SUITED UP: Take a KDE PIM wherever you go

"You don't need lawyers to compete"

Call off the GNOME dogs

TUX

the first and only magazine for the new Linux user

GnuCash
Quicken your finances on Linux

gThumb
Another way to manage your photos

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You CAN Play Windows Games on Linux

YOU WILL FIND OUT HOW TO USE CEDEGA TO PLAY MANY WINDOWS GAMES ON LINUX, AND SPECIFIC INSTRUCTIONS ON HOW TO SET UP AND PLAY *DEUS EX* WITH WINE, ALL THANKS TO *TUX*.

INKSCAPE REVISITED
Our continuing series on Inkscape defines Inkscape concepts

iRIVER
Carry your tunes and more using one of two ways to connect an iRiver device to your Linux desktop

THIS MONTH'S MANGO PARFAIT:
Mango confesses her love for GNOME (we think), explains how to share a partition between Windows and LInux, takes some guesses about solving browser problems, and recommends some Playstation 2 games (go figure).

TUX
ISSUE 7
OCTOBER 2005

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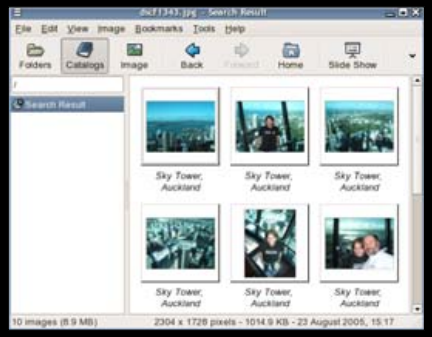

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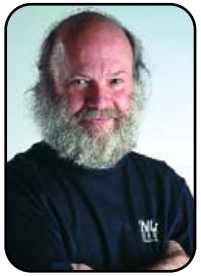

FROM THE PUBLISHER

Patents and Innovation

Innovate consistently, and you don't need lawyers to compete.

PHIL HUGHES

A better title for this column might be "Patents *or* Innovation". I am not a lawyer, and I don't even play one on TV. In fact, one of the things I really like about living in Nicaragua is that lawyers are low-paid people who stand in lines for you and not much more. I do have, however, some opinions that hit the edge of legal issues. Here goes.

When I was a kid playing with electronic gizmos in my parents' basement, I remember reading various tips in electronic magazines by Don Lancaster. Don seems to have outlived the publications he wrote for, so I will consider his advice useful. After writing an assortment of books—the oldest of which I remember was called *The TV Typewriter Cookbook*—he wrote one called *The Incredible Secret Money Machine*. This was a book about his life, which focused mostly on how he supported himself.

I bought and read the book. It had quite a lot of wisdom in it, but to me, his advice on patents was the most important. He said that if you invent something and start selling it, then you can be working on your next invention while everyone else is trying to figure out how to copy what you did. In other words, innovate and then innovate again, rather than getting bogged down with the lawyers.

Today, I read all too much about the legal side of life in technology. This includes a regular stream of totally absurd patents. I won't bore you with the details, but if I saw one for making ice by freezing water, I wouldn't be too surprised.

I recently saw a post on the Free Software Business mailing list from someone who has done some software innovation and is concerned about possible legal action against him when he releases the software. Now, he didn't steal the idea—he just figures that there is a chance someone has a patent on it or on part of it.

Let's say you did design a machine that makes ice by freezing water. It might be computerized or at least have an indicator light that comes on when the water is frozen. Chances are you are an engineer, not a lawyer. The way the patent system works, you need either to start working on your law degree or hire a lawyer to do a patent search before you feel comfortable starting the manufacturing of your new-fangled machine.

TUX

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TO COPY WHAT SOMEONE ELSE HAS DONE IS NOT THE WAY TO INCREASE YOUR MARKET SHARE. YOU NEED TO DO IT BETTER.

On the other hand, if you could just get that machine into production, you could put your innovative mind to work on something new—maybe a device to make steam by boiling water. Again, you could incorporate a computerized system or a light that tells the user when the water is boiling. (I mainly suggest this as I am sure there are lots of patents on whistling tea kettles.)

The counter argument is that big companies won't invest in innovation unless they can get some protection for what they create. I am not sure this is the case. If the innovator is a big company, it will have visibility and market share already. That gives the company the head start Don Lancaster talked about. If the innovator is the little guy, he probably won't have a huge investment, and he always has the choice of selling his invention to someone with market share.

This is a Linux magazine, so it is time to reel this in to how it applies to Linux. First off, the Linux kernel is not patented, but beyond that, there are very few patents related to the UNIX operating system. This means that Linux could become what the community needed rather than having to be a collection of compromises to avoid patent conflicts. Further, as many of the pieces of the basic UNIX design went into creating an industry standard (POSIX 1003), Linux could comply with a standard rather than being forced to diverge from it.

Next, because Linux is small in desktop market share today, innovation is likely to enter into building more market share. To copy what someone else has done is not the way to increase your market share. You need to do it better. Whether that is an office suite that doesn't force you to buy the new version or a general system design that protects you from worms and viruses, there has been room for innovation and it is happening.

In writing this article, I realized that if there was one thing that should have been patented by Linus Torvalds, it was the way a diversified workforce created Linux. I am fairly confident that there has never been a case of such a totally diverse workforce (geographically, in native language and in skill level) working together to create any decent-sized software system. In fact, this happening by a group of volunteers worldwide shows that innovation can happen without a company looking for patents or even employees looking for a paycheck.

Draw your own conclusion, but like most of the Open Source Software community, you aren't going to see me climb on the software patent bandwagon any time soon. I'm all for free the technology and letting the user decide.■

Phil Hughes is Group Publisher for SSC Publishing, Ltd.

FROM THE EDITOR IN CHIEF

Who Let the GNOME Dogs Out?

Complaints by GNOME fans unfounded, and some actions by evangelists underhanded.

NICHOLAS PETRELEY

I just finished editing another batch of letters. As usual, they contain a number of complaints about how we are KDE-obsessed and don't cover GNOME enough. One letter claims that the only software we have covered so far is KDE-specific software. And, of course, GNOME fans are having spasms about Mango Parfait's opinions of GNOME. I'm sure they will be equally thrilled with her sarcasm about GNOME in this issue. My suggestion to these folks is to lighten up and stop taking her comments so seriously. I'm sure this isn't the first time someone has poked fun at something you like. If you're so convinced that GNOME is best, that's all the more reason you should be at ease when people criticize it. You know better, right?

Before I deal with the issue of GNOME coverage in *TUX*, let me say a few words about how I feel about GNOME. I dislike it. That shouldn't matter. We all have our preferences. If you like GNOME, use it. If you hate KDE, great. I have no problem with that. Different strokes for different folks.

What bothers me is not GNOME, but that we critics of GNOME have been accused of disliking GNOME simply because we don't understand it. I don't think that's the case, but if we really don't understand it, shouldn't that tell you something? Why wouldn't we understand it? Could it be because GNOME is one of the most unintuitive, inconsistent desktop environments ever designed? Could it be because GNOME keeps undergoing dramatic changes in its philosophy toward how a desktop should behave?

Indeed, the frequent overhauls to the philosophical approach to how a desktop should behave puts GNOME evangelists and defenders in a very awkward position. Take Nautilus, the file manager, for example.

"It's great because it does everything." When GNOME dumped the buggy Midnight Commander file manager in favor of the original version of Nautilus, the hype was all about how Nautilus would be a Swiss Army knife for GNOME. It was a file manager, browser, system administration tool, package manager and more. It was considered the core component of GNOME. See http://www.businesswire.com/webbox/bw.032001/210790539.htm for a sample press release in 2001.

"It's great because it's so simple and does only basic tasks." Later, GNOME developers decided to rip out most of the features in Nautilus and strip it down to basics for the benefit of speed and ease of use. But if you read the press release mentioned above, the original point of making Nautilus do everything imaginable was for the benefit of "ease of use". So which approach actually made GNOME easier to use?

"It's great because it has a revolutionary new spatial design." Then Nautilus morphed into a "spatial" file manager. This "spatial" file manager was supposedly revolutionary, although anyone who has used OS/2 knows better. The idea was that every folder should have its own size and

place on the desktop, which gives that folder a unique "spatial identity". Every time you opened a folder, that folder would appear in the same position and size on the desktop you had used the last time you visited that folder.

Unfortunately, whenever you open a new folder, the previous folder window remains on screen. As you navigate deeper through subfolders, your screen becomes cluttered with open windows. When I complained to a GNOME advocate about this behavior, his response was that I could change the default behavior of Nautilus back to the way it used to work by changing a registry setting. A registry setting? That's GNOME's idea of ease of use? Eventually the Nautilus developers relented and added a preferences option to choose between the new "spatial" behavior and the old explorer version of Nautilus.

"It's great because it's not spatial anymore." Now I've downloaded and installed the preview of Ubuntu 5.1, which includes the latest version of GNOME. I assume that GNOME still makes the "spatial" behavior of Nautilus the default behavior. I don't know. But Ubuntu makes Nautilus default to an explorer mode that works similarly to prior versions of Nautilus. This raises the question, if the "spatial" approach to file management was so terrific and simply misunderstood and underappreciated, why did the Ubuntu team decide not to use it by default?

I'd applaud the change, but the new Nautilus explorer mode includes one of the most abominable features ever conceived, ostensibly "borrowed" from the hideous GNOME file picker. In one of the toolbars, you'll see a back arrow, after which buttons appear as you navigate through folders. Each button represents a folder, a subfolder, a sub-subfolder and so on, as a history of where you've been. If you go back one step, it keeps the extra button there, in case you want to go forward again.

Why buttons are supposed to represent folders is a mystery to me. But here's a bigger mystery. If you navigate deep enough, there's no room for all the buttons, so a scroller appears. A scroller for buttons? Now that's revolutionary. This is especially a problem with the file picker, where there's even less space for the buttons. Worse, I still haven't figured out why the back arrow I mentioned earlier creates two buttons called home and then changes into an icon that, if clicked, takes me to the top level of the entire filesystem. This is intuitive?

Here's the point. GNOME defenders can rant all they want about how critics simply misunderstand it. The problem illustrated by the crazy history of Nautilus is that there's no "it" to misunderstand. If "it" is so great, why does "it" keep going through so many radical changes in philosophy? I have sympathy for long-time GNOME advocates because they've had to defend both the original designs and the contradictory overhauls as being the best approach.

One more word about the changes in the latest version of GNOME. The new file picker (file open and file save) dialog now has a panel on the left where you can add bookmarks to folders. This way, you can return to frequently used folders quickly. These bookmarks also show up in Nautilus—I assume for the sake of consistency. KDE has had a more attractive version of this feature for ages, except KDE lets you associate bookmarks with applications. In other words, if I so choose, I can have one set of bookmarks appear when I use the word processor and another set appear when I use the spreadsheet. This way the application "knows" how I organize my files. Needless to say, you can't do that with GNOME bookmarks, so the file picker is destined to become cluttered with

bookmarks that point to folders, which don't relate to the current application. The good news is that the GNOME developers are beginning to see the benefits of including some of the KDE features. If this trend continues, GNOME can only improve.

Okay, so now you know a few reasons why I don't like GNOME. I have many more reasons, but I'll spare the GNOME fans the agony of reading them. There are also many things about GNOME that I like. But they don't offset the bad things enough to make me want to use it.

TUX COVERAGE OF GNOME

The amount of coverage we give to GNOME has nothing whatsoever to do with my opinion of GNOME, and our publishing history proves it. We focus on KDE more than we do GNOME, because our readers prefer KDE to GNOME three to one. But we do not ignore GNOME.

By the way, this ratio was almost corrupted by ballot-box stuffing. Someone on the GNOME marketing mailing list noticed the *TUX* Readers' Choice Awards and said that they should notify their fans to go participate in not only the *TUX* poll, but in all such polls. In other words, this was a call to rally the troops to stuff the ballot boxes in desktop polls.

In the case of *TUX*, it was too late. The *TUX* polls were closed by the time this message made it to the GNOME marketing mailing list. By the way, I searched several KDE mailing lists, and saw no mention of the *TUX* Readers' Choice Awards. Regardless, this is the kind of activity that taints the results of any Readers' Choice Awards. If we see fans of any type of software rallying troops to vote in our polls, we will invalidate that poll. That would be a tragic day in our history, because Readers' Choice Awards are an important part of *TUX*.

But here's what mystifies me most. Why do we get so many letters complaining about our obsession with KDE and lack of GNOME coverage? We certainly do not cover only KDE software, as someone claimed. In fact, many, if not most of our articles deal with software that is not specific to GNOME or KDE. To name a few examples, we have published articles about Thunderbird, OpenOffice.org, Inkscape, GIMP, Cedega, IceWM and more. We have published articles about GNOME-specific software, such as Tomboy and, in this issue, gThumb and GnuCash.

As for a lack of attention to GNOME, Mango Parfait, who loves to portray a hatred of GNOME that knows no bounds, has gone to great lengths to answer several questions about GNOME. So even where you'd least expect it, you'll find detailed coverage of GNOME. Think, folks. If she is not just having fun pushing the buttons of GNOME fans, and she truly detests GNOME, how is it that she knows GNOME well enough to answer questions about it? One might suspect she gets her answers from her boyfriend, Otaku, but she says he's a KDE fan, too.

So, many of the people who complain that we are obsessed with KDE and never deal with GNOME, obviously aren't reading *TUX*. Has someone told GNOME fans and evangelists to spam us with these letters? I don't know. But if so, it's time to call off your dogs. *TUX* will become a GNOME-focused magazine the day GNOME users vastly outnumber KDE users. So if you GNOME fans want more GNOME coverage, I suggest you improve GNOME first. Until then, we'll continue to publish according to the balance that we believe serves our readers best.■

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

LETTERS

Yay Linspire!

Thank you for printing my Letter to the Editor in the September 2005 issue. I just wanted to follow up and report that I have indeed installed Linspire 5.0! I also have their CNR service and all I can say is, WOW! This is the absolute cutting edge of computing! Someday, all OSes will be delivering software this way. But with Linspire, you have it today and it is flawless! Linspire really is the easiest desktop Linux in the world! Thanks again for pointing the way.

--
Mark Szorady

Tools for Basic Programming?

First of all I have to say that *TUX* is one of the best Linux magazines. It's written by Linux users for Linux users. Good job. In the Letters section [September 2005], I found a letter written by Alan, who asked about Basic Programming under Linux. Well, there are tools available. Just see these pages to get a better overview: GAMBAS (http://gambas.sourceforge.net) and REALBASIC (http://www.realbasic.com), which offers now a private Linux version for free.

--
Alex

More on Terminal Commands

I would like to echo the comments of Sydney Nash in September's *TUX* Letters section. Specifically, the "50 Commands Every Linux User Ought To Know" suggestion. I was recently cleaning out a bag of "goodies" I got at the last FOSE show here in DC when I came across a Ubuntu CD. I was reluctant at first, but decided to load the OS on a laptop I barely used (just in case I really messed it up). That was less than a month ago and now that laptop is my most-used computer.

I have made many mistakes along the way, but resources such as *TUX* and Ubuntu's Web Forums have been immensely helpful. I do think many new users would benefit from an article outlining useful terminal commands. Let's face it, most users learn new things about their computers simply by playing, and without proper direction that playing could be damaging. I thought your magazine is about teaching new Linux users how to operate in this new environment, not just about teaching them how to point and click, we already know how to do that.

--
Matthew Anthony

Boo KDE

I want to write to thank you for the excellent article in the September 2005 issue [John Knight's "The World Beyond KDE and GNOME"]. I am gratified to see you doing some articles about lightweight desktops. Frankly, I am bored with the KDE love-fest at your publication. For all of you noobs out there, don't listen. KDE is excessive eye-candy goop. GNOME is better. Well, okay, it would be better if spacial Nautilus wasn't so completely awful. I mean, it really does suck doesn't it? Sigh. And your excuse of "we cover more KDE because most people use it" is extremely lame. Just do a Windoze magazine then—95% of PC users use it right? Therefore it must be better, right?

Okay, back to the reason I'm writing. I'd love to see a *TUX* article about Fluxbox. It is the best lightweight WM out there, and when paired with the Rox Filer, it really is an awesome desktop. I'll use it with about 80% GTK apps and 20% KDE apps and just giggle at the KDE vs. GNOME fight. Oh wait, wasn't I just ranting about that? Oops.

--
KRK

Scribus?

I've been most impressed by your magazine over the last few months since I discovered it. It's a real breath of fresh air, and it fulfills the long-neglected purpose of helping Linux users (old and new alike) get the best out of their systems, without all the techno-geek-speak that tends to bog down other publications in the field. I've been using Linux for a few years now, but I still discover new things from your mag. I particularly like the articles with the tips on how to use different applications. When all is said and done, what average users want to do is sit down and get the most out of their apps—whether it's an office suite, image editor or audio and video tools, etc. You've men-

tioned in recent editions that you intend to move the production of *TUX* to using Scribus. I've tinkered with Scribus and think it is a marvelous desktop publishing application, though perhaps not as rich as Adobe InDesign. I would really like to see an article or two on how to do things in Scribus. Perhaps you could use the design of your own magazine as a demonstration. Keep up the good work.

--
Lloyd Brady

Is Mango a Woman?

Here are answers to some of the questions posed in your magazine last month, with some questions of my own mixed in:

My favorite Linux OS so far is PCLinuxOS, but I'm about to try Linspire 5.0, which as you know is free to download till September 6. Who knows, I may subscribe to the updates. We'll see.

Is Mango Parfait really a woman? How about a real photo to prove it? It's unbelievable that a beautiful woman is this much of a Linux expert. Did I say unbelievable, I meant f__in' unbelievable, which is more in "her" style of speech.

I used to prefer GNOME because it worked better in the older Mandrake version I used to use. SUSE was okay in KDE. I think KDE has improved, because now I like it well enough that I see no reason to go back to GNOME anymore (in PCLinuxOS).

I always read *TUX* cover to cover, is there any other way? I like the landscape format. It reads very well on my laptop! I always learn new things reading your magazine.

I'm not a newbie anymore, but I don't always go to the command line if the GUI tool is convenient. My way is whatever is easiest and fastest, so it depends.

Firefox, Gmail (or Kontact) depending on where I read my e-mail.

Please *do* show us how to install two or three Linux OSes on the same system; include WinXP Pro as the Windows version, which is also on the multiboot system.

Thanks for asking. I really like your magazine. Keep up the good work and the continual improvements, issue to issue.

--
Emil J. Wisekal

It is rather chauvinistic to suggest that a beautiful woman cannot know as much or more about Linux than a man. Having said that, Mango has two things going for her. First, she was hand-picked by publisher Phil Hughes, and Phil knows what he's doing. Second, Mango admits that she sometimes solicits help from her on-and-off-boyfriend Otaku. How much help she needs is anyone's guess. We don't care as long as she keeps getting it right. Regardless, if you read her first column, you'd know that she is willing to kick the keister of anyone who suggests she doesn't know Linux because she's a girl. So I'd watch out if I were you.—Ed.

More on REALbasic

In response to the September 2005 Letter "Don't Be Afraid of the Terminal Window", I've found that using http://linuxcommand.sourceforge.net is a VERY informative tutorial on most things terminal (sorry, no pun intended). As well as the oh-so-simple man pages. And for the real brave, `man bash` will give you a world of information. And, regarding the "Basic Programming?" letter, there is an AWESOME (IMO) IDE/compiler called RealBASIC (free Linux version, retail version makes cross-platform executables), which are totally free for Linux use and tries very hard to be source-compatible with Visual Basic.

--
Rob

Incidentally, a new version of REALbasic, REALbasic 2005 for Linux, became available on September 13. Check out the details at http://www.realsoftware.com/visualbasic.*—Ed.*

Boo Mango

I love your magazine; it has been instrumental in my changeover from Windows over the last year, and it is a service to the Linux community. But I must join the never-ending horde who protest against the ramblings of Mango Parfait.

Her tirade over the GNOME desktop at the start of the last issue is downright offensive! Is it really necessary to make references of wiping one's backside in order to present her childish opinion on whether KDE is better than GNOME? What's more, she then goes on to tell a guy that if her instructions aren't exact to his operating system, he should upgrade his OS, and on a completely unrelated note, change to KDE just to suit her.

She continues this trend by telling another guy how terrible Fedora is for installing programs, and tells him to get an entirely new package manager, taking another dig at GNOME in the process. She mentions the default system as an afterthought or "the worst way", which, given the arduous set of instructions above, also seems to be the simplest way.

Though I find her humor unfunny, I can deal with it, as it's a matter of personal taste. Dealing with more than one widow manager is unrealistic, and I realise that by choosing KDE, you are catering to the widest possible audience. But this kind of childish behavior is a sea anchor on your publication, dragging down the quality of the entire piece. The Linux community is seen by outsiders as a bunch of socially inept geeks, and this kind of attitude toward different opinions encourages that belief.

