13. Magnifying Glass

(Ctrl-V). Now that you have a floating handle selection, make this floating selection a new layer (right-click on picture, Layer→New). Delete the original Handle layer. Name the new layer Handle.

Click on the Rotate tool in the Toolbox. Click on the canvas. In the Rotation Information dialog type -30 in the Angle field. Click the Rotate button to apply the rotation to the handle (Figure 11).

Create a new layer (right-click on picture, Layer→New). This next part should be familiar to vou because we've done it before. Click on the Elliptical selection tool. Holding down the Shift key, click and drag to create a circular selection.



Figure 14. Final Puppy

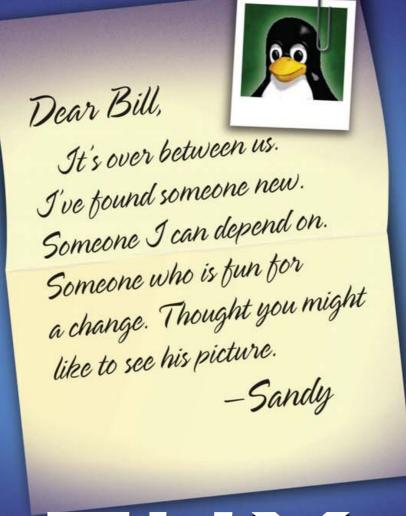
Click on the Gradient tool in the Toolbox. In the Options dialog, click on the Gradient button and choose the Crown Molding gradient and set the Shape to Linear. Click and drag across the selection to fill it with this gradient. Click on the layer name to name this layer Ring (Figure 12).

Now reduce the size of the selection by 10 pixels (Select→Shrink). Use Ctrl-X to cut the selection out of the gradient you just applied. Click on the Handle layer in the Layers dialog. Drag that layer to intersect with the Ring layer. Move the Ring layer if needed (Figure 13).

I've taken this example a bit further by adding a puppy layer and using the Lens filter (Filters→ Glass Effects→Apply Lens) to warp the face a little (Figure 14). Much of this project focused on using selections: the handles, the lens ring and the distorted face. As you can see, selections are an important tool in your GIMP toolchest.

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Linspire Is Filled with Linspiration

Despite some flaws, Linspire is by far the best newbie Linux distribution, especially if you are a Windows convert.

P.50 Linspire

RICKY FREEDLANDER

Version tested: 5.059

Price: \$59.95 US suggested retail price

\$49.95 US as a download

CNR subscription: \$49.95 US per year

http://www.linspire.com

I've tried just about every Linux distribution whose name most people would recognize and then some: Red Hat, Fedora, SUSE. Mandriva (formerly Mandrake), Debian, Knoppix/Gnoppix, Mepis, PCLinux OS, Xandros, Ubuntu/Kubuntu and more. None of these alternatives rival Linspire, formerly Lindows, for ease of use, especially for those who make the transition from Windows to Linux. The folks at Linspire have a unique understanding of what it takes to make average users comfortable with their desktop. The average Linux desktop has come a long way, but it is still permeated with user interface decisions made by self-absorbed geeks who have no idea how normal people want to use computers. Linspire has identified most, if not all of these shortcomings, and has addressed them in one way or another.

For example, Linspire includes a remarkable tool called Click-and-Run (CNR). CNR is an installation tool that lets you add and remove packages from your system. You can install both free and commercial packages from CNR.

CNR organizes all the available applications for Linspire in categories that people are most likely to understand. For example, you can click on Audio & MP3 and CNR presents you with a list of available packages, plus links to subcategories. You don't



have to click on an application name to find information about what it is or what it does, because the description shows up along with the package name itself (Figure 1). If you see an application you like, you simply click on a little green button and

Figure 1. CNR is the ultimate package manager.

CNR installs the package immediately. There's no dialog box that lists all the dependencies (other packages) your selection needs, and it will install these in addition to the application you want. A nongeek user is going to say, "Who needs that sort of thing, anyway? Just install the program and don't bother me with the details."

I was expecting the Linspire CNR warehouse to have a terribly limited assortment of available applications, but I was surprised to find almost everything I wanted in the warehouse. It even had avidemux, which is a fairly obscure but useful open-source program for manipulating AVI videos. I've had trouble finding it for other distributions, and as far as I can tell, I can't even get it at all for Ubuntu Linux without breaking things or compiling it myself.

