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ISSUE 15 • JULY 2006

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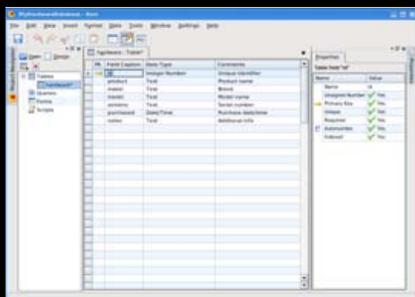
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THIS MONTH, MANGO PARFAIT:

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- Gives tips to install WINE on the 64-bit Kubuntu Linux
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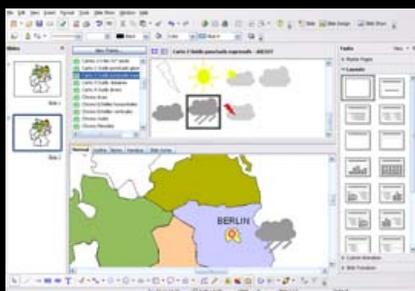
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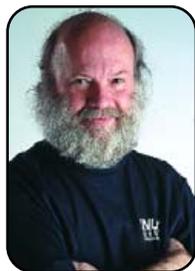
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KEVIN SHOCKEY





FROM THE PUBLISHER

Ubuntu and Dapper Drake Illustrate the Social Power of Inclusion

By purposefully reaching out to users, projects like Ubuntu and Django increase user participation, which leads to more user satisfaction and better software.

PHIL HUGHES

I have been watching the Ubuntu community put together Dapper Drake over the past six months. This is the latest Ubuntu/Kubuntu distribution. I am certainly not new to watching Linux distributions evolve, but this one seems to be different.

One difference is, of course, that Linux in general grew up. Sending Pat Volkerding a private message about a bad assumption related to a proprietary CD drive ten or so years ago was more like the norm. Today, in any of the “desktop-oriented” distributions, the feedback is much more likely to be about an application than an incorrect hardware assumption.

Dapper Drake has had seven pre-releases. By pre-release, I mean a complete version of the distribution available for download. I have been running it since the second one on one of my systems. That means I have had an opportunity to see all the warts and watch how they were addressed. For me, this has proved that open-source development works on a very large scale.

Many years ago, when Linux was “just for geeks”, I remember an argument over how Microsoft could afford different hardware and lots of people to do testing before they released a new version of its software. The general response was that although Microsoft could hire people and buy computers, Linux had the advantage that there were thousands of people all over the world with different hardware testing Linux every day.

Well, that is what has happened with Dapper, except I would guess the numbers involved were larger. While I used the pre-releases every day, by the time I discovered a bug, it always had been reported already, and in many cases, the fix was already available simply by running the automatic update program.

Now, although the idea of bug reporting and fixes available on-line is not unique to free software, the ease at reporting the problem and the speed that it is addressed is unparalleled in the proprietary software market. This is mostly because Linux has an

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open model, where anyone can get the software source and anyone can report a problem, encouraging people to participate rather than just trying to find a way around a problem.

Although some may read this as a sales pitch for Kubuntu, that isn't my intent. I do think Kubuntu is one of the best desktop distributions going these days, and each release proves to me that it is moving forward rapidly. The real point is that any software project where users are encouraged to participate—that is, their input is valued—will have an advantage over a proprietary approach as far as addressing the needs to the customer.

Let me offer another example. There is a framework for rapidly developing Web sites called Django (<http://www.djangoproject.com>). Although it's a rather geeky project, it has addressed user participation in an open but different way from Ubuntu. Django has three active discussion groups: one for developers, one for users and one for announcements of changes. It also has a Web page to report bugs.

The final part of Django's participatory system is the way users get new versions of the software. It employs a tool called

Subversion that lets users get the updates by entering a simple command. But, making the updates work with your system is the best part. You get simple directions, so that you have to do exactly nothing. That is, even if you are running the test system, the update automatically gets included immediately.

In the cases of Ubuntu and Django, the social aspect of these projects may be the most important. By encouraging user input in this manner, the division between users and what they use is eliminated. You, as a user, will be more likely to take the time to offer constructive criticism rather than say, "I paid for it so fix it." On the other end, developers will have more appreciation of you as the user and see more value in their work if this interchange can happen.

In the Linux community, this isn't new. When there was one Linux newsgroup on Usenet, you could see users "grow up". That is, you might notice someone asking a real newbie question and then, a week or a month later, see them answering newbie questions. Trickle-down economics don't seem to work; however, trickle-down knowledge on open-source software does.