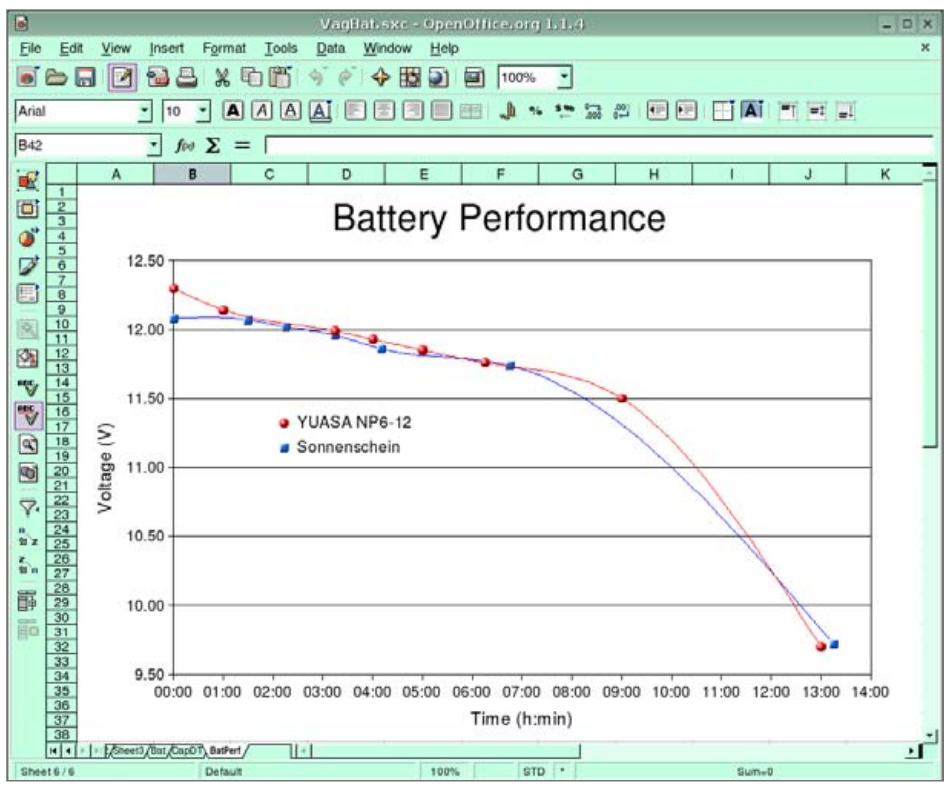
--
terence

You may find her humor unfunny, but at least you recognize some of it as humor. Do you honestly believe Mango was realistically suggesting that the reader upgrade to make her life easier? Lighten up.—Ed.

Calc Can Do It

In the last issue of *TUX*, Mr Simms, in his letter, claims that it is not possible to depict multiple xy data sets on a single graph using OpenOffice.org Calc. Quote, "For example, in OpenOffice.org Calc there is an open issue to include multiple x ranges in a single plot. In other words, a way to plot different x,y sets of data on the same plot that Excel allows currently, and has for a while, but Calc doesn't."

This is incorrect. The attached Battery Performance spreadsheet (sorry a bit scrappy) shows how this is done using OpenOffice.org 1.1.4 Calc. You just have to combine the x data into a single column and enter the y data in separate columns. It may not be quite as easy to set up as in Excel, but visually the end result is indistinguishable from the Excel version.



I migrated to Linux about six months ago, after using M$ products for some 25 years. At the moment, I can't see any real need to go back. Great Mag—it's helped me a lot already. Keep up the good work.

--
Andy Carter

Anti-KDE

In the last issue, you make much of the GNOME-vs-KDE debate. In your own words, you refer to "The number of Linux developers using KDE is increasing. The number of Linux developers using GNOME is shrinking." Developers? I thought *TUX* was a magazine for people that were new to Linux—folks (like myself) who can't write code for a hill o' beans but want a desktop environment that looks good, doesn't get in the way and lets us do what we want to do.

I've tried, really, I have—I currently have SUSE 9.3 Professional installed along with Ubuntu (and Windows XP Pro, but that's another story), and I've installed several other KDE-based distros (such as PCLinuxOS), but I just don't get it. KDE continues to be too "busy", a little too frenetic for my tastes—and it's just plain ugly (IMHO). Perhaps the 4.0 release will address these issues—I hope so.

The good news is that Linux does not lock us in to a single, set desktop, a la MS Windows. Choice, after all, is one of the major causes of the open software revolution. Let's hope it continues! As I hope this magazine continues.

PS. I find the Mango Parfait column shrill, annoying and *way* too full of attitude—but, again, it's a matter of choice.

--

Mark W. Tomlinson

The point was that if developers are favoring KDE, how much more are normal users? That was just speculation until we got the answer from our Readers' Choice poll. Our readers favor KDE by a 3-to-1 margin.—Ed.

Thanks *TUX*

I started using Linux about eight months ago. I had a relapse for two months and went back. My friend started me out with Slackware (very stable). I used it just for an experiment, but now it's all I use. I have tried others and don't care for them. The so-called hard distros are not bad if you have a Linux friend and an account on linuxquestions.org. I just wanted to thank you for writing such a great magazine. I stumbled upon it just before issue #1, and it's very nice. It's just what it's intended to be, and I love it. I would love to have a printed issue to carry and show off (my printer isn't going to shell out 60 pages and have no ink every month!), but the free version is extremely cool. I will soon be doing my second person-to-Linux conversion, and I can successfully do it with such an awesome magazine.

--

Samuel

More Thunderbird Extensions

About the article "Extending Thunderbird: the Best of All Worlds" [September 2005]—I like the article, but I think there are two very important extensions that should be mentioned that were not. These include Delete Junk Context Menu, which makes handling junk mail much less of a hassle (I don't know why they didn't include that as a default feature), and View Headers Toggle Button, which lets you view all header information in an e-mail with the touch of a button. Like it or not, all users of all operating systems should know how to read and interpret certain parts of an e-mail header as part of safe Internet usage. I've used this a few times already to provide adequate information to report abuse and phishing at well-known Web sites.

About GNOME coverage—I understand the reasons that you cover KDE, and I don't argue with that. However, I would suggest at least some coverage of GNOME to expose new users to the alternatives. After all, isn't that the point of *TUX*, to expose new users to what is available to them? My own experience with learning how to use Linux included KDE and GNOME, and I personally prefer GNOME because of the smoother appearance and more feature-rich applications (granted my comparison was done about three years ago, and I just haven't had the desire to check out KDE since). Also, as time goes by, we may see a convergence of how these two desktops work as they continue to comply with the OpenDesktop initiative. Keep up the good work with the magazine!

--

James Payne

Networking Suggestion

I have just received my first edition of *TUX* and am just writing to say that you blokes (and blokettes) are Number 1. Excellent layout, presentation, content and "feel". In short—I'm in!

I am an intermediate (mad scientist) user on Windows and am making my first foray into Linux (currently Ubuntu because everything worked out of the box), and I am about to try Vector Linux. I have tried Mandrake 10 but found some teething problems (probably my fault). An article on how new users may add all those beautiful transparent windows and widgets would be only too welcome.

Many new Linux users will be changing from Windows (or are trying) and will have at least two or three computers networked (wireless seems huge at the moment), so I'm wondering if an article on simple network setup, just to connect the PCs together, might also be a good read?

--
Peter

Yes, We're Mind-Readers

You must be reading my mind! Thank you so much for starting some articles about Inkscape. I have just installed it on my Mandriva box and am looking forward to learning how to use it. Some GIMP tutorials would be great too. I also have Inkscape on my Windows machine. Are there any differences between the two program versions?

--
C. Dempsey

As for the differences between versions of Inkscape, you'll have to ask the Inkscape developers! We don't do Windows.—Ed.

Not Just for Newbies

You say that you aim at beginners, but as a Linux user for ten years, I enjoy your magazine a lot! There are tons of wonderful programs out there and due to the nature of open source (no marketing budgets!) very few people know about them. You not only publish a great magazine but also make a big contribution to free software.

--
Tansu

Kubuntu and Ubuntu

I wish to contradict a little bit of what you said in your Editorial in the August 2005 issue of *TUX* magazine. Maybe not so much a contradiction, but a difference in experience with Ubuntu/Kubuntu.

First, given the purpose behind *TUX* magazine (that is, serving the interests of Linux beginners), I would not suggest using Kubuntu yet. I recently tried it out and was very frustrated with numerous issues, which are admittedly problems with the fact that Kubuntu is really in the development stage. If you go to their forums you will see a plethora of complaints, the reply to which is generally, "well, it's not ready yet."

Fortunately, it was quite easy to turn Kubuntu into Ubuntu, so I didn't have to reinstall.

When I first installed Ubuntu, it was at version 4.1, I believe. Being unfamiliar with GNOME and having problems configuring it to do what I wanted, I gave up on it. But again, instead of reinstalling my favorite distro Debian, I turned Ubuntu into Debian. You are probably right that this is not advisable for the beginner. As I recall the solution really lay in removing many packages and then installing the proper Debian ones. And everything worked the way I wanted it to. Anyhow, it was, at least on the 4.1 version, rather easy to Debianize an Ubuntu installation.

As for 5.x version, I can't say for sure how easy it would be Debianize it, but I have the feeling the solution would be similar. Contrary to what you say, after Ubuntu-izing (sic?) Kubuntu, I found that there were a number of packages that I wanted that weren't available. So, I just went to http://www.debian.org/distrib/packages and grabbed the package from unstable or stable. And then I installed it with `dpkg -i`. So I am not at all sure why you say that you can't use "pure Debian software". I've been doing it all along.

Finally, I want to say that it turns out there is a more-Ubuntu way of getting packages installed that aren't available when you do the default install. You have to edit sources.list and add:

```
deb http://archive.ubuntu.com/ubuntu/ hoary universe
deb-src http://archive.ubuntu.com/ubuntu/ hoary universe
```

Apparently, there is also a way to do this through the Synaptic Package Manager by choosing "universe" from the repositories section. But I never

use Synaptic, so I wouldn't really know for certain.

As a final note: for beginner users, Fedora Core may be a good solution. However, I find pretty much all my colleagues are abandoning Red Hat. No one seems to like the steps Red Hat is taking with respect to Linux and prefer something more stable (not in terms of uptime, but in terms of maintaining a Linux directory structure, and so forth). So, I personally tell people to stay away from Fedora Core. Also, as far as I'm aware (and maybe I am very wrong), but upgrading across versions of Fedora Core is not as easy or pretty as updating across versions of Debian (including Ubuntu). Therefore, I always suggest Debian-based versions. Of course, as I have admitted, Debian is my favorite distro, and so I am not impartial and I am not so familiar with Red Hat.

PS. You guys are doing a great thing! I suggest your publication to all Linux colleagues and potential users. Whether a novice or a guru, it is a good tool to know about and spread the revolution.

--
Curtis Vaughan

More GNOME vs. KDE

I just polled our LUG and the responses I got were that five users use GNOME, one and a half use KDE and one uses Fluxbox. I don't question your source that says KDE is most popular, but it's just not been my experience, and whatever, *TUX* would be much better if it were more GNOME-friendly.

My reading pile's too big, so I'm just working through issue 1 now (although the following issues are there queuing too). I'm sure I read somewhere that you wanted feedback on the magazine, so two things have come to mind.

Firstly, I've a growing irritation that almost every article is KDE-based. I'm a new user (your market), so I've no real idea how interchangeable KDE and GNOME are, but I know I use GNOME. All the software so far has been KDE-based, and the only mention of GNOME I can remember so far was in the article about customising your desktop, which went along the lines of "there are two desktops, GNOME and KDE. In this article, we'll show you how to customise KDE." Useless, then, for me. Is this a question of balance, or can writers be asked to consider both, or does this simply reflect that most people use KDE? (I've no idea of their actual relative popularity). I used GNOME at uni, and then installed Red Hat 9 at home, and that's GNOME too, so we can't be that rare.

The other thing isn't a complaint, it's just to note that I'm interested in sound—making music, production, synthesisers, that sort of thing and possibly video too, when you're considering subjects for future issues.

Other than that, having got maybe three quarters through the first issue I've a long to-do list (get my music and photographs organised and so on), so in that respect it's a great success. Thanks for it.

--
John

Try Puppy

I read that another Dominican wrote to you in August, great! Seems like open source is getting bigger down here!

I just completed the vote for best OS and other stuff—I chose PCLinuxOS, and I would have chosen Puppy Linux too if it was present, because I really enjoy it. As a matter of fact, I run both on my machines, PCLOS on the hard drive, and Puppy on live CD.

I really recommend Puppy for older hardware. It works fast! And then you don't have to be a slave of the "hardware upgrade cycle", which is a major freedom in the computer world!

For the desktop environment, I do really enjoy GNOME, but I chose KDE because it still feels more comfortable for me (I fix Windoze PCs for a living). But then, Puppy runs on fvwm95, and it's fine for me.

I wish to thank you for your mag, which is great. I really read it, and enjoy the advice. You guys should cover PCLinuxOS and Puppy Linux; I am sure that it would interest a lot of folks. Actually, down here in the Dominican Republic, most of us are still stuck with older hardware, so it might help. Keep on going, you're doing great!

--
Martin

Thanks Again, *TUX*

Thank you! Thank you! Thank you! I can't thank you enough for producing a Linux magazine geared towards new users. I have recently switched to Linux (PCLinuxOS) after growing more and more frustrated with spyware, virus infections and Microsoft proprietary practices. I consider myself an advanced Windows user, but I really needed something that would help me learn Linux, and your magazine is turning into a great tool for me. I know that it is free, but I would gladly pay for a print version. Yes, it would be worth every penny!

--
P3RR1N

Xandros?

I recently purchased Xandros' Deluxe version. It hasn't worked out for me. I thought I should write to say something about it. I'm composing this on a Windows e-mail client, because maintenance of the Xandros product has required so much of me that I've stopped using it.

Xandros has positioned itself as a Windows replacement. This led me to expect a similar level of performance. I commend Xandros for trying, but the performance of their system is not to this level.

Problems I have experienced come from two sources. The first is a lack of software performance. As an example, the CD writing software crashes frequently. This brings me to the second problem, technical support. The Deluxe version comes with 60-days technical support via e-mail. I wrote the technical support department advising them of this problem. Following an exchange of e-mails over a period of weeks they advised me that they were closing the issue because they "could not duplicate the problem".

I've had other difficulties as well, and I realized I was spending more time stewing over the things in Xandros that I could not get to work than I was using the system. I've returned to using Windows. And I'm sorry to report that. I think that the Xandros idea is a good one, but in this user's view it's not ready.

--
David Danforth

Xandros seems to be a Linspire wanna-be. Perhaps Xandros will be competitive with Linspire someday, right down to the CNR (click-and-run) style of installing applications. But right now, I agree that it falls short.—Ed.

XAMPP Really Works

I'm responding to a Letter to the Editor from reader Manish Parmar [August 2005]. Manish was looking for an easier way to install Apache, MySQL and PHP on a Mandrake distro. I have certainly spent a lot of hours trying to get the famous Apache-MySQL-PHP trio installed and all playing nicely together. I finally stumbled across XAMPP (http://www.apachefriends.org/en/xampp.html). Their Web site states, "XAMPP is an easy-to-install Apache distribution containing MySQL, PHP and Perl. XAMPP is really very easy to install and to use—just download, extract and start." And you know what? They are right—it just works, even for a relative newbie like me. Everything is configured to work together from the beginning, and it feels like you are just installing one package. BTW, I'm running Mandrake 10.1. Thanks for a great magazine!

--
Gina Bennett

The Simple Things

Request: I am only about five months into my Linux adventure and so far so good. What I would like to see are simple things, such as, how do we "map" a network drive? How do I connect to a shared printer on someone's XP Pro computer? How do I get my Linux workstation to use my DNS server, which is a Windows 2000 Server?

My first goal of testing Linux at my office is to make sure I can do all those simple things first and then work on getting moved over to OpenOffice.org, Firefox and so on.

Hope these are valid ideas. Love the magazine! About time someone pulled this type of magazine off!

--
Brett Taylor■

Q&A with Mango Parfait

Mango solves a Windows share problem and breaks tradition by answering geek and browser questions and recommending PlayStation 2 games. MANGO PARFAIT

I am perturbed. I like that word. I learned it recently and I am using it a lot. Perturbed. I am perturbed that my on-and-off boyfriend Otaku plays *Everquest II* when he should pay attention to me.

I am perturbed because I read the last issue of *TUX* and see that the editor in chief thinks I have a pathological hatred of GNOME.

I do not have a pathological hatred of GNOME. I like GNOME. I like how often GNOME developers change window managers, desktop designs and user interface ideas. It is like that guy Forrest says. It is like a box of chocolates. You update GNOME and you never know what you are going to get.

I like GNOME because I have no brain. I need GNOME developers to decide what I can and cannot do with my desktop. If GNOME made it easy to change the color of the window title bar and title bar text, I would probably make both colors white, and then I would not be able to read the title on my windows and that would make me perturbed.

I like how Nautilus opens ten windows on the desktop at the same time if I look for a file in different places and those places are many folders deep. If someday I decide I do not like so many open windows when I look for a file, I can move all my folders up to the desktop. It is good to have to rearrange all your folders to make GNOME easier to use.

I like how Nautilus remembers where I put these windows and how big they are. It would be hard for me to remember the last size and position I used for every folder. When I use KDE, I have to work hard to open so many folder windows. Then I have to write down the size and position of every folder window I open. When I visit that folder again, I have to check my list and resize and move the folder window to be the way it was the last time. It is important. I am perturbed that KDE does not remember these things automatically. I know you can set KDE to do this, but you can find out how only if you have a brain, and as I said, I do not have one.

I like how much the GNOME interface is perturbed and not consistent. There is a saying, "Variety is the spice of life." GNOME is very spicy. I do not even know what kind of file load and save dialog will come up when I use GNOME applications. It doesn't matter. I do not know how to use most of them anyway. So I give up looking for the file and that saves me a lot of time I would spend working.

I am not perturbed with this month's questions. You send good questions. Send me more. I like them.

Q I have recently installed Fedora 4 on my Intel box as a dual-boot with Windows XP. I created a small vfat partition to share files between [Windows and Linux]. Both OSes boot and run fine, and the vfat partition is recognized and usable by both OSes, but there is an ownership issue under Linux. I cannot grant write permissions to folders or files within the vfat partition under Linux. As I do not want to work as root, this poses a problem. I have tried creating folders with different permissions without success. Any suggestions?—*Greg Falk*

A I have many suggestions. But I should not answer your question because it is a geeky question. *TUX* is for desktop users, not geeks who know how to make many partitions. But I will answer your question because your name reminds me of Peter Falk. I like Peter Falk. I like the movie *Princess Bride* and Peter Falk is in *Princess Bride*. But I also watch many *Columbo* reruns.

Now I will tell you my suggestions. My first suggestion is to play *Xenosaga I* and *Xenosaga II*. These are very good games for PlayStation 2. I am almost perfect as I am, but if I could choose to look like someone else, I would like to look like KOS-MOS in *Xenosaga*, especially *Xenosaga II*. In the first game, her hair is plain blue almost like my natural hair color. It is different in *Xenosaga II*. The light in her blue hair flows just like the waterfall in a picture we had at the oriental buffet where I used to work as a waitress. It is so pretty. I use Action Replay cheats for PlayStation 2 when I play *Xenosaga II*. My off-and-on boyfriend Otaku can play *Xenosaga II* without cheating. I do not pilot big robot fighting machines all day like Otaku does, so he plays better than I do. I need cheats.

My second suggestion is to get rid of Windows. You do not need to worry about how to share a partition if you do not have two operating systems. Delete the stinky one if you have to delete one of them.

My third suggestion is to treat yourself to ice cream (my favorite flavor is mango—I am sure you would not guess that), because you do the right thing. You do not want to run Linux as root. You want to run Linux as a normal user.

My fourth suggestion is to set up your vfat partition in a different way. Before I tell you how, I want to ask what does vfat stand for? Very Fat? I like the term Fat32 instead. Fat32 sounds like the name of a rap group. "Gonna get down make it funky, gonna paint my crib blue, gonna rap with all my homies 'cause we're Fat32."

Okay, you are probably getting mad at me by now, but I do this on purpose because you asked a geeky question. But I will finally give you the real answer. The answer is fstab. Make a new line in your /etc/fstab file or change the line you have.

Here is something like what you probably have in your fstab file now. I cannot give you a perfect example. I do not know what partition you are using. I do not know what mount point you are using. So I made up the partition /dev/hdb2 and made up the mount point /shared. You use the vfat partition you made instead of /dev/hdb2 and use whatever mount point you want. Here is my example:

```
/dev/hdb2  /shared vfat defaults 0 0
```

Here is an example of what you should have in your /etc/fstab file instead:

```
/dev/hdb2 /shared vfat uid=greg,gid=greg 0 0
```

I am making an assumption that your user name and group name are both called greg. Fedora Core 4 makes a new group for every user and calls the group the same name

as the user. If your user name is greg, then your group is greg unless you changed it. Some other distributions make "users" the default group. If you (not you, Mr Falk, but you Mr and Ms Reader) have a distribution that makes the default group "users", then you want to put gid=users in place of gid=greg (or gid=user name).

When you boot Linux, the shared vfat partition belongs to the user greg and group greg (or whatever user name and group you put in the /etc/fstab file). You can read and write to this partition without being root.

But you probably cannot read and write to this partition if you log in as someone else. If you have many people who use this computer and you want them to be able to use this partition, here is what the line should be more like:

```
/dev/hdb2 /shared vfat noauto,user 0 0
```

Now the partition is not mounted when you start Linux. A user has to mount it to use it. This makes the partition and all the files on the partition belong to the user who mounts it. She should just type `mount /shared` from a user prompt, not a root prompt. She should be polite and do `umount /shared` when she is finished so someone else can use it.