CNR REMEMBERS

You also can purchase commercial programs and install them automatically from CNR. And here is the icing on the cake: Linspire's CNR remembers what you pay for and install. If, for some reason, you must switch computers and re-install Linspire from scratch, CNR remembers what you installed before (based on your account and registration details). This means you can bring your new system up to date with all the software you chose before with very little trouble. You also can re-install commercial packages like Photogenics immediately, without having to pay for them again. Linspire CNR remembers that you already paid for this package. In fact, even if your subscription to CNR runs out, you can still re-install Photogenics for free as long as you paid for it when you had a valid subscription.

THE ALTERNATIVES

The only way to appreciate fully the advantages of CNR is to compare it to other package managers.

Desktop users inevitably will want to install some new software or update their existing software. There are some remarkably easy package managers available for Linux these days that handle these tasks. Xandros has a custom, easy-to-use package manager that is similar in some ways to the Linspire approach. Kpackage is not customized, but it is standard with KDE and is practically a work of art. However, even these similar tools pale in comparison to Linspire's CNR program.

The problem with programs like Kpackage (and in some cases, the Xandros custom installer) is that it is really just a skin-deep front end for the distribution's package system. So, Kpackage "thinks" pretty much the same way the distribution's package system works. No distribution has an intuitive packaging system, and that deficiency always manages to leak into the way Kpackage works. For example, a Kpackage front end to Debian organizes packages the Debian way, which is not userfriendly. The categories of packages include things like X11, tex and python. Grandma simply isn't going to get that. Xandros organizes its packages better, and it gives you the chance to install packages with a single click. But it is not nearly as feature-rich nor as easy as Linspire's CNR program.

PAY FOR FREE SOFTWARE?

Users who are already savvy about Linux will cringe at the thought of having to subscribe to a CNR service to download and install open-source programs they can get for free, but Linspire isn't made for those users. The rest of the world will find it worth every penny for the convenience.

Right now, you can get a short, free trial subscription to CNR with every purchase of Linspire. During this time, you can download as much free software as you like. In fact, if you want to

"cheat" Linspire out of their subscription fee, you can download every free package you can find before your free trial expires.

The subscription fee for CNR is roughly \$50 per year. Right now, you get two extra benefits for this price. First, you get technical support from Linspire. You also get hefty discounts on commercial software that you can download with CNR. I purchased Photogenics for \$19.95 through CNR. The retail price for Photogenics is \$79. If I found a few more commercial packages for Linux to be appealing, both Linspire and CNR would pay for themselves very quickly in the discounts I get just for using Linspire.

Linspire hints that the subscription fee may change in the future. Linspire is considering lowering the CNR subscription fee by removing the support option from it. You pay less every year for CNR, but you still get the discounted prices on commercial software. What you do not get is support from Linspire. If you want that, you'll have to pay the full \$50 per year. None of this is official yet, but it is likely that Linspire will move to a different pricing model like this one. If Linspire does reduce the yearly fee for CNR alone and still offers discounts on commercial software, that would make CNR truly unbeatable in the market.

LINSPIRE "GETS IT"

Here's another example of how Linspire improves the user experience. digiKam is a feature-rich and powerful photo manager you can get for any distribution. But intuitive, it is not. Linspire offers its own equivalent program, Lphoto.

Just compare the two screenshots, one of digiKam (Figure 2) and one of Linspire's Lphoto (Figure 3), and the difference should be obvious. Anyone who fires up Lphoto can see instantly how to e-mail photos, print them, set one as the desktop

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Figure 2. digiKam Photo Manager



Figure 3. Linspire's Custom Photo Manager, Lphoto



Figure 4. Lphoto Edit Options

background or view the current library as a slideshow. Why? There are big buttons at the bottom of the window for each of these common tasks.

Do you want to crop a picture or remove redeye from a portrait shot? Click on the Edit tab, and you will see big buttons for these kinds of tasks (Figure 4).

Even operations like burning photos to a CD or making a screensaver are easy to find. They're not big buttons—they appear in the main menu, but that's hardly worth a complaint.

Now, have another look at digiKam and ask yourself if you see from the picture how to e-mail a picture or group of pictures, how to set one as your desktop wallpaper or how to perform any of the tasks mentioned above.