Here is a better way. You can use the line that does not mount the partition automatically, then point and click to mount and unmount the partition.

Go to the KDE Control Panel or the system settings window. Select Desktop→Behavior. Click the Device Icons tab. Check the box for Mounted Disk Volume and Unmounted Disk Volume. If they are already checked, then you are okay. Leave them checked. Do this for every user on the computer.

The vfat partition will show up on your KDE desktop. It will probably look like a disk drive icon when a user logs in. Each user can right-click on the icon and select mount from the pop-up menu. She can also right-click on the icon and select unmount from the pop-up menu when she is done. You can also change the line in fstab to make the partition belong to a group that every user can access. How do you do this? It depends on the distribution, so I will stop now and hope you are happy with my suggestions.

Q I tried out Opera on the suggestion of the awards person [see the "2005 *TUX* Readers' Choice Awards" in the September issue] because Firefox can slow down and even freeze (on Linux!!) my computer, especially with Flash. My problem is that I cannot get Opera to use Thunderbird (/usr/bin/thunderbird) no matter what I do! There is very little help on-line. Please help me!—*Samuel James Sarette*

A Okay, I make two exceptions this month. First I answer Falk's geeky question. Now I will try to answer your question, even if it is a browser question and not a Linux desktop question. I hope it will help many Linux users, because Linux users use Firefox or some other browser instead of Internet Explorer. There are ways you can use Internet Explorer on Linux, but I do not recommend any of them. I think it is better to use Firefox, Mozilla, Opera or Konqueror.

Opera comes with good documentation on how to do what you want to do. I forgive you for not finding it. It is not your fault. You won't find the documentation anywhere in the help files. I will show you where to find the best documentation while I show you how to make your settings work.

Select Tools→Preferences from the main menu. Click on the Programs option on the left side of the dialog and then click the Advanced tab (Figure 1). Click on the combo box for Email

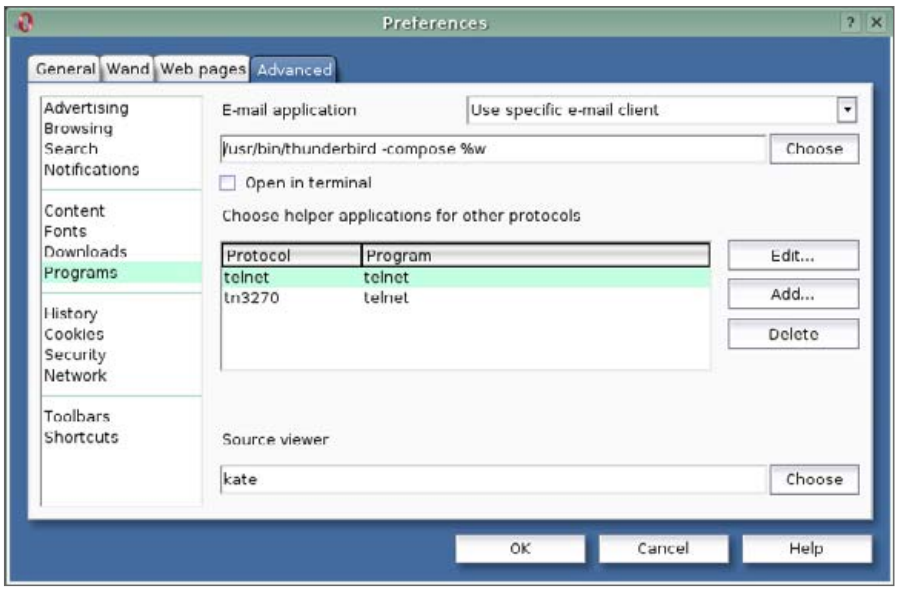


Figure 1. Opera 8.02 Preferences for External E-mail Client

application. Change it to Use specific e-mail client.

You should see a field open up. You can type something in that field. You ask, "What should I type?" That is a good question. This is when you start looking for documentation. If you want to waste time, try clicking on the help button. You will not find the answer. Click on Help→Opera Help from the main menu and look through the help files. You will not find the answer. If I am wrong, and Opera put the answer in the help files, Opera hid the answer or used invisible pixels.

Here is how to read the Opera documentation about using another e-mail client. Point your mouse cursor over the field that appeared when you told Opera to use another e-mail client. Wait a while. If nothing happens, move the mouse cursor away and then try again. Someday you will get a tooltip that tells you how to use this field. I cannot find any other documentation about how to use this field except this tooltip, so I am guessing Opera puts all of its documentation in tooltips. Maybe they will add a "search tooltips" and "index of tooltips" feature someday.

Enter the following line in the field that opens up:

```
/usr/bin/thunderbird -compose %w
```

Some distributions like Debian install Thunderbird as mozilla-thunderbird, not thunderbird. For those of you who are not using Fedora, if the line above does not work for you, try this one:

```
/usr/bin/mozilla-thunderbird -compose %w
```

Q I'm using Windows 2000 and SUSE 9.3 Pro, and I want to share a folder where I have ripped my music collection. I set the properties in Windows to share the folder, and I have managed to access it under Linux; however, to access the folder I have to type `smb://athlon-xp/Music`, and then I'm greeted with a login prompt. Is there a way to avoid the login prompt, perhaps by saving the user name and password locally (or even a setting in Windows)?—*Logan Johns*

A I am so sorry to read that you ripped your music collection. You do not give details about where and how it is ripped, so I cannot tell you how to mend it. Maybe use glue, maybe a tailor can help. I guess some of your music is still okay, because you want to share it.

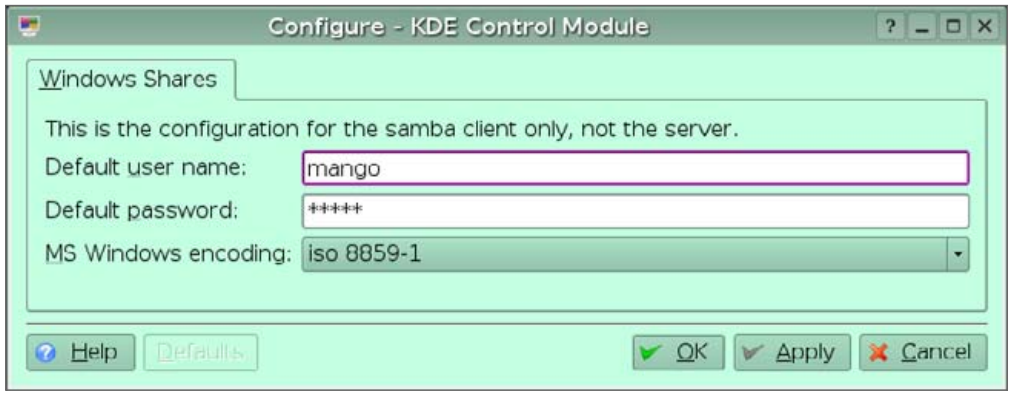


Figure 2. Set a default user name and password for Windows/Samba shares.

I can fix your other problem. Open the KDE Control Center. If you have a recent copy of KDE, you can click on the System icon instead and follow these same instructions by clicking on icons instead of lists.

Click on Internet and Network (in the list on the left in the Control Center, or the icon if you have the System feature). Then click on Local Network Browsing. You can enter a default name and password here (Figure 2).

Click Apply. If you are using the Control Center, you can close it now. If you are using the separate settings window, click OK to close the window.

Now when you open up a Windows or Samba share folder, it should open without asking you for a name and password. I do not have to tell you that this does not work if you have different names and passwords for different shares. Because I do not have to tell you, I do not know why I did.

Q I am using Firefox as my browser, and somewhere along the line I seem to have turned off JavaScript. I have enabled the selection to run JavaScript, but I still get problems with: A) Access to Home Banking—tells me I need JavaScript enabled. B) Getting some buttons on Web sites to direct me to other URLs. The browser just seems to sit there and do nothing. C) When I open my home page, it initially opens as a half screen with what appears to be some code appearing on the bottom stating:

```
^   Tooltiptext = "&n

^   label = "&flashgotoNoDMS
```

Sometimes after a few seconds, the page fills completely and the code vanishes (into the background???).

This also happens on some other sites, and I have to resize the pane to full screen manually using the drag function on the top border.—*Alan Nicholson*

A Okay, here is another browser question. I answered one, so I guess I will answer another. I hope it helps many Linux desktop users because many Linux desktop users use Firefox.

It is possible that your copy of Firefox is broken or your Firefox settings are broken. I do not think that is the problem. Maybe I am right, maybe I am wrong, and you need to erase your Firefox settings directory and start with new settings. I assume I am right.

Say I am right. Really. Say, "Mango is right." It will not fix anything, but it makes me feel better if you say that. If I am right, first I will make a guess about the banking problem you marked "A)". Here is the hard way to find out why

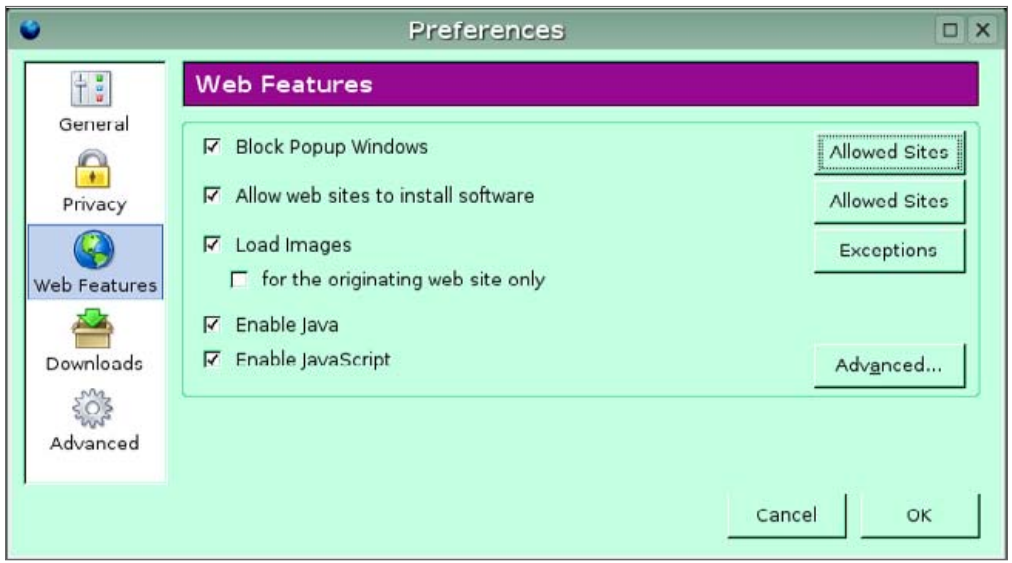


Figure 3. Blocked pop-ups can cause JavaScript problems.

many pages do silly things like this. Write a fancy JavaScript thingy for a Web page and then make it work for every version of Internet Explorer, Firefox, Mozilla, Opera and Konqueror, at least. You will find out very fast why some Web sites tell you to turn on JavaScript when you know you have JavaScript on.

If you want a fancy JavaScript thingy to work on many browsers, you must write your JavaScript to figure out what browser someone is using. It depends on how complicated your thingy is, but you might have to make little changes for every browser or even write separate JavaScript programs for different browsers—not only different browsers but different versions of browsers! Some banks and companies are lazy and they say, "Everyone uses Internet Explorer so we do not have to worry if this works on some other browser." You go to that page with Firefox and the page acts funny or tells you that you need to turn on JavaScript. I am guessing that is the answer to your first example.

Now I will make a guess about your second problem, marked "B)". You say that some buttons should take you to another Web site, but they do not work for you. I think I can guess this problem too. Sometimes it is like I said before. The JavaScript program is stupid about all browsers except Internet Explorer.

But sometimes the problem is not the JavaScript code. Open up the Preferences dialog for Firefox by clicking Edit→Preferences from the main menu. Click on the Web Features icon, and you will see something like Figure 3. Do you have the box for Block Popup Windows checked? That could be your problem. Many JavaScript links and buttons say they will take you to another place, but they really open up a pop-up window.

Try this. Uncheck this feature and try the button again. You know you have found the problem if the link works.

You do not have to allow all Web sites to block pop-up windows. You can see on the Preferences dialog an Allowed Sites button (see Figure 3 again). Click this button and tell Firefox on which sites you want pop-ups to work. See my example in Figure 4.

What if this is not your problem? Look at one more thing. Click on the Advanced... button for JavaScript in the Preferences dialog (see again Figure 3).

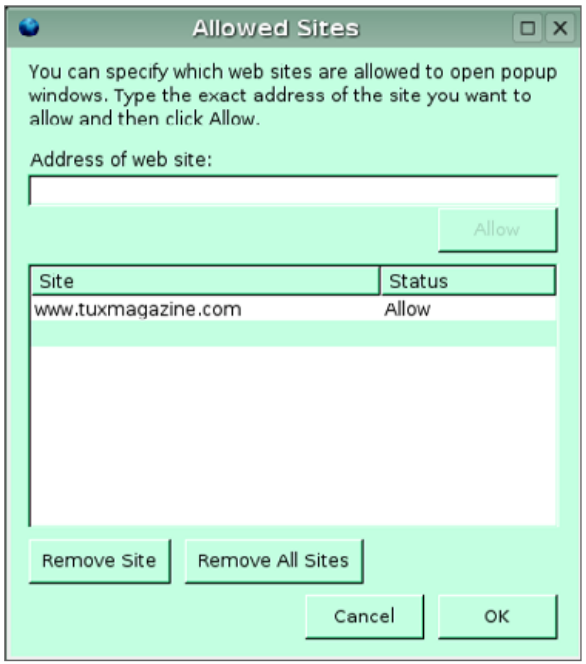


Figure 4. Define sites where pop-ups are allowed.

You will now see another dialog that looks like Figure 5.

You need to decide what you want to permit JavaScript to do. I do not want to recommend any settings. Some settings let JavaScript do too much. Some settings stop the JavaScript from doing too much and make Web pages confused and work the wrong way.

Now I will make a guess about your third problem, "C)". The moon. Sometimes

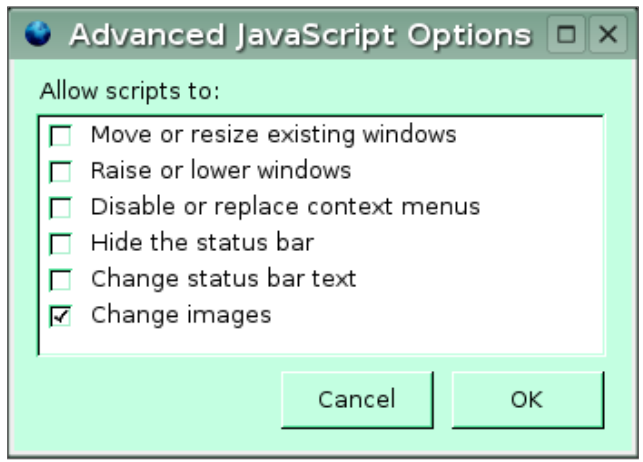


Figure 5. Advanced Settings for JavaScript

the moon makes Firefox do funny things. If it is not the moon, then it might be Firefox. It might be Firefox and your Flash plugin. Do you see the question and answer before yours? Firefox plus Flash plus Linux sometimes equals crazy like a Firefox. I have the same problem too on at least one distribution. After I use Firefox for a while, I try to load a new page and it never loads. At first I think my Internet connection broke. Then I try to load the same page in Opera or Konqueror and it loads in one second.

I do not guarantee that the Flash plugin makes this problem appear. The problem started after I installed Flash. Maybe it is a coincidence. Maybe it is not. Try to update Flash and see if the problem goes away. Try to uninstall Flash and see if the problem goes away. I will do the same thing and maybe I will let you know if it solves my Firefox problem.

If none of my advice works for you, try using Opera 8.02 instead of Firefox. Opera is a very nice browser. It is free if you do not care that it shows ads at the top. [*Opera 8.5 is now available for free, even without ads.—ED.*] It even has great documentation, if you do not mind that the best documentation is hidden in tooltips.

If Opera is not your cup of green tea, try Konqueror. The bad thing about Konqueror is you may have more problems with Web pages than you do with Firefox, if the Web pages are written mainly for Internet Explorer. Sometimes you can fix this by changing how Konqueror identifies itself. But I am making too many guesses now, so I will stop here.■

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 questions as I can and answer them here.

Digital Exhibitionism, Part II: gThumb

A look at how to manage and fine-tune photos with gThumb.

JESSICA HALL

Last month, we took a look at performing simple editing and photo management tasks in KDE's Readers' Choice Award-winning digital photo management application, digiKam (http://www.digikam.org/Digikam-SPIP). This month, we look at how to perform similar tasks in gThumb, the image viewer and browser for the GNOME desktop (http://gthumb.sourceforge.net).

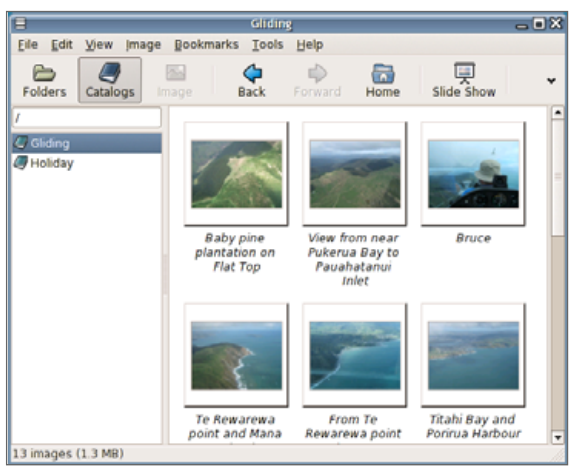


Figure 1. gThumb's Catalog View

gThumb has three major view modes, activated by the first three buttons on the toolbar. The Folders view mode lets you browse through the filesystem and shows thumbnails of any images in the current folder in the right-hand pane. In this mode, you can perform basic copying, moving, renaming and deleting of folders.

The Catalogs mode is similar to the Folders mode. It shows a listing of catalogs in the left-hand pane and the thumbnails of the images that belong to a selected catalog on the right. Deleting an image in this view does not delete it on disk; it simply removes its association to that particular catalog.

The Image mode can be entered into by clicking on the Image toolbar button with an image selected or by double-clicking on any image, whether in Catalog or Folder mode. In this mode, you can see a larger view of your image and are able to perform various basic editing tasks.

EDITING PHOTOGRAPHS

gThumb comes with a simple range of tools to touch up photographs. The one feature that is conspicuously absent is red-eye reduction, but it has most other basic image-tuning tools. If you plan to put images on the Web, you'll want to make use of the crop and resize tools. Cropping lets you select only the part of the image you want to keep and then discard the rest. This way, you can re-center the elements in a photo or remove unwanted background objects.

To crop an image, go into the Image mode, and select Image→Crop from the menu bar. Select the aspect ratio you want to use from the drop-down box. In Figure 2, I'm selecting Display,

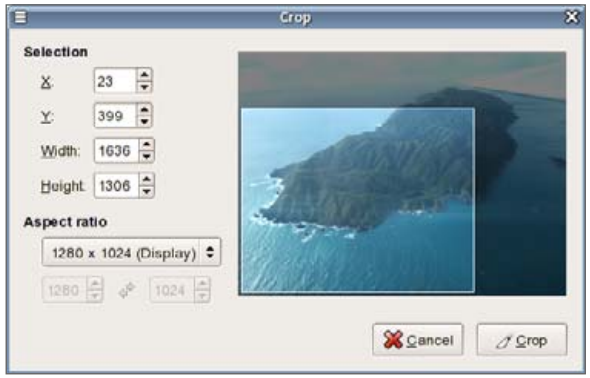


Figure 2. gThumb's Crop Dialog

which is the same aspect ratio as on my screen or desktop. This makes the cropped image the perfect shape for desktop wallpaper. Other choices are available, or you can select custom to resize the crop rectangle freely with your mouse.

Use the mouse in the center of the crop area to position it, and drag the corners with your mouse to resize it. Once you're satisfied with your alterations, click Crop.

My cropped image is now great desktop wallpaper, but it is a little large for posting on the Web. If you want to resize an image to make it smaller for e-mailing or posting on the Web, use the resize tool found in the Image→Resize menu.

Type the new width you desire into the width box, and then press the Tab key to have the corresponding height filled in. When you're finished, click the Scale button.

If you have a tendency to whip out the camera and start shooting, without realising you've left it on a preset completely inappropriate to the current lighting conditions, you'll use the color balance tool often. The cute little guy in Figure 3 was snapped with the indoor preset left selected—I tend to do that a lot.

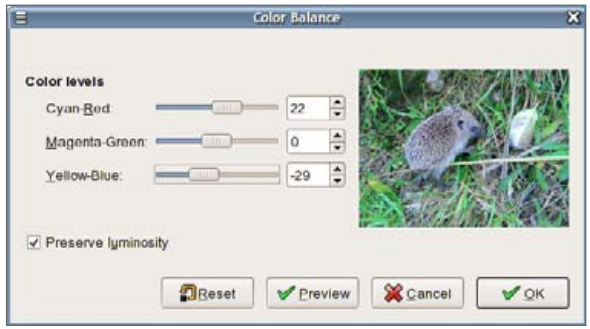


Figure 3. gThumb's Colour Balance Dialog

To correct the colour balance of an image, go to Image→Color Balance in the main menu. Figure 4 shows this picture with a little more red and yellow and a little less cyan and blue. This gives the picture some warmth and makes it look more natural.

Figure 4. Before and After Colour Correction

The photograph shown in Figure 5 is my partner Bruce with his newborn cousin, Sam. I didn't want to use a flash and make Sam cry, so the people in the foreground have turned out quite dark in contrast to the bright sunlight through the window. gThumb has a brightness and contrast tool we can use to tone down an over-bright picture or brighten up a dark one.

The brightness and contrast tool can be found by clicking Image→Brightness-Contrast. When increasing brightness, try also to increase contrast

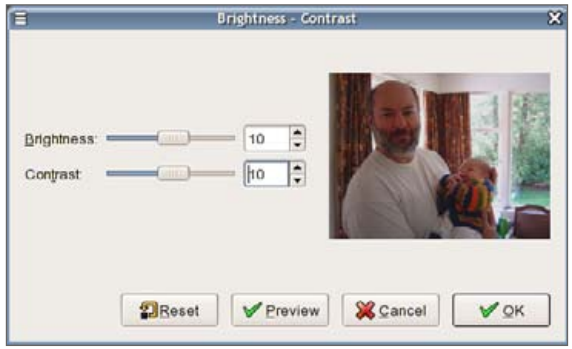


Figure 5. The Brightness and Contrast Tool

slightly to retain natural-looking colours and avoid making the image look washed out.

MANAGING PHOTOGRAPHS

Although gThumb is equipped with basic image editing tools, its real strength is in its organisational abilities.

You can sort images into catalogs and tag them with comments, date, place name and category. This meta-data then lets you use gThumb's powerful search tool to create dynamic catalogs.

To add a comment, place name or date to an image, either right-click on the image and select Comment from the pop-up menu, or select the image by clicking on it once and then click the Comment button on the main toolbar when in the Folder or Catalog view mode. Enter the information you'd like to record about the image, and click Save. Comments and other information about images are stored in XML files in a .comments directory in the same directory as the photograph.

To make sure that you always can find the photograph you want, gThumb lets you sort images into catalogs. To add a group of images to a catalog, select them with the mouse and then right-click on the selection. Choose Add to catalog..., and in the dialog that appears, either select an existing catalog or create a new one using the New button. Click OK. To see the new catalog you've created, go into the Catalog view mode by clicking the Catalog button on the toolbar. Images can belong to more than one catalog.

Figure 6. The Comment Editor

To fine-tune the sorting of your images further, you can create categories with which to tag your images. To add an image to a category, click the Categories button on the toolbar with the image selected or right-click on an image and select Categories from the pop-up menu. Select either an already existing category or create a new one using the New button. You can assign multiple categories to any image.

This all comes into play when using gThumb's extremely powerful dynamic search feature. To create a new search, click the Find button on the

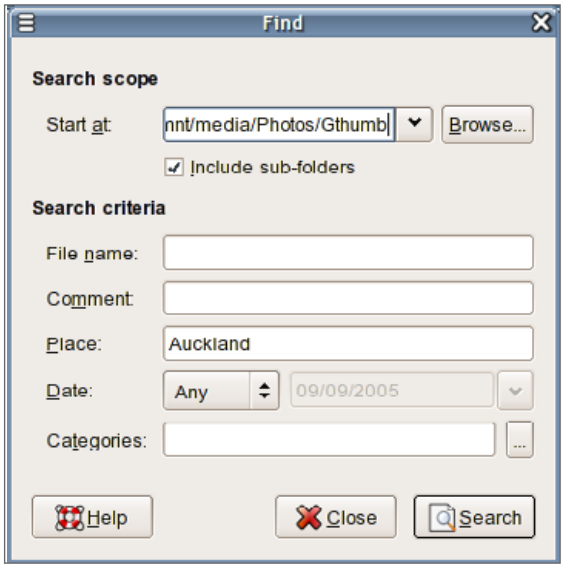


Figure 7. The Search Dialog

toolbar or select Find from the Edit menu. In Figure 7, I'm searching for all images that have the word Auckland in their comment, to try to find all the pictures taken on a recent holiday.

Click Search, and gThumb shows you all of the images that match your criteria. You can cancel the search, further fine-tune it or choose to view the images it has found. It saves these images as a dynamic catalog. At any time, you can edit the search or run it again to gather any images that have been added that meet the criteria after you originally ran the search.

Once you've assembled a collection of images you'd like to share with others, gThumb provides a simple tool to export them to the Web (Figure 9). Highlight a selection of images with your mouse, and choose Create A Web Album from the Tools menu. Tick Copy originals to destination, and then tick Resize if larger than: and select a size. If you have

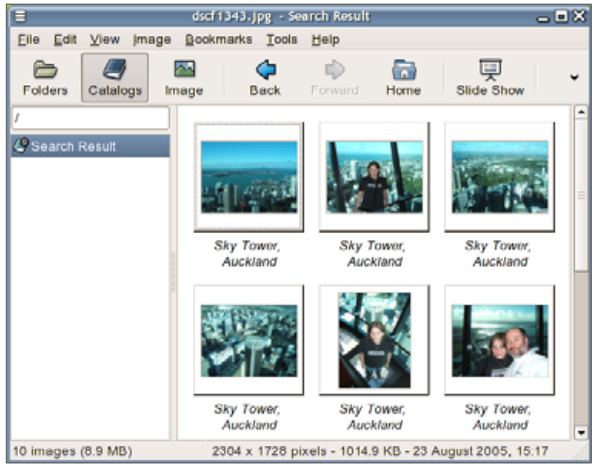


Figure 8. The Completed Search

friends or family on slow Internet connections, you might like to make that size as low as 640x480 for smaller file sizes. Click Save to generate your gallery.

One nice feature of gThumb's integration with GNOME is the ability to export catalogs to Nautilus' built-in CD-burning support. From the catalog mode, select Write to CD from the File menu. When the catalog is opened in Nautilus, click the Write contents to CD button. Type in a title for your CD in the Disc name box, and make sure it has selected the right burner device and a reasonable write speed (Figure 10).

For more information about gThumb, check out its Web site at http://gthumb.sourceforge.net or its comprehensive help manual.■

Jes Hall is a UNIX systems consultant and KDE developer from New Zealand. She's passionate about helping open-source software bring life-changing information and tools to those who would otherwise not have them.

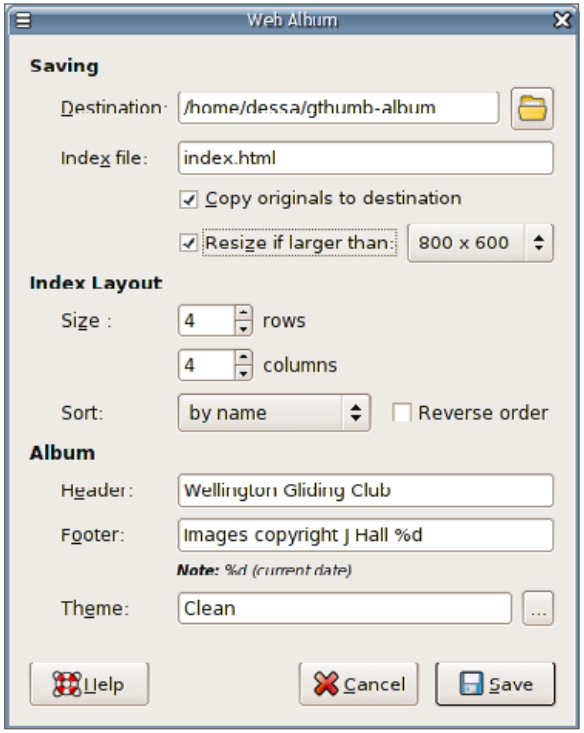


Figure 9. The Web Album Creation Tool

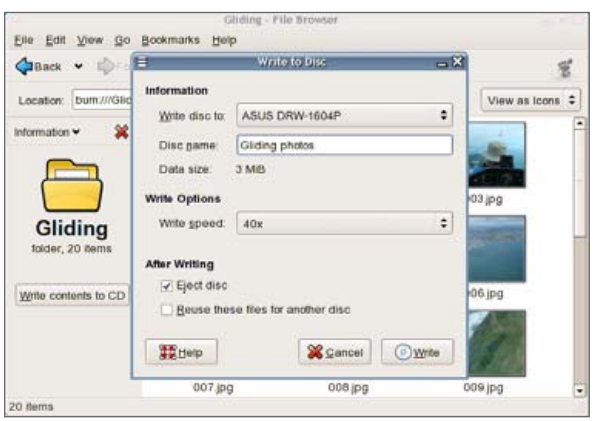


Figure 10. CD and DVD Burning with Nautilus

KDE Everywhere You Go: Platform-Independent Personal Information Management

How to make life easier by using your KDE-based PIM on different platforms.

A. CREG PETERS

If you are like me, you like to use a computer to do as much work for you as is "machinely" possible. If you are like me, you also carry various devices with you that leverage all this work you've made your poor PC do on your behalf. This means carrying a PDA, memory stick or other gadgets that hold information.

If this description fits you, you probably face the same situation that I do: accessing all of the information that you've so diligently entered in one place (like your Linux PC) in other places (for example, a Windows PC).

Luckily, there is a solution to this problem for schedules, addresses and to-do lists. Developer Lutz Rogowski leads a team (http://www.pi-sync.net) that has taken two PIM applications from the KDE desktop—KOrganizer and KAddressbook—and made them platform-independent. These applications, known as KDE PIM-PI (KDE Personal Information Management–Platform-Independent), allow a user to use the same programs and data on Windows or Linux (even handheld Linux, such as the software run on the Sharp Zaurus PDA). This article introduces KOrganizer–Platform-Independent (hereafter KO/Pi); a later article will introduce KAddressbook Platform-Independent (hereafter KA/Pi).

The site for the project, called Pi-Sync (http://www.pi-sync.net), offers the software for download and installation on Windows XP, desktop Linux (specifically SUSE Linux 9.2) and the Sharp Zaurus—on the original Sharp ROM most all releases and the OpenZaurus ROM (http://www.openzaurus.org) for stable releases.

INSTALLATION ON LINUX

On Linux, use your package management tool of choice (YaST, kpackage, Synaptic or whatever) to install the file KDE-Pim-Pi-X.X.XX-SuSE_9.2.i586.rpm (where X.X.XX is the version number).

For those who run Debian-based distributions of Linux (such as Ubuntu/Kubuntu or Libranet), this page (http://singlenesia.com/software) has an older but still functional version ready to install on these systems.

To run, select KO/Pi from your distribution's K Menu, or press Alt-F2 and type `kopi`.

INSTALLATION ON WINDOWS

On Windows, simply unzip the installation file (kdepim_2.1.16_for_Windows_XP.exe.zip) and extract the files anywhere you like. However, you also need to download the file kdepim334dll.zip, which contains some additional files that the program needs on the Windows platform. Unzip this file to the same folder as you did the previous ones.

To run, go to the folder where you extracted all of the files, and double-click on kopi.exe to start the programs. They won't show up in the Start menu, because they don't use the usual Windows installer that would create shortcuts for them there (you can do so manually); likewise, they probably can't be started from the Run dialog, unless you use the Browse feature or installed them to the Program Files directory. In any case, it is easier to navigate to the folder where you extracted them and double-click to start.

USING KO/PI

We begin by learning how to use KO/Pi for schedule and task management. On first start, a wizard prompts the user to enter information such as date

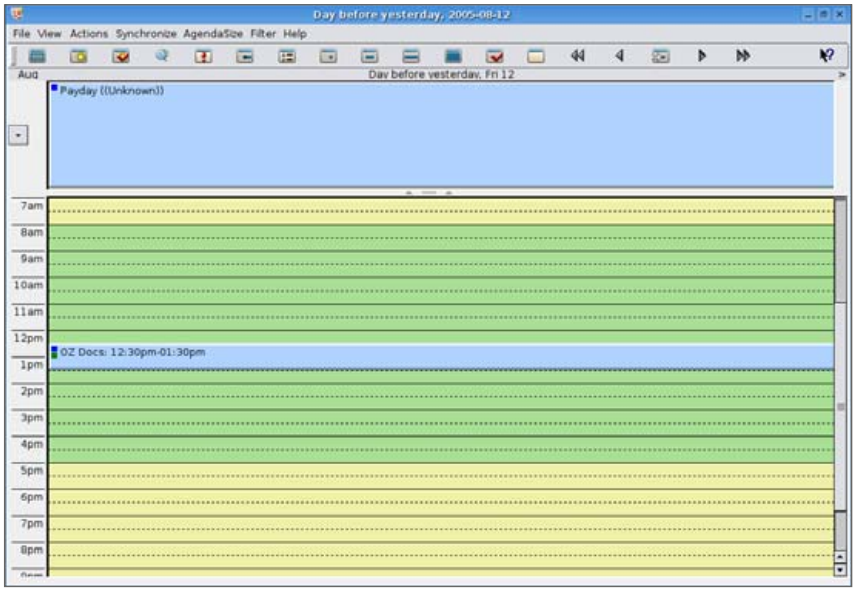


Figure 1. KO/Pi Day View

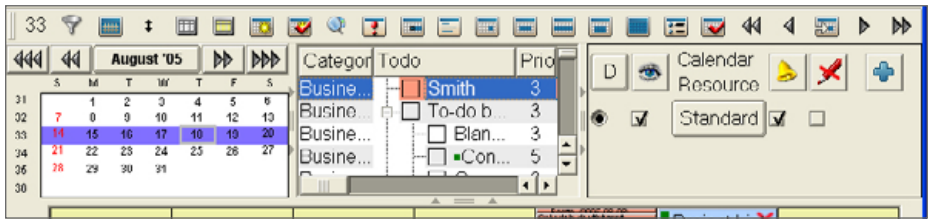


Figure 2. Upper Panels in KO/Pi

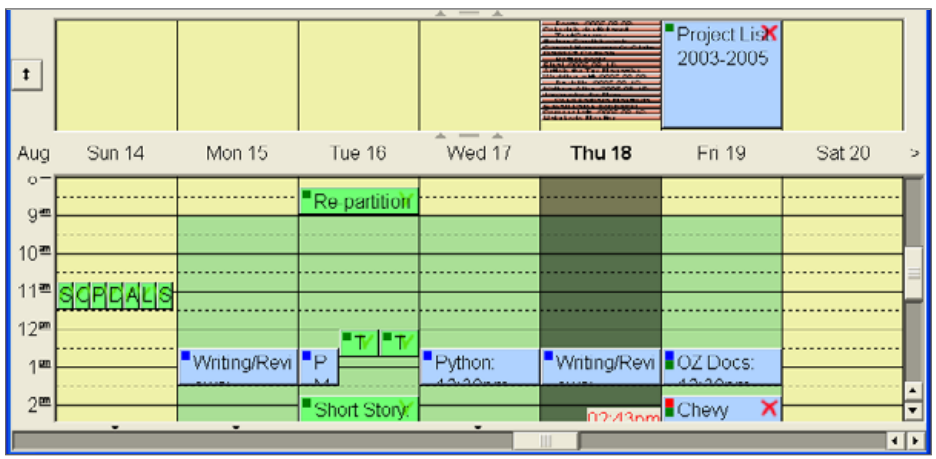


Figure 3. Lower Calendar in KO/Pi

preference (that is, month-first or date-first) and time zone. It is important to match these carefully to the date used by the machine you are using. If your machine uses Windows at all (either alone or in a dual-boot configuration), it is probably best to use Local Time. On the other hand, if you use Linux or other open-source OSes exclusively, these may set the hardware time of your machine to Grand Median Time (GMT); if this is the case, set the time to the time zone in which you reside.

For those who have used KOrganizer, KO/Pi should look very familiar. It is almost identical in terms of views available, how the information is stored and most other aspects. For those who are not familiar with KOrganizer, Figure 1 shows the basic layout (Day View) of the program.

[*Note: You may notice that some of these screenshots look different. That is because some were taken on a Windows PC, and some on a Linux PC. See—it really is platform-independent!*]

Click on the button that looks like a calendar with a week blocked out in blue; this opens the Week View (Figure 2). In this view, there are a number of different panels. The upper-left panel shows the Date Navigator, which lets you jump to any date quickly. The upper-center panel shows a list of tasks. The upper-right panel shows the calendars you have loaded (KO/Pi now has the ability to load multiple calendars—more on this in the next installment). The To-Do view and the loaded calendars can be hidden by clicking on the right-facing arrows. The loaded calendars can be removed altogether by selecting Toggle Resource View from the View menu; the Date Navigator can likewise be removed by selecting Toggle DateNavigator from that same menu.

The bottom half shows your appointments and tasks for the week. Depending on whether the item has a specific due date or time associated, it appears above or below the date number. Appointments without any specific time (often called all-day events) are shown in the box above each date (as shown in Figure 3). To-dos that are

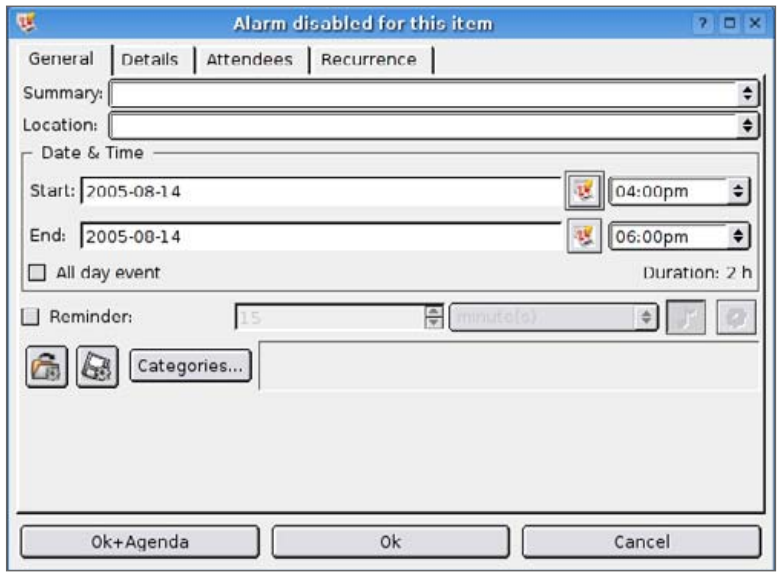


Figure 4. Appointment Edit Dialog

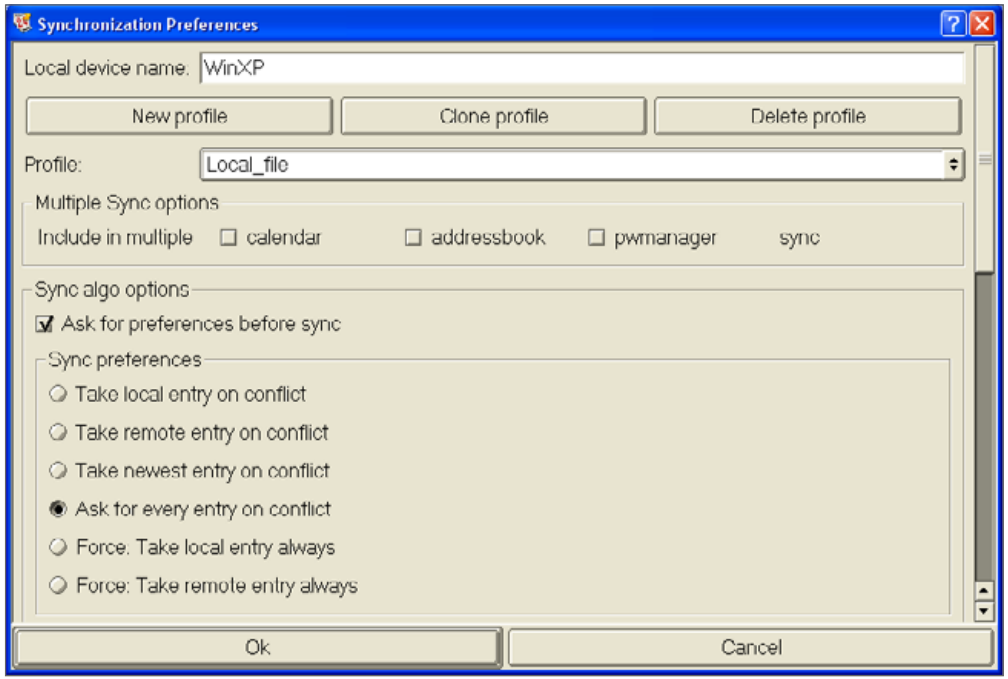


Figure 5. KO/Pi Sync Configuration Dialog (Top)

due on a specific day, as well as any overdue tasks you might have, are shown in those boxes as well. Appointments at specific times are shown at the bottom, as you would expect in most calendaring programs. Tasks with deadlines are shown at their assigned times. In either location, a blue color means the task is pending, yellow indicates the task is due, red signifies overdue and green means completed.

Let's begin by adding an appointment. The toolbar at the top has a button showing a calendar with a small yellow star on it—this is the New Event button (you also can access it by going to Edit→New Event). Clicking this button brings up the Edit dialog (Figure 4). The fields in the first tab are self-explanatory, allowing you to set the name of the event, the date, the time and whether you want an alarm. You also can organize your appointments by categories; select one or more categories from the pull-down menu, or edit the Categories list by clicking the button and adding or removing them to your liking. When you're done, click OK to add the appointment to your calendar (or click OK+Agenda to take you directly to the day of the appointment).

SYNCHRONIZATION BASICS

Now that you've created an appointment, you'll want to have it available on all your KO/Pi installations. This process is called synchronization, and it's one of the key advantages of the KDE PIM-PI suite. You can set up this function using the Synchronize menu. Click on Synchronize→Configure to set up your synchronization.