The point is that Linspire "gets it". Most people don't want to learn how to use a program like digiKam, no matter how powerful it might be. They want to download and organize their photos, print them, send them by e-mail and so on. They don't want to browse menus or read a tutorial on how to e-mail a photo. They want a big button that says Email. This is the kind of approach Linspire takes to all its modifications and additions.

(As an aside, Linspire made Lphoto open source, so you can get Lphoto installed and working in other distributions, but it's usually not easy to find the source or install it.)

A BETTER WINDOWS THAN WINDOWS

Linspire hasn't copied Windows down to the last detail, and that should come as a relief to all users, both Windows fans and Linux fans. But Linspire has made the default desktop configuration very Windows-like in many ways. For example, the desktop is based on KDE, where you normally single-click an icon to activate it. You have

to double-click icons on the Linspire desktop, just as you would in Windows.

Linspire doesn't give you any virtual desktops by default, because virtual desktops can be confusing to new users, especially if they are already used to Windows. But Linspire doesn't stop a savvy user from changing these defaults. You can switch to single-click icons if you want, and you can add virtual desktops if you want. But the default configuration is a clever way to make the desktop as friendly as possible to ex-Windows users.

Linspire has adapted full-blown Mozilla for e-mail, browser, address book and scheduler. I expected to snub this combination at first in favor of Firefox and other tools. But once I started using the Linspire suite, I found it quite irresistible. I'm even thinking about adopting this approach with other distributions. Naturally, Linspire includes OpenOffice.org as its office suite.

Linspire also comes with more device drivers than I have found in any other distribution. For example, my Linksys WUSB wireless adapter worked perfectly, the first time. I know of no other distribution that supports this USB wireless adapter out of the box. I have to compile my own drivers for every other distribution I have tried, and as of this writing, the latest source code for the USB wireless adapter doesn't work with the latest Linux kernels.

THE DOWNSIDE

Linspire is far from perfect just yet. The installation process does help you create a normal user, but it is far too easy to use Linspire as root (the Administrator) by default. The folks at Linspire may even work this way themselves, because at least one Click-and-Run application I installed wouldn't finish the configuration step until I

logged in as root and installed it from there. This is one thing Ubuntu gets right and Linspire gets wrong (probably in an effort to emulate Windows XP, which is poorly designed). Ubuntu does not even let you create a root user password, and it prohibits you from logging in as root. If Linspire took this approach, it would come that much closer to being the perfect newbie distribution.

Another downside to Linspire is that if you upgrade to a new version or re-install Linspire over the existing installation, you still have to re-install all the CNR applications you installed previously. These applications actually exist on your hard drive, but the Linspire desktop doesn't know about them until you re-install them. Fortunately, CNR keeps track of all the packages you installed, and keeps track of them off-line. So, you can reinstall everything you had installed before, and do so guickly and easy. As mentioned before, you do not have to worry about paying twice for the same commercial package. CNR remembers what you paid for.

VERSION CATCH-UP

There is always a trade-off you have to make when you customize a desktop like Linspire has customized KDE. It keeps your distribution at least one or two versions behind the current version. Linspire's desktop is based on KDE 3.3.2.

It is debatable as to whether this drawback is the fault of the Linspire or the KDE folks. If KDE were already intuitive enough as it is, companies like Linspire wouldn't have to modify it to make it easier for the novice user. The question is whether the modifications are really necessary. That you'll have to decide for yourself if you buy Linspire.

I happen to think Linspire has it right, and KDE needs to pay attention to at least some of the

changes Linspire made. In fact, Linspire is so desirable that I have been tempted to switch to it as my default desktop despite the fact that I would have to give up using the latest KDE. This is saying a lot. I am obsessive-compulsive about using the latest software. I am the kind of Linux user who measures the age of the software I use in hours. not version numbers.

You can boot the Linspire CD as a live CD. This is nice, but I don't quite see the point. If you bought Linspire, you might as well install it. Most Linux distributions are easy to install these days. Linspire was a little easier than others, but not so much as to make a fuss about it. And as with all distributions, your mileage may vary. Even Knoppix—known for its massive support for almost every computer imaginable—doesn't install well on some machines. So there is no guarantee that everyone will have a problem-free installation of Linspire. This is where it will come in handy that you have to buy Linspire. You can call the company and get support.

Finally, I was excited at first when I saw that Linspire includes full-screen narrated tutorials. The tutorials are really sharp and professional looking. But I was a little disappointed when I found out that only the first, most basic tutorials are narrated. The other tutorials, such as the one on how to set up a network card, are good enough that you don't need the narration to learn what to do. but it still seemed a little cheesy to boast about narrated tutorials if they're not going to narrate all of them.