The dialog box that pops up, shown in Figure 5, is a little confusing at first. The very top field is labeled Local Device Name. This is a label to identify your device—you can name it anything you like, as long as all of the devices have unique names. Under this are three buttons, New Profile, Clone Profile and Delete Profile. These refer to the Sync Profiles listed in the pull-down menu below the buttons. You can set up different profiles

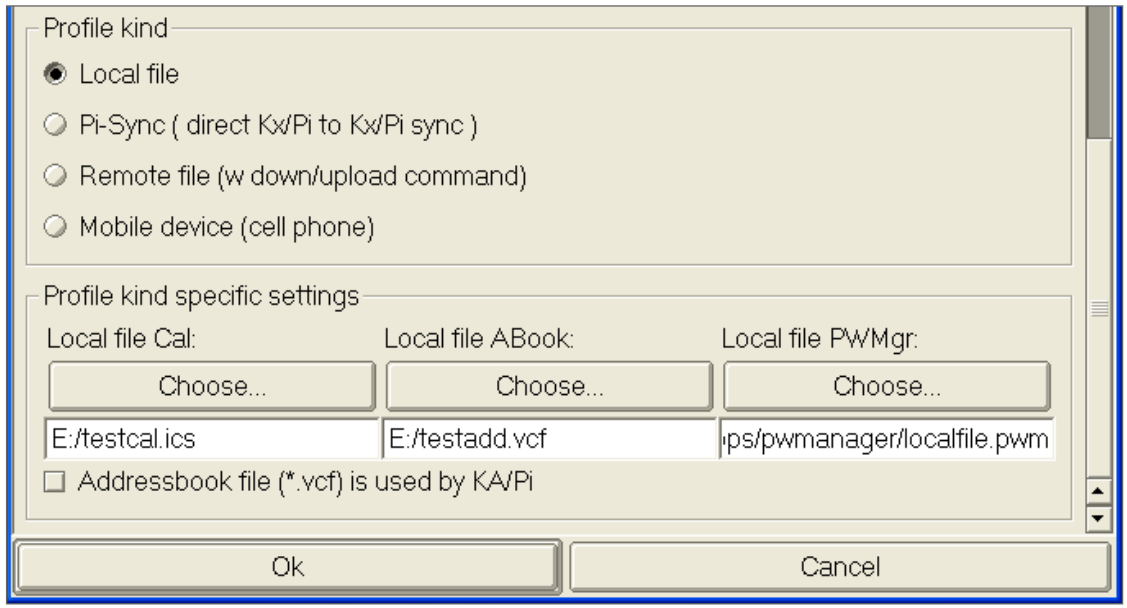


Figure 6. KO/Pi Sync Configuration Dialog (Bottom)

depending on where you are and what other device(s) you are trying to reach. For simplicity's sake, let's create a profile that synchronizes the event we just created with another, identical file on the machine you're using. Click New Profile, and the Profile Name field shows noName. You can change this to anything you like; let's use Local copy. Scrolling down, you'll see settings labeled Multiple Sync Options and Sync Algo Options (which contains subsections for Sync Preferences, Filter! Options and Write-back Options). You needn't change any of these, as the defaults are fine for our purposes here.

What will concern you is the next section titled Profile Kind (Figure 6). There are four options: Local File, Pi-Sync, Remote File and Mobile Device. Leave this set to Local File, and go to the bottom of the dialog. The last section is titled Profile kind specific settings. There are three input boxes, which allow you to indicate the local file with which you want to synchronize KO/Pi, KA/Pi and PWMgr (this is a password manager application, which is not covered in this article). You can use the Choose button to call up a file selector and select a file, if you have one (KO/Pi uses iCalendar files, and KA/Pi uses vCard files). If you don't have any files, you can input a name, and the application creates one for you.

After you are all done with this, click OK to record your settings. Now, if you click on the Synchronize menu, there should be an entry for the profile you just created. Clicking on the profile name starts the synchronization process. Soon you should see a dialog box detailing the changes that the application will make to either or both files (in this case, only the remote file, because the local file is the one to which we added the appointment). Click OK to confirm the changes, and you are fully synchronized! The good news is that the settings are shared between KO/Pi and KA/Pi. If you launch KA/Pi, the synchronization profile should already be set up for you. Simply begin adding or importing addresses, and you can sync at will!

Now, you may ask why you would want to synchronize to another file on your own system. Instead of the hard drive, these files could be on a USB memory stick—you can take them to other places (such as work) and point the KO/Pi you installed there to synchronize with them. The files could belong to another program—for example, the upcoming Mozilla Calendar/Sunbird program also uses iCalendar files, as does iCal on Mac OS X (although the iCal files used by KO/Pi may be in a slightly different in format, and some elements may not be exactly the same). You can see the flexibility that KDE PIM-PI offers through its synchronization methods.

In the next article, we will explore the Pi-Sync protocol and show how two machines with KDE PIM-PI can synchronize directly with each other. We'll also detail some ways of getting data you already have into KDE PIM-PI, so you don't have to enter it yourself. Finally, we'll discuss some strategies to make the most of the ability to use KDE PIM-PI on multiple platforms.■

A. Creg Peters is a project manager at an international consulting firm. In his spare time, he works on fiction, practices kendo and fiddles incessantly with as many as four Linux machines in his home in Germantown, Maryland.

Inkscape: the Elements of Design, Part I

This follow-up series on Inkscape starts with a serious look at design definitions.

JON PHILLIPS

The elements and principles of design are often used to teach the basics of general design to students. This article is the first in a series of three building on past *TUX* magazine articles about Inkscape, an open-source drawing program (http://inkscape.org). This series uses the elements and principles of design to help you construct compositions.

This introductory piece is geared for all types of people, from beginners to professionals. It specifically discusses the elements of two-dimensional graphic design in order to teach you a basic design vocabulary. Next month's article will focus on the principles of design that use the elements you learn from this article. The third and final article will combine the elements and principles to help you create a composition that will be submitted to the Open Clip Art Library (http://www.openclipart.org).

DESIGN AND GRAPHIC DESIGN

What then is design? In general language, it often infers an intent or a plan. More specifically, in the arts, design often refers to graphic design, which is the art of arranging image and text to communicate a message. Wikipedia furthers this definition, stating that it is "applied in any media, such as print, digital media, motion pictures, animation, product decoration, packaging, and information signs". It is a practice that is traced back to the origin of the written word, yet only in the 19th century did it receive separate recognition.

Commonly, graphic design is linked with commercial culture. However, there is nothing about design that is explicitly linked with commodity beyond the long history of use by businesses to advertise services and promote products more effectively.

Regardless, to use design effectively, you must be clear about the message you want to communicate. What is important to us is how to convey your intended message more precisely. However, in order to write, you must first learn vocabulary (the elements of design), which will enable you to construct sentences with grammar rules (the principles of design). Then, you can write articulate messages—what are known as compositions in graphic design.

ELEMENTS OF DESIGN

The elements of design are the basic graphical components used to create a larger design. Think of these elements as the smallest units of design that an artist combines and arranges in different ways to achieve a design goal. The common elements are point, line, form (shape), texture and color.

POINT

A point is a single mark that is placed into a space. Multiple points can be used to achieve texture. If grouped together, the human brain connects the cluster of points and draws invisible lines between the points in space. This effect, closure, is described later.

First, start Inkscape on your computer. If you don't have a copy of Inkscape, point your Web browser to http://www.inkscape.org and download the proper package for your system—Windows, Mac OS X or Linux/UNIX. For further information, please see last month's article by Dmitry Kirsanov on getting up to speed with Inkscape.

To draw points in Inkscape, select the ellipse tool (F5 key) from the left-hand vertical toolbar (or press F5, Figure 1).

Figure 1. Ellipse Tool

Then, click on your drawing area and hold the Shift key down while dragging toward the bottom right of the canvas. This allows you to create a small ellipse. Now, go to the menu and

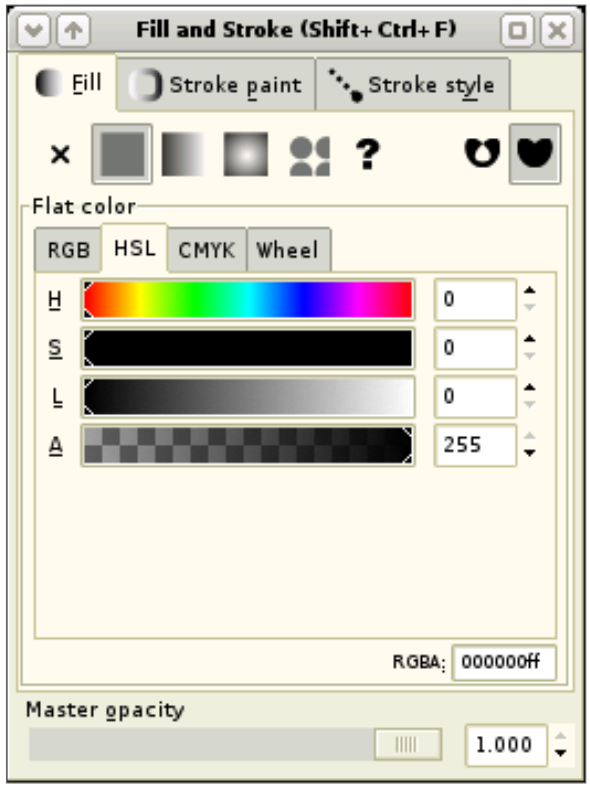


Figure 2. The Fill and Stroke Dialog

Figure 3. Selection Tool

select the menu Object→Fill and Stroke (Figure 2).

Then, change to the selection tool (F1 key, Figure 3).

Then, select the ellipse you just created on the canvas. Next, on the Fill and Stroke dialog, click the fill tab and select the flat color button and adjust the sliders so that the point is black. Then, select the stroke tab, select the flat color tab once more, and set the stroke to black. You now have a point like in Figure 4!

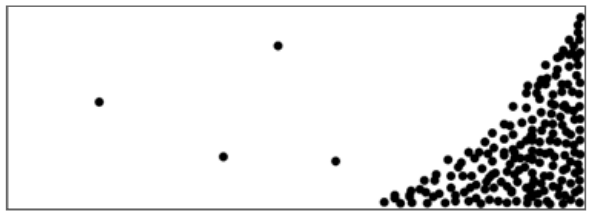


Figure 4. What's the Point?

The next step to understanding the point is to create a cluster of points—the fun part. Now, select the selection tool (Figure 3, F1 key), and while dragging the point, press the spacebar to make a quick duplicate of the shape in a different location. Make sure not to hold the spacebar down too long unless you want an unmanageable amount of copies of your point! Use this technique to make the outline of a star, or make a cluster of points in the corner as shown in Figure 4.

LINE

A line is a mark with length and direction. It is created by a point that moves across a surface. A line can vary in length, width, direction, curvature and color. It can be two-dimensional, like a pencil line on paper, and also can imply three-dimensionality to create perspective. Lines can be grouped together to create a sense of value, density and texture.

In Inkscape, select the beziér curve tool from the left-hand toolbar (Shift-F6, Figure 5).

On the canvas, single-click your mouse. Then, move to another location and double-click, thus ending your line.

Figure 5. Beziér Tool

Next, single-click while holding down the Ctrl key. While pressing that key, move your mouse to the right keeping a straight horizontal line. Double-click to terminate the line. Then, use the technique learned above to make three quick duplicates below this newly created horizontal line.

Select the first newly duplicated line with the selection tool and then select the stroke style tab on the Fill and Stroke dialog. Change the Width of the line to 3 points (pt), as shown in Figure 6.

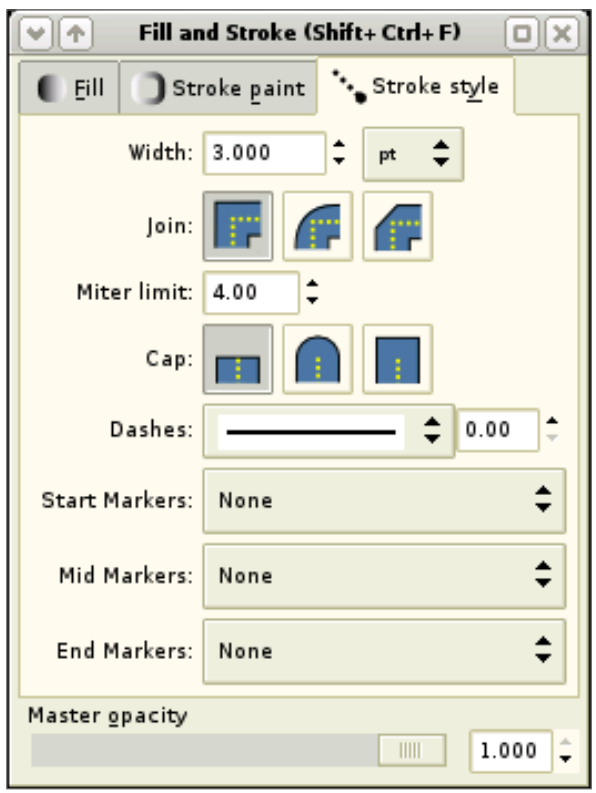


Figure 6. The Stroke Style Tab in the Fill and Stroke Dialog

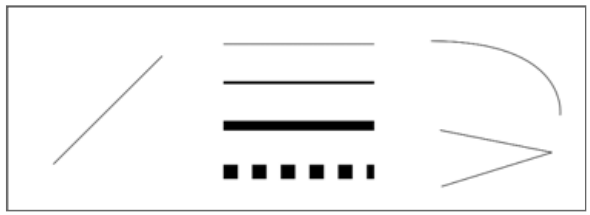


Figure 7. Different Types of Lines

Figure 8. Rectangle Tool

Figure 9. Polygon Tool

Select the line directly below this 3-pt line, and change its width to 6 points. Then, select the fourth line, change its width to 15 points, and in the fill and stroke dialog, change the dashes to the second option from the top in the pop-up list. You now have a large dashed line (Figure 7).

Lines also can be curved and irregular. To make a curved line, click on the canvas once more with the beziér tool, and this time continue to hold the mouse button down and drag toward the bottom-right corner of the drawing area and let go. To terminate that line, double-click. This is a curved line. To make an irregular line, click once on the canvas and move your mouse to another location, click again, move to another location and then double-click your first mouse button to terminate the line. This makes a shape similar to the bottom-right corner image in Figure 7.

Figure 10. The Auxiliary Toolbar

FORM (SHAPE)

The simplest definition of form, or shape, is a closed contour, an element defined by its perimeter (http://digital-web.com/articles/elements_of_design). This is a flat figure or shape that is created when actual or implied lines meet to surround a space. Often a change in color or shading helps to define a shape. There are generally geometric and organic shape types. Geometric shapes are constituted by the primary shape types—circle, rectangle and triangle—in addition to multi-sided polygons. Organic shapes have irregular outlines composed of straight and curved lines.

Now that you have learned how to create irregular lines, it is a simple matter of closing one of these lines to make it a closed shape. Use the beziér tool to construct a square by using the Ctrl key to constrain the lines horizontally and vertically. When approaching the end of the fourth line that makes the square, let go of the Ctrl key and move your mouse over the small box that is now on top of your initial click. Once your mouse is in this box and it turns red, let go of your mouse. You have now created an approximate square, as shown in Figure 11.

As an aside, another way to create this same shape is to select the rectangle tool (F4 key, Figure 8). Click once and then drag down and right to create a basic rectangular shape.

Now, to create a geometric shape, select the polygon tool (* key, Figure 9).

Click in the middle of your canvas, hold the Ctrl key and drag upward to create, by default, a five-pointed polygon, also called a star (Figure 11). If you would like to change the number of sides on your

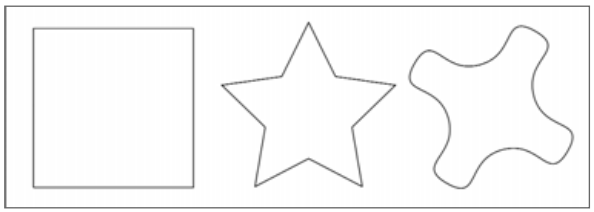


Figure 11. Three Example Shapes

polygon, go to the auxiliary toolbar above the canvas and change the number of corners with the up and down arrows next to the entry box (Figure 10).

To create an organic shape, create another polygon and then go to the auxiliary toolbar (Figure 10) and change the number of corners to four and the Rounded value to 0.60. You have now created an organic shape (Figure 11).

TEXTURE

A texture is used to create the appearance of a surface, or the material that composes something. It is the way a surface feels—how it may look. Example descriptions of textures are rough, bumpy or smooth.

In the point exercise, we created a cluster of points that approximated some type of surface. For this demonstration, let's use line segments to create the effect of texture. First, create a simple line. Then, quick-duplicate several times with the same distance between duplicates as demonstrated in Figure 13. Cover a large area of the canvas using this technique.

Next, create a line that is perpendicular to the first line you created. Use the same procedure of quick-duplication to make a cross-hatched effect. This increases the density of the texture.

If you want to increase the line's length and

Figure 12. Edit Tool

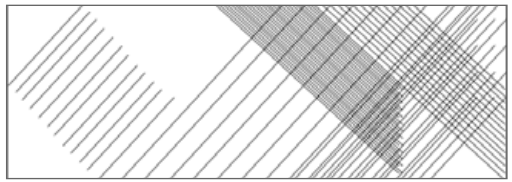


Figure 13. Texturing Makes an Area Interesting

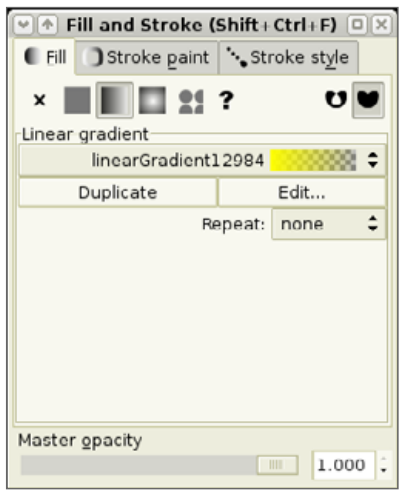


Figure 14. The Fill and Stroke Dialog Linear Gradient Selector

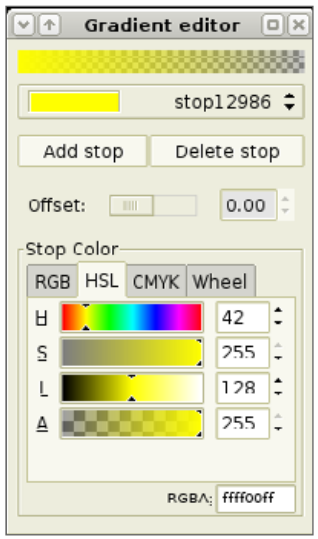


Figure 15. The Gradient Editor

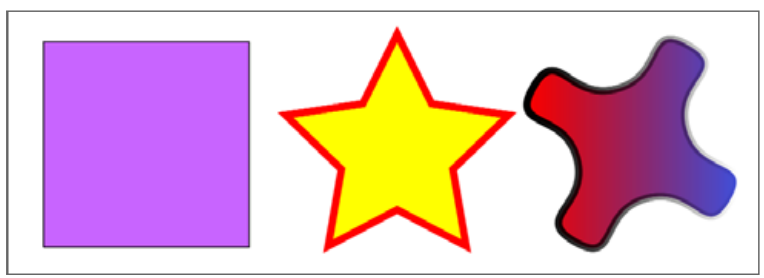


Figure 16. Finally, Color!

keep its direction the same, change to the Edit tool (F2 key, Figure 12).

Then, select one of the cloned lines, select an end point, hold the Alt and Ctrl keys, and drag the point upward or downward. The direction of the line is now constrained. Using this technique, you can make a texture fill an irregular or organic shape (Figure 13).

COLOR

Color is the perceived character of a surface according to the wavelength of light it reflects. Color has three dimensions: hue, value and intensity. Hue is another word for color and is indicated by common names like red or blue. Value is variable from lightness (white) to darkness (black), and intensity is a color's brightness (chroma) or dullness (gray).

Now, using the shape example, let's add some color. To begin, select the first rectangular shape and then go to the Fill and Stroke dialog and select the Fill tab. Make sure that the flat color button is depressed. Also, make sure the RGB tab is selected. Adjust the red, green and blue values to achieve a color like the first shape in Figure 16.

Select the second shape, the star, and change its color to yellow. Then, select the Stroke paint tab in the Fill and Stroke dialog and select the flat color button once more. Now, change the stroke color to red. Also, increase the width of the line to 6 points like you did in the line section and make sure, in that same dialog, that the line is not dashed.

Next, select the third object, the organic four-pronged object. Click the Fill tab in the Fill and Stroke dialog and select the linear gradient button to the right of the flat color button. Your selection now by default is a linear gradient that changes gradually from the last selected color (yellow) to no color. To change the gradient colors, click the Edit... button on the Fill and Stroke dialog (Figure 14), which pops up a Gradient Editor dialog (Figure 15). Change each stop to the colors you would like. For this exercise, try to match the colors in Figure 16. Then, make the stroke color of this object into a gradient matching Figure 16's stroke color. Make sure to change the stroke width to 6 points and make the line solid, not dashed.

CONCLUSION

You have now successfully graduated basic design vocabulary school! In the next installment of the series, we will learn the basic grammar of design, the principles of design: balance, rhythm, proportion, dominance, unity and composition.■

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GnuCash

Looking for something like Quicken on Linux? Here's how to use GnuCash to handle your finances.

XAVIER SPRIET

Managing personal finances becomes significantly more complicated as we age. We initially deal only with smaller amounts of pocket money and have very little accountability for what we do with it. By the time we enter the work force, our needs increase and we start having to pay for gas, rent, books and so on. Once we reach adulthood, the amount of transactions that we perform every day becomes too high to track simply with a spreadsheet. We want to track not only of our paychecks, but we also want to keep an eye on our taxes, retirement funds, home mortgages, lines of credit, credit cards—the list goes on.

GnuCash is a finance management application that uses formal accounting principles to help you keep track of where your money comes from and where it goes. In turn, the data you maintain through GnuCash allows you to perform some thorough budgeting and lets you identify problem areas in how you currently manage your money.

ACCOUNTING AND THE GNUCASH TUTORIAL

I don't know about you, but when I went to college, I took accounting and could not stand it. All the concepts were boring and unnecessarily complicated. So I went on with my life and slowly forgot every single concept of accounting that was ever taught to me.

I realized several years ago that personal finance applications, such as GnuCash, provide a way to track and manage my money, but I was intimidated by such applications shortly after starting them every time, mostly because of the dreaded accounting principles I had forgotten so long ago.

I will say it flat out: the most exciting aspect of GnuCash from my perspective is its excellent documentation.

GnuCash ships with documentation about each feature provided by the application, but it also includes a "Tutorial and Concepts Guide" that does an amazing job of explaining the concepts of accounting and also puts them in perspective. The tutorial helps you relate all the concepts to your everyday transactions and explains in a practical way how GnuCash approaches each problem.

Figure 1. Tutorial and Concepts Guide

After spending a little while reading the tutorial and following along with the example scenario, I started looking at GnuCash in a different way. It took me a while to get used to the user interface of the application, but the tutorial always pointed me in the right direction when I started feeling frustrated.

PERSONAL FINANCES VS. SPREADSHEETS

Last month in *TUX*, we spent some time looking at how our friend Adam used OpenOffice.org Calc to manage his budget. His financial spreadsheet allowed him to enter recurrent transactions, basic accounts and use customized formulas to determine what was happening to his money.

The spreadsheet model is a good tool if you are looking for a high-level overview of the numbers that matter to you today, but this model does not scale well.

Our friend Adam realized that as well. As Junior accountant, Adam did not need to read the GnuCash tutorial to get up to speed on his accounting concepts, but he did spend some time reading it anyway just to see how these concepts applied to GnuCash.

ADAM IS BACK

Adam recently decided to stop renting his current

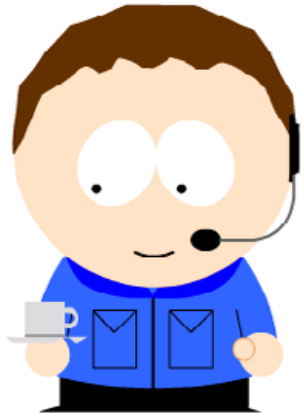

Figure 2. Adam

apartment and purchase his first home. He needs to determine where his money is coming from, where it is spent and how much money he should consider spending per week to make his mortgage payments without having to sacrifice his lifestyle.

Once he knows how much money he can afford to spend per week, Adam can start looking in his inbox and sign up for that perfect pre-approved mortgage at an incredible rate sent by an emerging bank that has nothing in mind but the well being of random e-mail users. Either that or he will decide to hunt for a real mortgage.

ACCOUNTS

In order to keep track of his money, Adam needs to create five general accounts under GnuCash. He launches GnuCash and completely skips the usual tip-of-the-day window as well as the first-time configuration druid that offers to create some base accounts for him. He then proceeds to create his main account containers:

- Assets: the assets account allows Adam to keep track of what he owns. This includes cash, goods (cars, homes and high-value items), stocks, mutual funds and so forth.

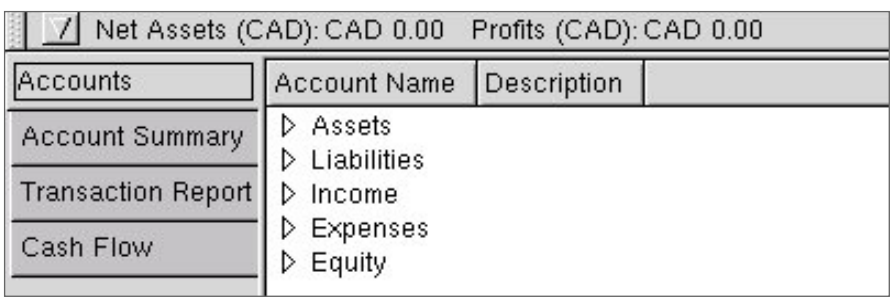

Figure 3. Base Accounts

- Liabilities: Adam needs to monitor his liabilities to keep track of what he owes. All types of debt are managed as liability accounts.
- Income: income accounts bring additional value to Adam's net worth. Every week, his paycheck increases the balance of his checking account (asset). This transaction originates from his main Income account.
- Expenses: Adam creates one sub-account under the Expenses account for each category of expense that he typically deals with. This includes his phone and utility bill, the taxes that come out of his salary, his rent and so on.
- Equity: equity accounts are used to track Adam's net worth. We create only one equity account at first and use it to track the original balances of other accounts. This is important, because you do not typically start using a financial application with zero money, income or debt.

For each of these top-level accounts, GnuCash provides a matching type of account. It is important to set the type of account properly when you create a new account, because GnuCash uses this type to determine how the money should flow between accounts.

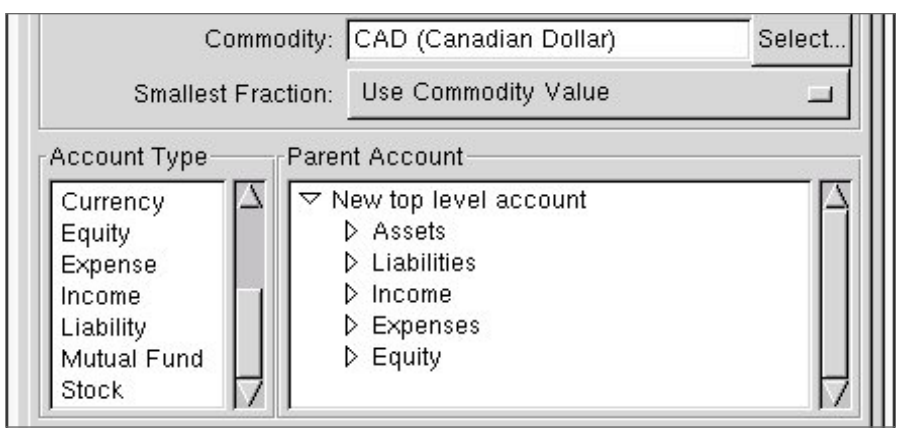

Figure 4. Account Creation Dialog

SUB-ACCOUNTS

Adam now needs to enter his individual sub-accounts into these containers. This part is relatively easy; the only trick is to make sure you select the appropriate type of account for each new account you create. The GnuCash tutorial does a great job of describing the function and purpose of each type of account available to you.

Under the Assets account, Adam creates the following sub-accounts:

- Checking (that is, Adam's checking account).
- Savings (Adam's saving account).
- Retirement contributions (Adam is Canadian, so he contributes monthly to his RRSP account for his retirement).

Under the Liabilities account, Adam now needs to create the following sub-accounts:

- Line of Credit: Adam uses a low-interest personal line of credit to benefit from lower interest rates on his credit purchases by paying his credit card immediately after each expense with his line of credit.
- MasterCard: Adam frequently uses this credit card for large purchases when he does not want to face instability on his checking account balance.

Under the Income account, a simple Salary account is used to track Adam's only source of income.

Under the Expenses account, Adam creates an expense account for his phone bill, long-distance plan, rent, income taxes, groceries, utilities, cell phone, Internet service, gas and a general entertainment account.

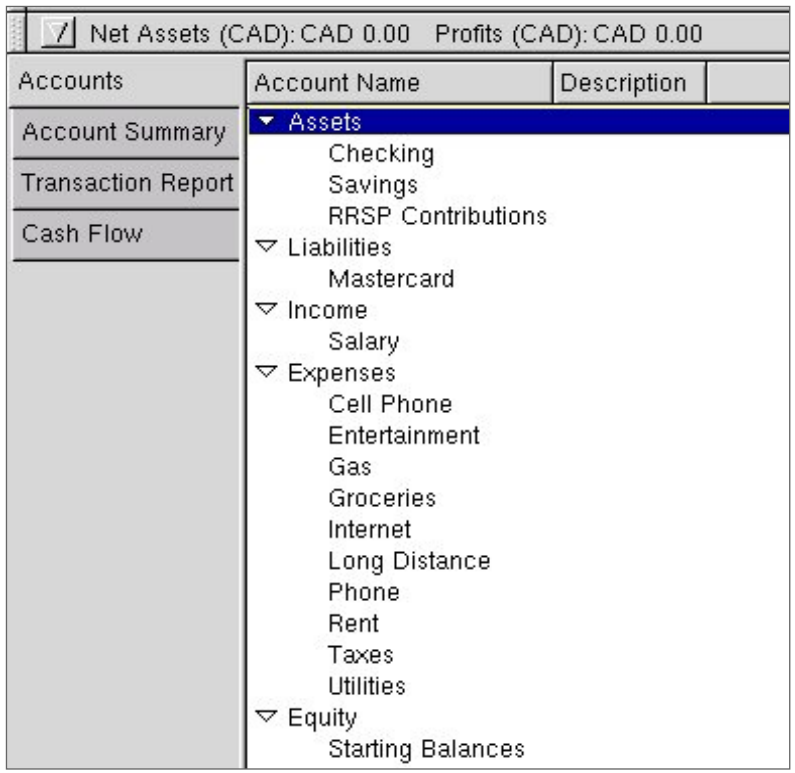

Figure 5. Adam's Accounts

The Equity account has only one sub-account called Opening Balances that is used to assign balances to the newly created accounts.

TRANSACTIONS

Now that Adam's base accounts are all in place, he can start using GnuCash to record individual transactions. The first transaction Adam wants to record is the opening balance for each of his accounts.

Adam double-clicks on his Checking account, clicks on the first available transaction line to create a new transaction and enters Opening Balance as the description of the transaction. He then selects Equity:Opening Balances as the transfer account, and enters the amount of 100 in the deposit column. When Adam presses the Enter key or clicks the Enter button on the toolbar, his transaction is created. The balance of his checking account is automatically changed to 100, and so is his Equity:Opening Balances account, thus indicating Adam's current net worth is $100.

Following this model, Adam creates transactions for each of his expenses. When creating an expense transaction (for example, Rent), Adam needs to use the withdrawal column for the amount of the transaction, as the money is actually being taken out of his checking account and transferred to his Rent expense account.

Because bills typically are sent on the first day of the month and are due by the last day of the month, Adam makes the date of each of his recurrent expense transactions the first day of the next month, that way his *current* balance is not affected by bills that have not yet been received.

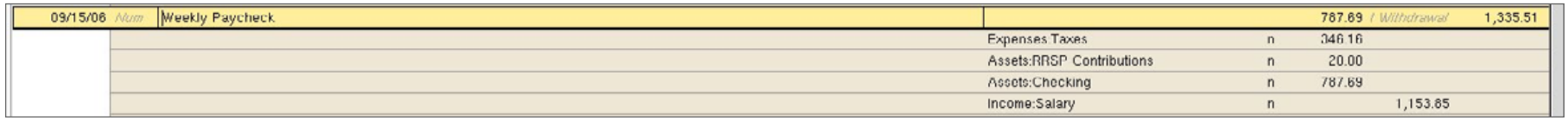

Figure 6. Adam's Salary Split Transaction

COMPLEX TRANSACTIONS

Adam almost had a heart attack once he saw his balance forecast after entering all his expense transactions. He then realized that he had not yet created any transaction for his income.

Adam's weekly salary entry is a little more complex than the other transactions he has just set up.

Every week, Adam receives his paycheck. This paycheck is calculated by dividing his yearly salary by 52 (the number of weeks during the year), then income taxes are automatically paid to the government (roughly 30% of Adam's income) and Adam's retirement contributions to his RRSP account also are transferred automatically (roughly $20 per week).

If you have followed my advice and read the GnuCash tutorial, you already should know how we are going to manage this complex transaction.

GnuCash offers support for transaction containers called splits. A split lets you create a group of transactions that are dependent on each other and the transaction group in general.

Adam double-clicks on his Checking Account entry in his Assets account, clicks on an empty line to create a new transaction and clicks on the Split button in the register's toolbar. Immediately, some nested transaction lines appear, indicating GnuCash is ready to record the details of his transactions group.

In the Description field, he enters the value Weekly Paycheck. Without even specifying a value for the transaction, Adam selects the first nested line, and without entering a description, he selects the Income:Salary as the transfer account.

Adam makes roughly $60,000 a year, so in the Withdrawal column for the new nested transaction, he enters 60000/52 and GnuCash automatically calculates Adam's gross weekly salary.

Now, because he must deduct taxes, Adam selects the next nested transaction line, skips the description field again, selects the account Expenses: Income Taxes and enters 60000/52*.33 as the value under the deposit column to indicate this amount will be deposited from his checking account to his taxes account when the group of transactions is processed.

Now, for the RRSP contributions, Adam simply has to create another nested transaction that deposits $20 to his RRSP account (an Assets account).

Upon pressing Enter, Adam's split transaction is recorded and the register shows the balance of the transaction, which should hopefully be positive; otherwise, Adam needs to move to a different country or find another job.

SCHEDULING TRANSACTIONS

Now that Adam has created a split transaction to record his next paycheck, he is wondering how he can avoid creating this transaction again every month. Fortunately for Adam, GnuCash supports transaction scheduling and recurrent transactions.

Scheduling a transaction is pretty easy. All Adam needs to do is double-click on his Checking Account entry, select the transaction he wants to schedule and click on the Schedule button in the toolbar. An assistant shows up, prompting him for information pertaining to the schedule he wants to create.

Adam selects Weekly for the frequency of the transaction, selects next Friday as the start date and Never Ends as the end data. Once he records the transaction, it is stored as a recurrent transaction.

This does not mean that GnuCash automatically enters the next X transactions automatically for you in your register. Instead, scheduling a transaction works by having GnuCash check for scheduled transactions at startup or during runtime and prompts you to create the transaction automatically.

Every Friday, GnuCash now prompts Adam to record his latest paycheck. Simply following the wizard instructions allows the transaction to be created automatically without any calculations required on Adam's side.

REPORTING

At this point, Adam has entered enough information to generate reports that will show him what is happening to his hard-earned money.

The first report Adam wants to see is the

Cash Flow - 01/01/05 to 12/31/05 for

Selected Accounts

- Assets
- Assets:Checking
- Assets:RRSP Contributions
- Assets:Savings

Money into selected accounts comes from	
Equity:Starting Balances	CAD 100.00
Income:Salary	CAD 769.23
Money In	**CAD 869.23**
Money out of selected accounts goes to	
Expenses:Gas	CAD 20.00
Expenses:Internet	CAD 50.00
Expenses:Phone	CAD 40.00
Expenses:Taxes	CAD 194.41
Money Out	**CAD 304.41**
Difference	**CAD 564.82**

Figure 7. Cash Flow Report

Account Summary report. He does this by clicking on the Reports menu entry and selecting the Account Summary entry from this menu.

Once the report shows up, Adam can change the settings GnuCash used to generate that report by clicking the Options button. In the dialog that appears, Adam wants to select the last day of next month as the report's end date. He now is able to have an accurate forecast of his financial shape by next month, with all transactions being processed automatically and broken down as part of the report.

Now that Adam has a high-level overview of his money's whereabouts, he wants to drill-down into the accounts and forecast on a per-transaction level. He creates a new Transaction Report and sets the end date as the last day of the following month again and sees a breakdown of all the transactions that have occurred since the start date of the report and up to the last day of the following month.

Adam's wife is not an accountant, and she could care less how individual transactions affect her bottom line. All she wants to know is how much money is coming in and how much is going out. Fortunately for Adam, the Cash Flow report allows him to do exactly that.

You can discover the other reports provided by GnuCash as you go. I have had little success with most of the graph-based reports as they failed to display any kind of legend on both of my test configurations. You should be able to create and configure most reports with ease at this point.

MORE FEATURES

GnuCash provides a very large number of features that we did not have space to cover in one article. For example, the Reconcile feature allows the accountant to compare the recorded amount of each transaction with the amount found in the bank statement. This lets you track inaccuracies or lost money. Adam uses this feature at work for his corporate account needs, but he does not feel this feature is very important to him for managing his personal finances, so you can read up on this feature in the GnuCash tutorial as it is also very well documented.

GnuCash also provides a Mortgage Payment wizard that lets you enter the attributes of your mortgage and have GnuCash come up with a payment schedule and also enter the scheduled transactions.

This feature seemed to have issues dealing with weekly mortgage payments, so Adam decided to rely on the mortgage schedule provided by his bank instead.

INSTALLATION

GnuCash has been around for a long time, and it is available for every distribution I have ever heard of to date. Under Fedora/Red Hat, you should be able to type `yum install gnucash`. Similarly, on a Debian, Ubuntu or any other Debian variant, you should be able to type `apt-get install gnucash` to install the application.

- Under Gentoo Linux, type `emerge gnucash`.
- Under Mandrake/Mandriva, type `urpmi GnuCash`.

For most other cases, you should be able to use the package manager shipped with your distribution (SUSE and Novell Linux also ship with an automated package manager). If your distribution does not provide a package management system, you should be able to find a version of GnuCash on your distribution's media.■

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I've Got Peace Like an iRiver

***TUX* walks you through how to set up an iRiver device on your Linux system.**

MATIJA SUKLJE

iRiver is a portable media player. It isn't quite accurate to call it an MP3 player, because iRiver is one of the few so-called MP3 players that supports the OGG/Vorbis music format. When you add to that the awesome sound quality it produces (with the included Sennheisser headphones), it makes it a great choice for the Linux-using music lover.

The only problem with iRiver is that it doesn't work out of the box with Linux, which shouldn't be much of a surprise really, as Linux is infamous for poor driver support. Fortunately, the problem is easy to solve. And in this article, I show you how to solve it. So let's start cracking!

ONE WAY IN—TWO WAYS OUT

The first step is figuring out how you want your iRiver to behave. Don't know what I'm talking about, do you? Well, just follow my lead, it's not difficult at all. The firmware (software embedded in a hardware device) that came on your iRiver doesn't make it behave as a UMS (USB Mass Storage) device. If it did, you could use it as a normal USB disk. But don't despair! It is possible to turn it into a USB disk by upgrading the firmware.

It's up to you to decide whether you want to do this to your iRiver device. If you want to keep the firmware as it is, you'll have to connect your iRiver to your computer using special software. The up-side of this is that you won't have to upgrade the firmware that lets you view the radio station presets and view the remaining battery power from the computer. The serious down-side is that you won't be able to use it as a UMS device and thus will need the special software installed on every computer you want to use with your iRiver. Finally, you can't copy your MP3s from your iRiver to the computer's hard drive because of the official firmware's built-in restrictions.

The alternative, again, is to change the (official) firmware to unofficial firmware. This changes your iRiver into a normal UMS device unhindered by copying restrictions, so you can carry around and use your iRiver with any computer that has a working USB port. The down-side is that you cannot use the custom iRiver software with your iRiver device anymore.

I chose to switch to the UMS firmware. It is more useful to be able to see the battery meter and radio station presets on the device itself than to view them on a computer. Plus, it is nice to be able to use such a device as a disk. It makes it easier to use as a music device and makes the iRiver an all-purpose portable disk drive.

If you decide to turn the iRiver into a UMS device, jump to the "Using UMS Firmware" section; otherwise, just continue reading.

LEAVING THE FIRMWARE AS IS

As mentioned, you can use your out-of-the-box iRiver pretty much exactly like you would if you were using the official iRiver software.

What you need to connect iRiver to the computer is a working USB port and a package called libusb, or a package similarly named. Most distributions come with full USB support built-in nowadays, so you probably don't have to worry about installing this package.

GOING OLD-SCHOOL WITH IFP-LINE

ifp-line is a simple command-line application with which you can browse and manipulate files on your iRiver (upload, download and remove). It is capable of checking the battery, formatting and upgrading the firmware. But what's even better is that it can be used together with Midnight Commander to make the file manipulation a lot easier. And this is what we try to accomplish here. For those who desperately want to learn its command-line commands, the README is pretty straightforward.

Install ifp-line. It should be available for your distribution as a package. If not, have a techie friend compile it for you. If you know how to compile programs, uncompress the tarball, change to the ifp source directory and run:

```
# make; make install
```

If you want to use ifp-line as a non-root user,

you also should run the following command in the same directory:

```
# ./noroot.sh
```

Now, we're set. You can test whether it works by simply plugging the iRiver in to a USB port, turning it on and running these commands:

```
# ifp ls
# ifp df
```

The first command should show you which files and folders are on the root directory of your iRiver, and the second should tell you how much free space you still have on your iRiver (in bytes).

WORKS? GREAT! NOW, LET THE REAL FUN BEGIN!