CONCLUSION

Well, it's time to get to the inevitable controversy. You can't get Linspire for free. (Well, it's just as "free" as Windows if you buy a PC with Linspire

pre-loaded, and Linspire is making more and more pre-load deals all the time—but that's another story.) You have to buy Linspire. You can download a copy for \$49.95, but most of the target audience for Linspire will want to purchase a box for \$10 more. You don't get much more for that \$10 besides the convenience of not having to download an image file and burn a CD. There isn't much in the box that makes it worth \$10. more except the convenience of having a premade CD. You get a short, free trial of CNR, and you can download a warehouse full of software during that time. After that, you have to pay \$49.95 per year to use CNR. (Though, as mentioned previously, this rate may become dramatically less if you want to opt out of getting support from Linspire.)

If you intend to pay for a good number of commercial products for Linux, such as Photogenics or Moneydance 2005 (a Quicken-like program for Linux), Linspire and your CNR subscription will eventually pay for themselves in the discounts you get for these products. Some commercial products are totally free only to CNR subscribers, making the deal even sweeter.

The bottom line is that if you are savvy about Linux, Linspire probably isn't for you. But if you are a novice desktop user, or a nongeek who is used to Windows and wants to switch to Linux, Linspire is, hands down, the ultimate distribution. The competition, if there is any distribution worth calling competition, doesn't even come close. You will find that both Linspire and the CNR subscription are worth every penny.

Ricky Freedlander is a consultant and freelancer and has been using Linux since 1995.

Gadget Guy: Snap Snap!

SEAN CARRUTHERS

One of the nicest things about the bulk of today's new digital cameras is that they've dispensed with the proprietary software previously needed to move your images from the camera to your PC. Although the software often added a few nifty features to a Windows-based computer, it also tended not to be overly friendly with other operating systems, which meant that Linux users had to use alternative methods for retrieving pictures.

Now, most cameras act as "storage-class" devices when you plug them in to a computer with the USB cable. This means it no longer matters what type of machine you're plugging the camera in to-Windows, Mac or Linux-the newest generation of digital cameras should act just like any other external media, and you can drag and drop your photographs into the appropriate folder right on your computer.

This month, I take a look at a pair of new digital cameras designed to connect to your PC this way. Fire up your favorite photo editor and manager—there's photography afoot!

FUJIFILM FINEPIX F10

http://www.fujifilm.com \$400 US

FujiFilm has long been touting the benefits of its 6.3 megapixel SuperCCD imaging sensor, and the F10 is the company's new high-end consumer model. It comes with a 3x optical zoom, and

there's a large 2.5-inch optical viewfinder on the back of the camera, but the whole thing checks in at a svelte 90 x 57 x 28mm. (One casualty of the compact design is the optical viewfinder, which is omitted completely on the F10.)

The camera is surprisingly powerful for such a compact model. Startup time is very quick, giving you the ability to take your first shot within five seconds of pressing the power button. A guick flick of the mode dial—located around the shutter button moves you quickly between automatic, manual. movie and scene position mode. The last of these modes lets you switch between portrait, landscape, action, night-shooting and "natural light" modes. Natural light mode is my favourite, as it allows you to take pictures in low light conditions without having to use the flash, so you can get good shots with both foreground and background items clearly visible.

Although the camera takes great pictures in a variety of conditions, a couple things aren't ideal with the F10.

First is the camera's occasional tendency to focus really, really—and I mean painfully—slowly when you're in macro mode; it's almost like you can hear the miniature workers inside heaving-ho and yanking on the pulleys to get all of the optics in place. Ow.

The second is the use of a nonstandard connector on the side of the camera to provide both USB connectivity and power. It's a nice way to tame the cable sprawl on your desktop, but it means that any time you want to connect the camera to a computer, you'll need the special adapter brick that hooks to both the USB and power cables.



The camera comes with a 16MB xD card for picture storage, so you'll definitely want to invest a bit of extra money in a higher-capacity card. With 512MB cards at about \$80 and 1GB cards at \$120. you'll want to buy as large a card as you can afford, because once you start shooting with the FinePix F10, you won't want to stop.