There are some graphical applications available for iRiver. Since I'm a KDE user, I cover the installation and usage of the Qt-based ifpgui. GNOME users might be happy to hear there's also iFP-gnome (see Resources)—a GUI made for their favourite desktop.

You should be able to find a package of ifpgui for your distribution, but if not, it is even simpler to compile than ifp-line. Tell a techie friend to uncompress the source code tarball, change into the ifpgui directory and run the command:

```
$ ./build.sh
```

It asks you for the root password once during the install to make the application usable by non-root users.

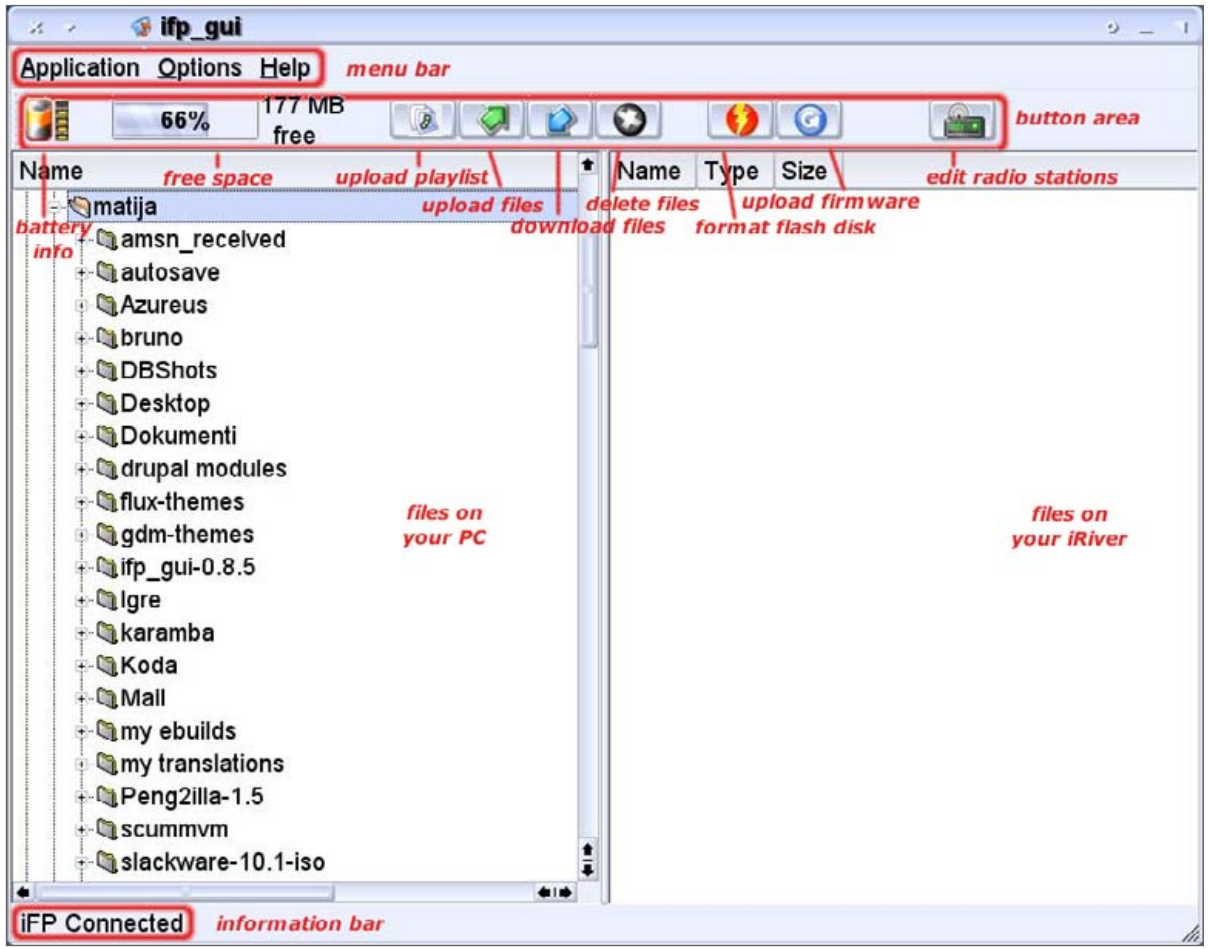

Figure 1. The ifpgui Main Window

As you can see in Figure 1, the interface is divided into four sections: the menu bar, the info bar, the button area and the main area. The main area is also divided into two parts. The left part shows the files on your computer, and the right part shows files on the iRiver. The buttons are self-explanatory.

The first thing you might want to do is dive

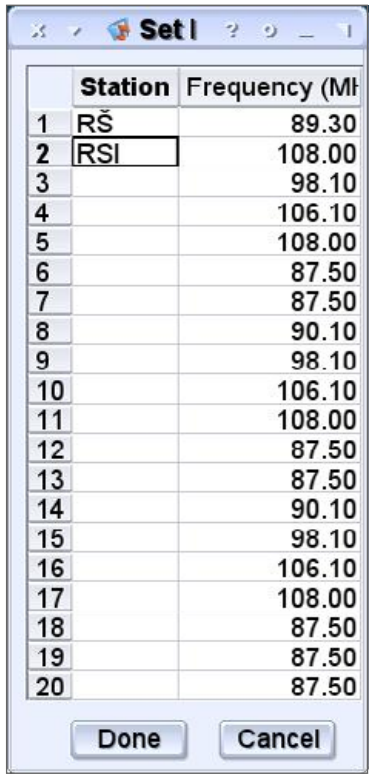

Figure 2. Edit Radio Frequency Presets

directly into copying music to your iRiver. The interface is simple to understand, but if you would like to hear how to do it, here's how. Let's say you want to upload some rock albums and keep them separated from the rest. So, create a new directory using the right-click menu on the right (that is, iRiver) part of the main area, create a new folder and name it Rock. Enter that new folder you just created. Now, navigate to your favourite rock songs on your computer (left part of the main area), select them and press the Upload button. You also can upload the files simply by dragging and dropping them from the left area to the right—whatever suits you best. You can select multiple files if you hold down the Ctrl key while clicking on them.

While you're at it, you might as well add your favourite radio station. Simply click on the radio button (it's the right-most button) and change the presets. Let's say you want to add a radio station called foo at the frequency 89.45MHz on the first preset. Double-click the Frequency field in the first row, and enter 89.45. You can even name it (it doesn't show on the iRiver though) by double-clicking the Station field and typing in `foo`.

But, as already mentioned, this application isn't difficult to use at all, just play with it a bit and you'll understand it perfectly. Unfortunately, ifpgui is, at the time of this writing, still in the beta phase and gave me problems detecting the connection to the iRiver. It may work for you immediately by the time you read this.

USING NEW UMS FIRMWARE

In my experience, iRiver becomes a lot easier to use when you transform it into a UMS device; it behaves just like a normal USB disk.

It is fairly painless to update the firmware to the UMS version. Download the latest UMS firmware from the official iRiver home page, and unzip the file with the command:

```
$ unzip <firmware filename, such as IFP-800T.HEX>
```

If you prefer to use your KDE desktop, simply open the zip file by clicking on it. KDE opens the file as if it were another folder. Now drag the file to a convenient location, like the desktop, to unzip the file.

If you're a command-line friendly person, run the following command to update the firmware:

```
$ ifp firmupdate <firmware filename, such as IFP-800T.HEX>
```

It's even easier if you use ifpgui. Click the upgrade firmware button, and select the .hex file you downloaded and unzipped to the desktop.

After the upgrade has finished, simply turn your iRiver on again, and you can start using it after it is done reformatting itself. Some distributions will detect the device automatically when you plug it in and turn it on. KDE will place an icon on the desktop for you. If your distribution doesn't work that way, put a link to it on your desktop yourself. Right-click on the desktop (while it's plugged in and turned on) and select Create New→Link to Device→Hard Disc Device. Be sure to point the device to the right device (usually /dev/sda) and change the icon and the name to what you like best.

Now that you can access your iRiver from your desktop, you don't have to mount it manually every time—just plug the iRiver in, turn it on and click its icon. Now you can open another Konqueror, point it to your music collection and drag and drop your music files from there to your iRiver. But, don't forget to unmount before you unplug it! Because you have a device link on your desktop, that's as easy as right-clicking the icon and selecting Unmount.

Figure 3. The amaroK Script Manager

SOME EXTRA GEMS

If you are using KDE 3.4, you can run Konqueror and enter `media:/` in the location field. Here's an even easier method: press Alt-F2. A dialog box appears. Type `media:/` in the edit field, and click the Run button.

amaroK is a popular music player for KDE. amaroK users might like to upload their music directly from amaroK to their iRiver. Select Tools→Script Manager from the main menu, after which a dialog box should appear. Click on the Get More Scripts button. A new window should appear with a list of available scripts. Select the one called Transfer To Media Device and click on the Install button. Then click Close to close the script installation window.

Now you need to configure this script. Select Tools→Script Manager from the main menu if you closed the Script Manager window. Select transfer_to_media_device.sh from the Scripts list, and start the script by pressing the Start button. (Depending on the size of the scripts window, you may see only a portion of the name transfer_to_media_device.sh.) Click the Run button. Then, click the Configure button. Click on the Storage Media option on the left and select the iRiver device. If you have an older version of KDE, you can navigate to the mount point, usually /media/usbdisk.

Now you can upload tracks directly by right-clicking the selected tracks and selecting Transfer to→USB device. If you would like to have this amaroK script load itself every time you (re)start amaroK, tick the Start scripts on application startup box.■

RESOURCES

iRiver Official Home Page: http://www.iriver.com

ifp-line (Command-Line Application): http://ifp-driver.sourceforge.net/ifp-line

ifpgui (Qt/KDE GUI): http://ifpgui.sourceforge.net

iFP-gnome (GTK/GNOME GUI): http://ifp-gnome.sourceforge.net

transfer_to_media_device amaroK Plugin: http://www.kde-apps.org/content/show.php?content=26850

Rockbox (Alternative/Unofficial Firmware): http://www.rockbox.org

Matija Suklje is a 21-year-old law student from Ljubljana, Slovenia, who has been interested in Linux and F(L)OSS since his early high-school days. You can contact him by e-mailing matija.suklje@rutka.net or from his new home page (http://matija.suklje.name).

Playing Windows Games on Linux with Cedega

How to use Cedega to play your Windows games on Linux.

KEVIN BROWN

About a year ago, I realized that there was only one reason I still had Windows installed on any of my systems. I'm a gamer; I admit it. So for a very good reason, I just had to have Windows—or so I thought. A few months after my epiphany, I read all the hype about WineX, which later became Cedega. I've been using Cedega ever since, and I must say that it keeps up with what I want to do and then some.

First off, it should be known that Cedega is not a complete Windows environment, or anything near it. It allows you to run Windows games on Linux.

Second, I need to address the payment issue. Cedega costs $5 US a month with a three-month minimum, and to me, it was worth it to spend $15 to see if I could get away from Windows. As Linux users, we've been quite spoiled in that we get great software for free (as in beer). Although you can download the most current version of Cedega without paying for it, this version does not include the .dll files or licensed material (think copy protection) that you need to run games. Besides, it's worth paying a small fee to rid yourself of the anchor and not have to dual boot. Also, you get to influence the Cedega developers and voice what's important to you; the developers actually do listen to user requests.

Cedega does not work with every game, so it is really important to make sure it's going to do what you need it to do. Your first stop should be http://transgaming.org/gamesdb, the games database for Cedega. This database shows the level of support for every game that someone has thought to test with Cedega. Check the database to see what the playability level (*not* the popularity level) is for the game you'd like to play. If the playability level is anything but a 4 or 5, it's not likely to act like it would on Windows. So if your favorite games all have lower playability levels, Cedega probably isn't for you. There are some exceptions where a playability level is 3, but the game plays fine. Another thing to keep in mind is that older games might start to work on newer versions of Cedega, but if nobody tests it again, the playability level in the database won't be adjusted accordingly.

The playability levels and their definitions are listed below. These definitions were hard to find, and I encountered many conflicting sources of information, but this should give you an idea of what they mean. You can safely assume that if the playability is a 4 or a 5, you'll be satisfied with how the game works in Cedega. However, you will find only the games officially supported by the TransGaming team at the URL http://digital-conquest.ath.cx/wiki/index.php/Category:Supported. Here are the playability levels and their definitions:

- 0 or N/A: Not rated.
- 1: Game does not install.
- 2: Game installs, but it does not play at all.
- 3: Game installs and plays, but it is limited in function.
- 4: Game installs and plays, but there are minor problems.
- 5: Game acts exactly as it would on a Windows system.

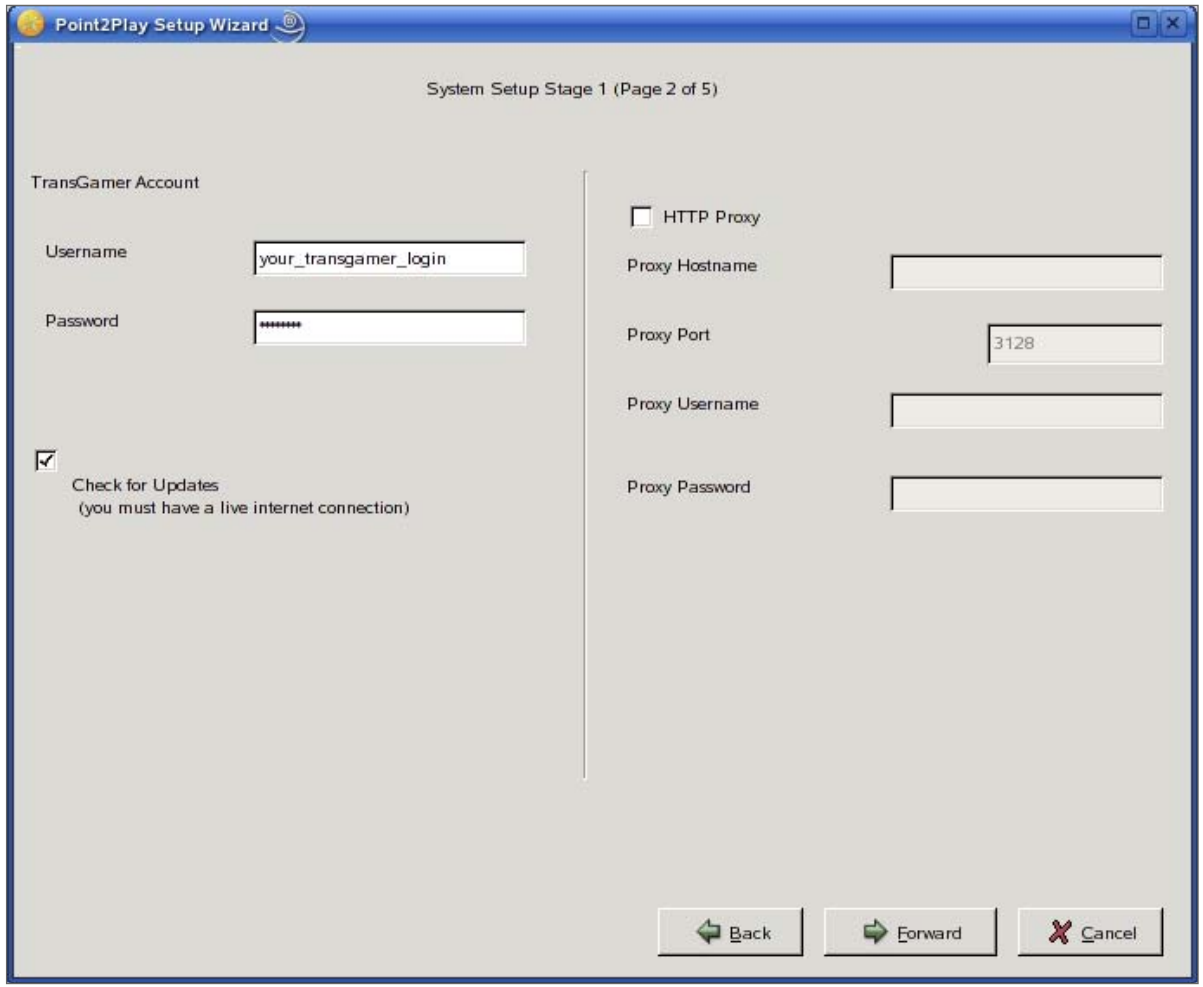

Figure 1. First Step of the Point2Play Setup Wizard

Once you've signed up, getting Cedega going is remarkably easy, especially since TransGaming has now written a program that does almost everything for you. This program is called Point2Play. You'll need to log in with your new account to download the appropriate software. Once you've logged in, click on the Downloads link. Read and decide whether you want to agree to accept the license.

Once you've done that, you should have access to many different files. Download the most recent version of Point2Play. Download either an RPM, Debian Package or tarball depending on which type of file your system uses. My SUSE 9.3 system is RPM-based, so I chose to download the RPM. They also have packages that let more experienced users save download time. When in doubt, however, choose a *full* package. These include everything you need.

Install the software you downloaded, and you should see a new icon appear in your K Menu or GNOME menu. If for some reason an icon doesn't show up on your particlar Linux distribution, you can start any program in KDE or GNOME by pressing Alt-F2. Enter the command `Point2Play`, and press Enter. Once you've started Point2Play, it goes into its configuration wizard, which leads you through the setup process. Proceed through the introduction by clicking Next, and you should see a screen like the one shown in Figure 1.

Fill in your TransGamer account information so that Point2Play can download the actual Cedega system. If applicable, fill in your HTTP proxy information. If you don't know whether you use a proxy, you most likely don't. Click on forward. Point2Play will verify your account information. If it checks out okay, you should

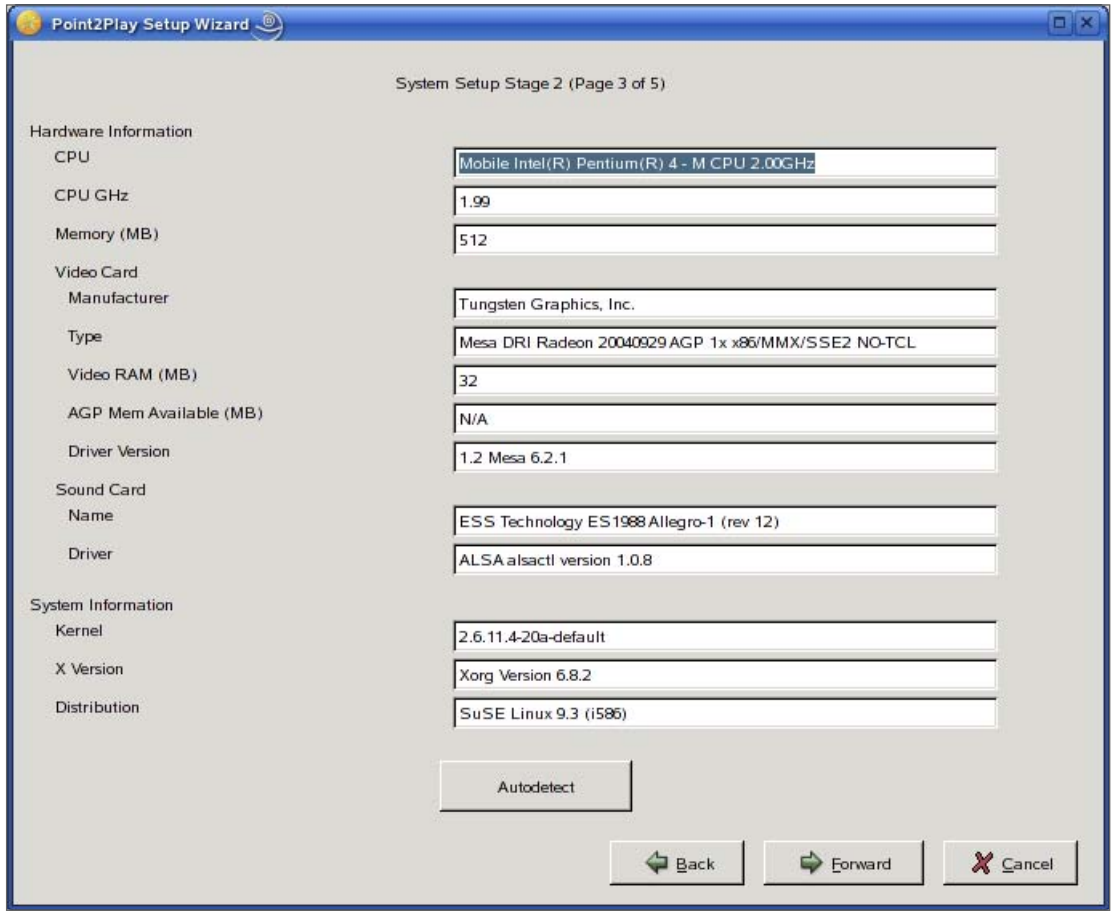

Figure 2. Second Step

see the next screen, shown in Figure 2.

This screen is largely for you to verify the information about your system. Click forward. Then you are presented with the next step of the installation,

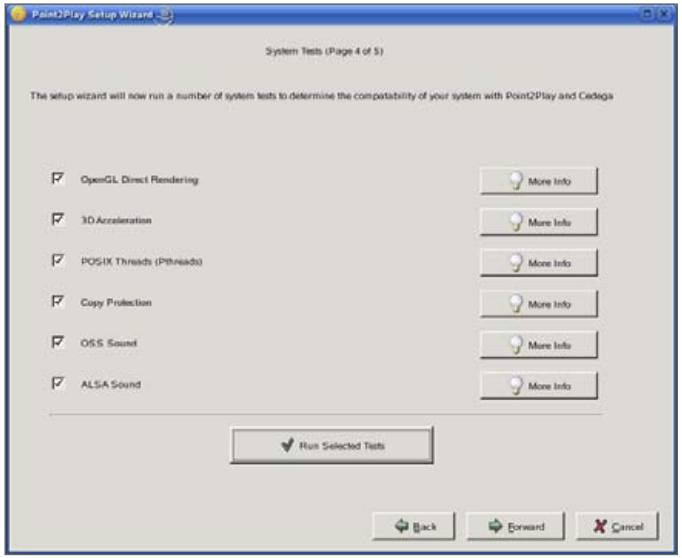

Figure 3. Almost Done!

which is Figure 3.

In this step, Point2Play tests your system to ensure that you're ready to run Cedega. Click forward to begin the tests. You'll see some gears spinning on the screen, and your system also will play a few sounds. Even if your system fails the tests, Point2Play still lets you proceed. This is not always a bad thing. For instance, on my SUSE 9.3 system with a specific graphics card, the test for 3-D acceleration fails, even though 3-D acceleration works for me. The real test happens when you attempt to play Windows games. If you see a red box when the tests are done, don't be surprised if games don't run correctly. If this happens, you'll need either to consult the informal tech support forums at http://www.transgaming.org/forum

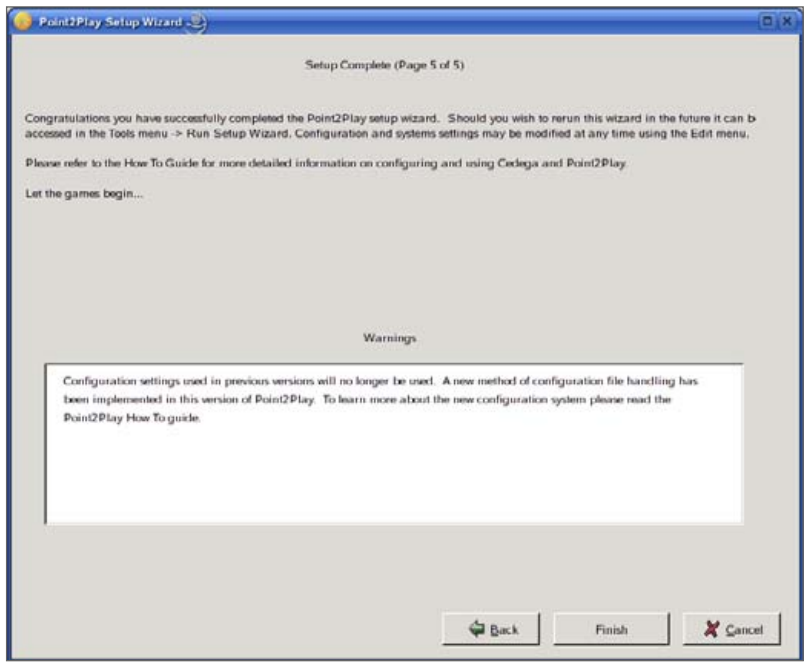

Figure 4. We're There!

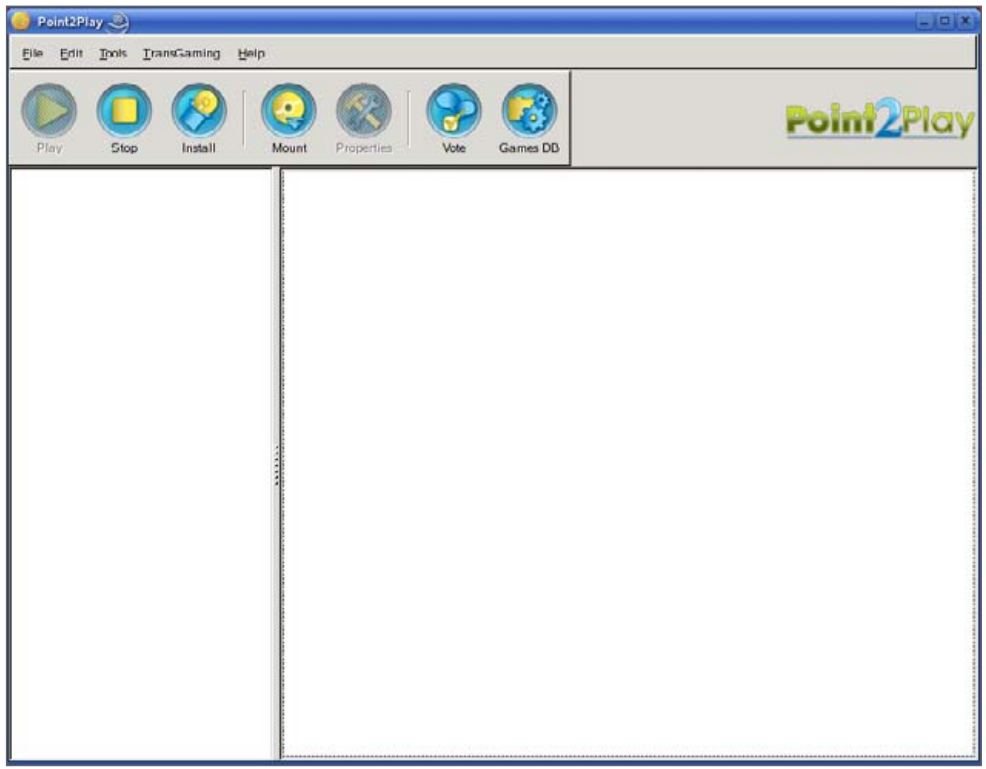

Figure 5. Can't you taste the pending gaming frenzy?

or your local Linux geek to see why things aren't working.

Finally, you should be presented with the screen in Figure 4.

Once you click Finish, you should be presented with the main Point2Play screen, shown in Figure 5.

Now, to install your favorite Windows game, all you need to do is place the CD in the drive, and then click on the large Install button toward the top of the application. Proceed though the installation process as normal, and you'll be rewarded with an icon for the game you just installed. It is rather creepy to see Windows confirmation messages popping up in your favorite window manager for the first time, but the end result is terrific.

If you're a gamer like I am, check out Cedega and enjoy your Windows games without having to run Windows.■

Kevin is 22 years old and currently lives in Nicaragua with his cat Guapo. He is proud to use exclusively *nix systems, especially with regards to his job as a Software Engineer. He likes helping others learn what he has learned, whether it be computer knowledge, playing bagpipes or Spanish.

Windows Gaming on Linux: *Deus Ex*

How to get one of the best games ever to work on Linux.

JOHN KNIGHT

You can run some mainstream Windows games under WINE (Wine Is Not an Emulator), a utility that runs Windows-based applications in a unique way. Instead of emulating Windows, which is a slow and clunky process, it takes a Windows command from a program and uses a Linux command in place of it. This means that instead of emulating a program, you are actually running it under your own Linux environment. This is a huge task, and as such, WINE is still unfinished software.

New computer users beware—this article isn't designed for the PC novice, but instead for intermediate Windows gamers who are new to Linux. If the terms Direct3D, OpenGL, software rendering or 1600x1200 mean nothing to you, this isn't your article. But, if you're a Windows gamer who's comfortable with this terminology, read on. Because readers are clamoring for it, we're going to try to describe how to run different games decently under WINE as often as possible. This month, we're covering an all-time classic, *Deus Ex*.

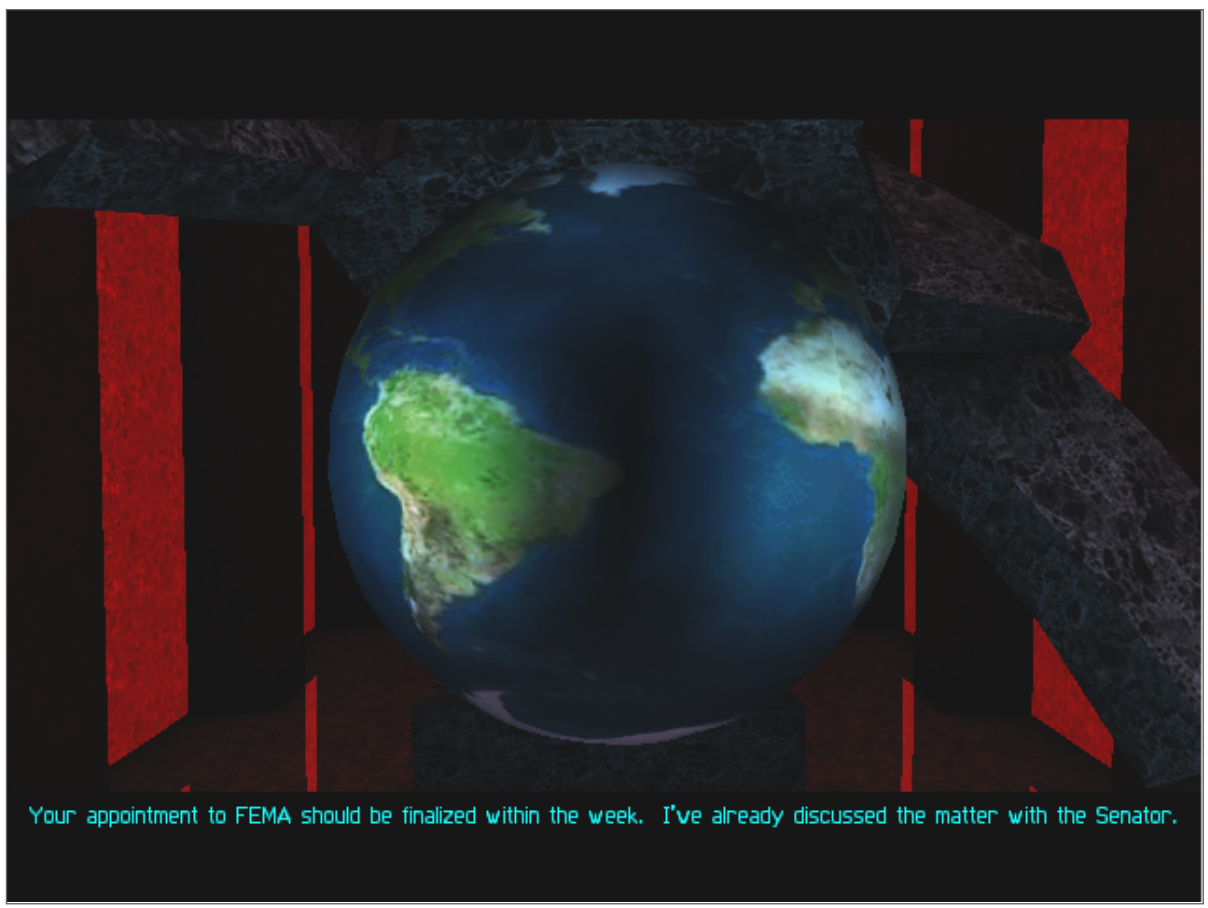

Figure 1. Megalomania aplenty with *Deus Ex*'s killer plot.

WHY SHOULD I PLAY IT?

Once voted Best Game Ever by *PC PowerPlay*—and it still ranks in the top five—*Deus Ex* is a genre-busting piece with well-crafted gameplay and a rich storyline that still plays well several years later (not to be confused with its sequel: *Invisible War*). Set in the not-too-distant future, the player assumes the character of J.C. Denton,

Figure 2. The bleak future of America? A decapitated Statue of Liberty!

an agent of UNATCO, a UN peace-keeping force. Fighting against a terrorist force and a virus that's sweeping the world, the game gets you comfortable in your role until a point where the story turns upside-down, and you have to forget everything you thought you knew.

Combining the best elements of a role-playing game (RPG) and a first-person shooter (FPS), *Deus Ex* provides a truly cross-audience experience. Instead of leaving your fate to a roll of the dice, RPG fans can use their own skills to decide their fate. Instead of running down endless corridors with a generic character and a hokey plot, FPS fans can decide what kind of player they want to be—whether it's a player that jumps straight into a fight or someone who sneaks past everyone unnoticed—the choice is yours.

INSTALLATION—KONQUEROR

Open the CD in Konqueror and click on Setup.exe. If you're lucky, it will start automatically. If not, right-click and choose the entry called WINE and wait a few moments. If this doesn't work, right-click on the file and choose Open With→Other. Type `wine` in the empty field and check the boxes for Run in terminal and Remember application association for this type of file. If this still doesn't work, you probably don't have WINE installed. Install WINE using your favorite package manager and then try again.

INSTALLATION—NAUTILUS

Open the CD and try double-clicking on Setup.exe and wait to see if it starts. If it doesn't, right-click on the file and see if there's an option to open it with WINE. If not, choose Open with Other Application and type `wine` in the new dialog box.

The installer should now start. Choose your language and click Next and then I Agree for the license agreement. You now have a choice of where to install the game. Unless you know what you are doing, simply click Next. Now comes the component choice, choose everything except DirectX. Click Next, and you are ready to install the game. Click Install and wait a few minutes until it has copied all of the game files to hard disk.

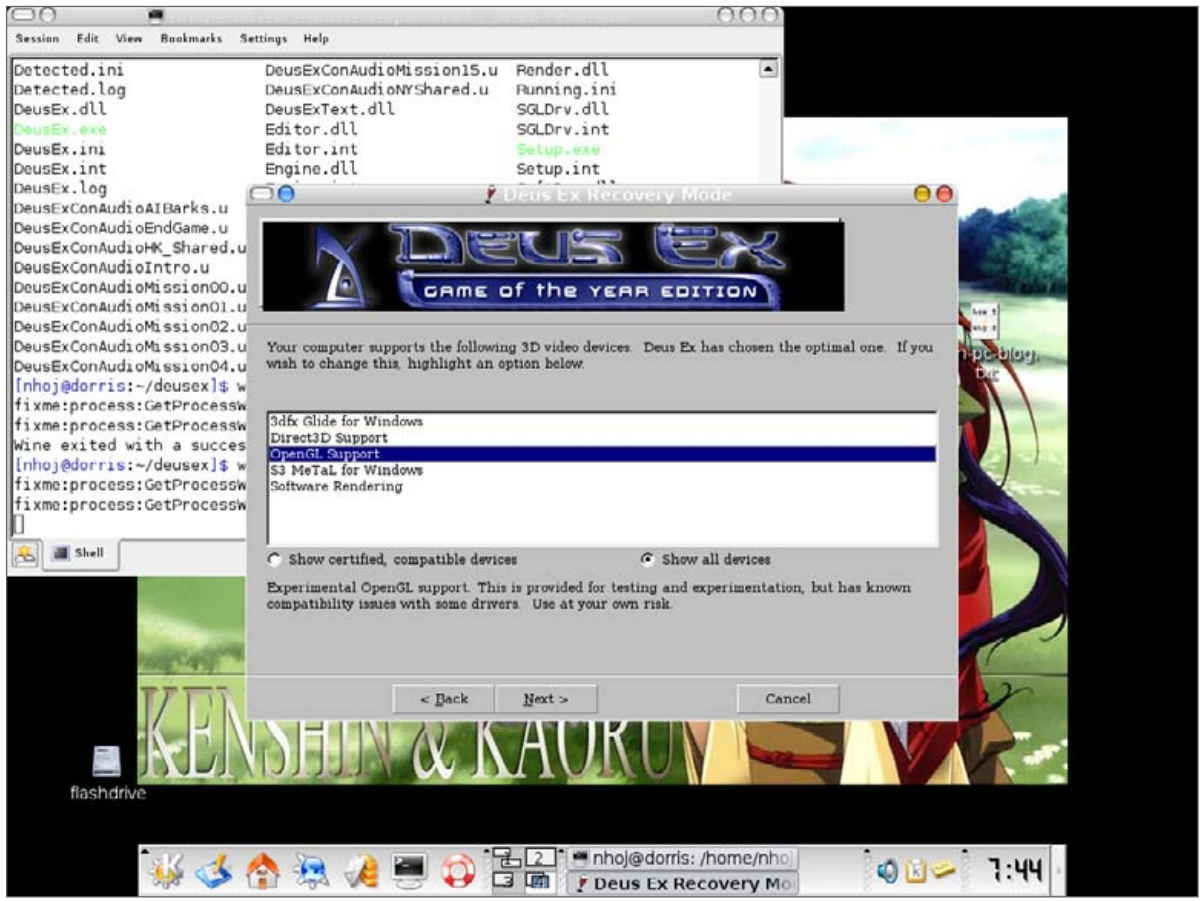

Figure 3. OpenGL is the optimal choice, but software rendering is there if you need it.

RUNNING FOR THE FIRST TIME

You are now presented with a screen called Deus Ex Options; choose Play from the menu. Next comes the 3-D Device Selection menu. Click on the Show all devices option, and choose OpenGL Support (Figure 3). Now click Next, Next and Run!, and then wait. If all went well, you should now be in the game. If not, read the trouble-shooting section after this. To access the game the next time, look in your menu under Wine→Programs→Deus Ex→Play Deus Ex.

If you don't have any of these entries, you still can browse for the game manually, but to get there, you have to enable Show Hidden Files. Under Nautilus and Konqueror, simply click on View→Show Hidden Files. Now browse your way to .wine/drive_c/DeusEx from your home directory. You will see a folder called System; this is where the game's main exe-cutable lies, and you will probably want to make a link to it. This is a simple process, and we'll show you how to do it in both Konqueror and Nautilus. (Note that this is unnecessary if you have the menu entries available.)

LINKING—KONQUEROR

Open up a new window and go to your home directory (or wherever you want the link to be made). Click and drag the System directory to the window with your home directory. A new dialog menu appears with a choice of Move here, Copy here and Link here; choose Link Here. The link will be made, making it easy to get to the folder in future. However, the link will be called System, and this might be a bit confusing later on; feel free to rename it to something like Deus Ex link.

LINKING—NAUTILUS

Open a new window and open your home direc-tory. Middle-click (probably your mouse-wheel—if not, click the left and right mouse buttons at the same time), and drag the folder in to your home directory's window. Choose Link here in the new menu and the link will be made; feel free to rename it.

WINE TIPS

Using menus can be very convenient, but opening up a program via the command line is usually the best option. Quite often a program won't exit properly and will still be running in the background. If you have a command-line terminal open, and you don't have the usual blinking cursor, the program is probably still running. Try pressing Ctrl-C to kill badly behaving programs.

WINE is unfinished and probably will not run perfectly. If a program fails to run, try updating to the latest version of WINE. At Winehq, there is an application database for Windows programs (http://appdb.winehq.org). Look around for your program, and see if there are any comments made by other users as to how they got the program to work.

The standard version of WINE is designed for all Windows applications. For something that's gaming-specific, try Transgaming's Cedega, available at http://www.transgaming.com. Cedega is based on WINE, but with added extensions specifically for gaming. WINE is the better choice for normal Windows applications (plus it's free), but Cedega runs a lot more games. It is a commercial application, but don't worry, the price is reasonable. See Kevin Brown's article on Cedega on page 42.

To run the game, follow the instructions as before in the Installation section, but run the file called DeusEx.exe.

PROBLEMS AND TROUBLESHOOTING

OpenGL rendering is what you're aiming for, but decent OpenGL support wasn't included until later versions. If you have the Game of the Year Edition or a later release version, you should be fine. Players with older versions may have to resort to software rendering. However, Transgaming's Cedega runs any version quite well with the in-game standard Direct3D rendering. I tried patching it, but to no avail; the game simply didn't start when patched.

If the game crashes the first time, don't be disappointed; it should run the second time. If all else fails, there's always ugly-old software rendering, but try playing around in safe mode first (which is available under the same menu as the game). Drivers always can be a problem too, and updating your drivers is a good idea, as old drivers can result in graphical glitches and full-screen problems.

Depending on your version of WINE and your video card drivers, you might find that desktop components like KDE's kicker are in the way when you go to full screen; if this is so, you can at least hide the Kicker by clicking on its Hide Panel. Or, if you're the kind of user that's comfortable and familiar with lightweight desktops, I recommend trying out the game under a desktop like Fluxbox or Openbox, where large sections of GUI aren't in the way in the first place. I also found that sometimes KDE's desktop icons can be thrown around into random positions. If so, it certainly is worth trying *Deus Ex* under another desktop.

After running the game, you might find that you have either no sound or very loud sound, or that 3-D graphics are now running poorly. For sound, check your volume levels; it appears that WINE sends volume levels haywire. I've found that sometimes the Master control becomes muted, and on older versions of WINE, I've had the Wave volume at 100%. For graphics, if video performance becomes poor, try logging out and restarting the X Windows System. To restart the X Windows System, look in the login menu at startup under Actions. If you don't have this, try using the keyboard shortcut of Ctrl-Alt-Backspace. If you still don't have success, reboot your machine.

Although there are a number of problems, the game really warrants the effort. WINE gaming is always a tricky venture, and *Deus Ex* is actually one of the better-behaved games. The WINE Project is always getting better, but the constantly updated versions of Windows makes for a moving target, adding to an already immense task. If you stick with it and get the game running, you won't be disappointed. *Deus Ex* has amazing gameplay, which is truly rewarding, making for an all-time classic.■

John Knight is a 21-year-old, rock-climbing, Japan-loving megalomaniac, trying to take over the world from his bedroom via his keyboard. He spends most of his time tinkering with MPlayer and headbanging to his MP3s.