NIKON D50

http://www.nikon.com \$900 US

Photography fans who come from the 35mm film camera school will almost certainly want to check out one of the growing numbers of digital SLR cameras available these days, but the question is where to start?

If you've never played with an SLR before either digital or film-based—the big selling point is control over your image. First of all, SLR stands for Single Lens Reflex, which means that what you see through the viewfinder is what you get when you press the shutter. There are a series of mirrors inside the camera that allow you to look directly through

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the lens when you frame your image, as opposed to a smaller window located beside the lens. There are other factors involved that can make this untrue, but in general, an SLR is a "what you see through the lens is what you will get for your final picture".

Anyway, if you've already built up a collection of Nikon lenses for your old film camera, the Nikon D50 is a great value-conscious option.

Although Nikon also has a few digital SLR models aimed at more professionally inclined photographers, the 6.1-megapixel D50 is designed for the SLR-curious digital photographer, with a slightly scaled-back feature set and a scaled-back price to match.

In addition to the 18–55mm lens that comes with the camera, the D50 is also designed to work not only with any of Nikon's new digital lenses, but also with the growing number of the company's oldschool analog lenses designed for the Nikon F-mount system. (Note: the old-school lenses won't provide full automatic functionality and won't send digital information back to the camera for storage as metadata inside the image files, but if you're willing to do manual work on both the zoom and focus rings, you can use the old lenses just fine.)

Secondly, though digital SLRs give you a wide range of automatic shooting modes, you also have the ability to flip into manual mode guickly and change your settings by hand, including focus, aperture, shutter, white balance, ISO equivalency and more. True, you can change some of these things with point-and-shoot models, but the process is often very odious. With digital SLR, it's often as easy as brushing your thumb against a jog wheel.

The Nikon D50 does a pretty good job of balancing the manual and automatic capabilities,

which makes it a great choice for those just wading into the world of digital SLR. You can go almost fully automatic

at the start, but

as you become more familiar with what the controls do, you can delve in as far as you like.

There's a mode wheel on the top left-hand side of the camera, and in addition to the major manual options (program, shutter-priority, aperture-priority and full manual), there's also a fullautomatic mode so that you don't have to worry about any settings. Additionally, there are a few scene modes, for shooting under very particular conditions, like portrait shooting, landscape, action, close-up/macro, night shooting and a

special setting for those trying to photograph active children. Moving between modes is as easy as changing the position of the dial—no need to burrow around in an onscreen menu system looking for the right settings.

Manual focus is a bit trickier with the D50. There are two switches—one on the body of the camera and the other on the side of the lens—for switching between manual and automatic focus. The real problem with the camera's manual focus capabilities is the tiny focus ring located at the very tip of the bundled lens. It's not an ideal location. First, it makes fine focusing work more difficult than with a lens that has a larger focus ring placed further back on the lens; second, if you're not exercising caution, you could inadvertently smudge the lens with the oil on your fingertips.

As with the vast majority of digital SLR cameras, the Nikon D50 doesn't come with a memory card, so you'll have to budget a bit extra. The D50 breaks with digital SLR tradition, however, as it uses SecureDigital memory instead of the more commonly used CompactFlash. Make sure to get one of the higher-performance SD cards, though, so the card doesn't become a performance bottleneck; it's well worth the price difference.



Sean Carruthers is a freelance technology journalist from Toronto. He spent six years at Canada Computer Paper, first as Products Editor at The Computer and later at HUB Digital Living magazine. As a freelancer, he has written for the Globe and Mail, http://globetechnology.com, HUB Digital Living, Computer Dealer News,

Homefront and CE-Biz. Although a relative newbie with Linux (SUSE, thank you very much), he has extensive experience with tech gadgets of all sorts and is enjoying figuring out which ones are compatible with Linux.

digiKam

digiKam is digital photography tool that interacts with your digital camera to import, edit and manage your digital pictures.

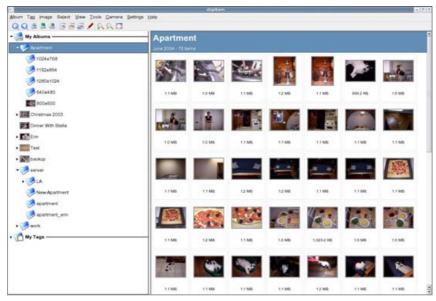
It is able to autodetect a large number of digital cameras, manage and organize different photo albums, perform image manipulations and even export your albums as photo galleries to publish on the Web.

digiKam has been around for a while and is definitely one of the most advanced photo management tools for the Linux desktop today.

The main dialog features an expandable tree of albums on the left, and the main panel is used to display thumbnails of all the images in the selected album. Placing your



digiKam Photo Import tool



Main digiKam Window

mouse over any of the thumbnails will display additional information about the associated picture.

digiKam also supports some interesting plugins for export of your photos as a calendar, batch image manipulations, a slideshow tool that creates MPEG slideshows for your photos and much more.

The application is pretty straightforward to use. Typically, you will plug in your digital camera to the USB port of your computer, then click on the Camera menu entry, then select the Add Camera entry. Clicking on the Auto Detect button at this point typically detects your digital camera and adds it to the list.

After clicking the OK button, a camera import wizard shows up. You can use that wizard to select the pictures you would like to import from your camera and select an album where they should be imported. Optionally, you may choose to have digiKam automatically delete the photos from the camera once they have been completely imported.

On the editing side of things, the built-in editor that comes with digiKam does a pretty good job of most of the little tasks I frequently need after importing pictures. digiKam offers cropping, rotating and scaling tools, a red-eye reduction filter and a few color filters to apply color effects such as sepia, black &



Photo Editor

white and so on, to your photos.

Overall, I found digiKam to be a perfect all-in-one solution for importing, editing and managing photo albums from all my digital cameras over the last few years. It performs well, looks great and the user interface is intuitive.

-Xavier Spriet

About digiKam:

- License: GNU General Public License (GPL)
- **Price**: Free
- Web site: http://www.digikam.org

Impress

The OpenOffice.org office suite appears to be getting close to a 2.0 version, with beta versions available on the Openoffice.org Web site for the last few months. I decided to look at what was in store for us, so we can all know what to look for when the final release comes up.

This month, I take Impress 2.0 (build 1.9.110) for a spin.

I had a few issues with the 1 x versions of Impress in the past, but I have to say I am guite impressed by the 2.x series of builds. The user interface is quite smooth and looks a lot better on the GNOME desktop than it used to.

Looking beyond the new, polished user interface, you will be pleasantly surprised to find a much-improved Microsoft PowerPoint compatibility in place. I was able to import large files guickly and complex presentations with no effort, and the reverse operation was just as straightforward.

Additionally, I was able to export my presentation as a Macromedia Flash file. which in turn allowed me to integrate a multimedia presentation to a Web document that everyone can read with a Web browser. This feature was already part of Impress in previous versions.

Impress features a presentation wiz-

ard that will help you get started while creating a new presentation. Additionally, a plethora of import and export formats are also supported. Although the major ones will be the Microsoft PowerPoint format, the new Oasis Open Document format and the Flash export filter, others are also provided such as PDF, HTML, various

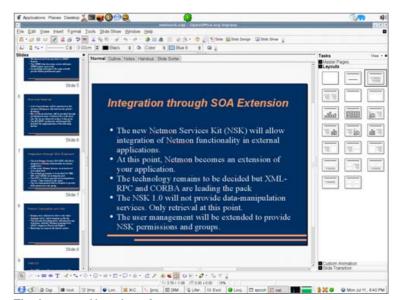
graphic formats and so on.

One issue that I originally had with most OpenOffice.org applications was the small amount of templates that shipped with the applications. After all, I don't necessarily want to design a new template from scratch every time I want to come up with a new personal presentation. I was guite thrilled when I noticed that OpenOffice.org supports the import for Microsoft Office templates as well. I was able to copy my entire collection of Office templates into my OpenOffice.org templates collection and use them for all subsequent documents.

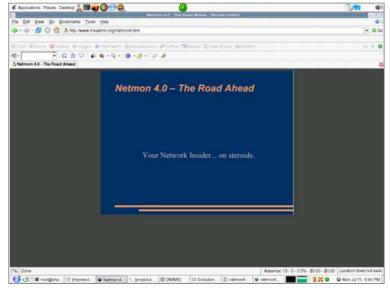
-Xavier Spriet

About Impress:

- **License:** Sun Industry Standards Source License (SISSL), GNU General Public License (GPL) and LGPL.
- **Price**: Free
- Web site: http://www.openoffice.org/ product2/impress.html



The Impress User Interface



A Flash Presentation

Planner

Whether your current project is professional or personal, short- or long-term, simple or complex, Planner facilitates the process of managing your project.

Like many project management tools, Planner lets you break down your project in tasks and phases. Individual tasks also can be broken down into sub-tasks, with a very flexible hierarchy.

For each task, Planner allows you to specify the duration, completion rate, priority, human or material resources assigned to the task, as well as notes and precedence relationships with other tasks.

The first panel of the interface features a task manager and a Gantt-chart. Any change to the project's tasks are reflected immedi-

ately on the Gantt chart. It is very important to specify the precedence relationships between tasks correctly; otherwise, the Gantt chart shows all your tasks scheduled at the same time.

Planner also allows you to manage the resources (whether human or material) allocated to a project. Specifying a cost for each resource also lets planner provide you with a cost estimate for material and labour broken down by tasks and sub-tasks.

It is also worth mentioning that if at any point, the user interface of Planner seems confusing or you are not sure what goes where.

Planner features a good user guide that illustrates most of the concepts involved. Click on the Help menu entry and select the User Guide to find out more.

Once resources have been created through the Resources Management panel of the application and properly assigned to individual tasks, you can visualize the utilization of all the resources allocated to the project through the Resources Usage chart.

Additionally, Planner supports the export of

complete projects into an HTML report, which you can upload to any Web server and instantly publish on the Web. This is especially useful if you want to provide your coworkers with a report on the status of the project and they do not have Planner installed on their system.

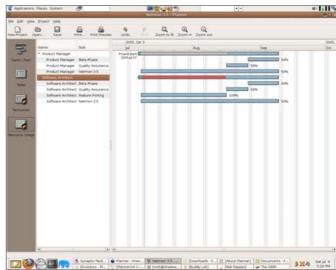
that is widely used by project managers in the workplace. The ability to open files created with Microsoft Project provides a better level of collaboration between multiple project managers.

—Xavier Spriet

Task Creation Dialog XML files. Microsoft Project is an advanced project management application







Resources Usage Chart



Change...

- **License:** GNU General Public License (GPL)
- **Price:** Free

■ Network Activity Report - Edit task properties X

General Resources Predecessors Notes

Schedule: As soon as possible

Duration:

Complete: 0

Priority: 10

Network Activity Report

Web site: http://developer.imendio.com/wiki/ **Planner**



XChat

XChat is an IRC (Internet Relay Chat) client. It allows you to connect to any IRC server and join channels (chat rooms). IRC networks are a great way to find people in your area or with similar interests, but it also represents a great way to get support for your favourite Linux distribution.

The way IRC works is that chat takes place on different networks. Each network typically represents a fair amount of IRC servers. But each network has no logical link to any other IRC network. This means that typically, a channel named #linux on one specific network will be totally unrelated to a channel named #linux on any other IRC network.

Now that we've covered the high-level basics of what IRC is, let us look more closely at XChat.

The first time you run XChat, the program prompts you to configure some key settings, such as the user name you would like to use, as well as alternate user names in case the one you were originally aiming for is already in use.

Once you have selected the user name, you must select a network. Most open-source projects have official support channels set up on the Freenode network, so I recommend you start off by using that one.

Once connected to a server, you can find channels that are of interest to you by clicking on the Window menu entry and selecting the Channel List entry. This allows you to search the entire list of channels on that server for a specific keyword or pattern.

XChat lets you connect to multiple IRC networks within one session. You can then join as



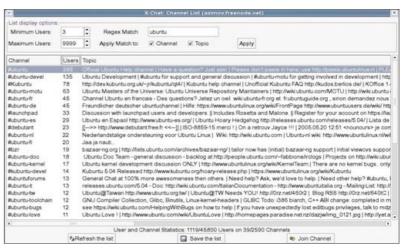
XChat Server List

About XChat:

- **License:** Gnu General Public License (Linux version only)
- **Price:** Free (for Linux)
- Web site: http://www.xchat.org

many channels as you would like for each of your current network sessions. Additionally, XChat supports sending and receiving files through IRC, chat area transparency, plugin support, event notifications, connections to SSL-enabled IRC servers (for encrypted chat sessions), a URL grabber dialog that gathers all links pasted in

any channel you are sitting in, text auto-replace (useful for common typos), configurable dialogs and much more. XChat offers all the useful fea-



XChat Channel List



Main XChat Window

tures one would expect from an IRC client in a non-intrusive way.

-Xavier Spriet