Now, does this mean you should use only Ubuntu and/or write Web applica-

tions using only Django? No, not at all. As I said in the beginning, this is my recent experience. Debian, the distribution upon which Ubuntu is based, has been doing this forever. The difference is that the average Debian community member is much more technical than the average Ubuntu community member. Fedora and OpenSUSE are also community-oriented. I expect that also is true of many of the other, "not-free" distributions.

When you go looking for the distribution that is the best fit for you, take these ideas into consideration. Maybe you don't want to participate, for example. You would rather send a check and get the support you need. That's not a bad thing—someone needs to be paying the bills. But, you still need to look beyond the propaganda and see how support really works. Talk to current customers and get some ideas. Paying doesn't always mean you get what you pay for.

Finally, good news for *TUX* readers and general KDE users. Starting with Dapper Drake, Canonical will now send out free copies of Kubuntu as well as Ubuntu. When you go to the Web site (<https://shipit.ubuntu.com>) you are now offered a choice. ■

Phil Hughes is Group Publisher for SSC Media Corp.



FROM THE EDITOR IN CHIEF

Filling the Void between Free Software and New Linux Users

Building a bridge for new Linux users will require research, planning and acceptance.

KEVIN SHOCKEY

This is a strange way to start, but words can get us into trouble. It's strange because I intend to use words to describe why words can get us into trouble. I wish you could simply download my thoughts, but that project isn't available yet from the Free Software community. Through the Letters section, I get to read quite a few uses of one word that causes me grief. It causes me grief, and I think it creates a lot of trouble for new Linux users. What is that word? The word is free.

The potential for trouble arises depending on who uses this word and whether he or she believes in the ideals behind the Free Software Foundation. What are some of those ideals? Taken directly from the Free Software Foundation Web site, <http://www.fsf.org>, the most fundamental of these ideals is the free software definition:

We maintain this free software definition to show clearly what must be true about a particular software program for it to be considered free software.

Free software is a matter of liberty, not price. To understand the concept, you should think of "free" as in "free speech", not as in "free beer".

Free software is a matter of the users' freedom to run, copy, distribute, study, change and improve the software. More precisely, it refers to four kinds of freedom, for the users of the software:

1) The freedom to run the program, for any purpose (freedom 0).

2) The freedom to study how the program works, and adapt it to your needs (freedom 1). Access to the source code is a precondition for this.

3) The freedom to redistribute copies so you can help your neighbor (freedom 2).

4) The freedom to improve the program, and release your improvements to the public, so that the whole community benefits (freedom 3). Access to the source code is a precondition for this.

In this editorial, I don't want to debate the virtues of the free software definition, nor am I attempting to sway anyone to "convert" to the ideals of free software. Instead, my

concern lies in the vast chasm that exists between those who embrace the free software ideals, who care about what the word free means and why it is important to software, and the much larger community of software users that aren't interested in anything other than whether the software works and the cost of that software.

Let's imagine that these two points lay opposite each other—one on each side of a gorge. Our goal is to build a bridge between these two points, so that communication can flow freely and effectively between each of these points. What we hope to avoid is for each side to start building a bridge from its side, get halfway, and then discover the two bridge pieces don't connect in the middle. To accomplish our goal, we'll have to do a little research and planning to orchestrate our bridge building so that it successfully joins together the two sides.

To start our research, we have to first examine each of these two sides and understand their perspectives. Once we understand the perspectives, we can begin planning our bridge. This planning process must identify and accept any assumptions discovered and yet still successfully draw up a plan that will

unify the two sides. The challenge in our planning is to accept that the perspectives of both free software idealists and new users are not likely to change significantly. In a large way, these fixed perspectives create most of the misunderstandings that I encounter.

Let's begin our research by examining the stereotypical new Linux user. If you'll forgive the gross generalization, this profile serves only to make a point. However, the model for this profile is based on personal experience and the model we have here at *TUX* for the new Linux user. There's a wide range of time most *TUX* readers have been using Linux. Our target audience includes some Windows users who are still within the "wait and see", preliminary research phase of using Linux, but the bulk of our audience has been using Linux anywhere from a few months to two or three years. We have some very experienced Linux users as well. With this initial group, these people may have seen Linux running on another computer, but they have not installed Linux on a computer they own.

Now for the generalities: the new Linux users we target are typically not power users, therefore they are not drawn to more technical Linux maga-

zines. As a rule, the people in this group are mostly interested in the computer working with little or no involvement on their part. The familiar phrase often heard from members of this group is "I just want everything to work." Many of the benefits made available from free software (freedoms 0 and 2) hold no interest for this group.

For me, when I think of new Linux users, I imagine that they see a computer as only a tool—a complex tool that should make some tasks easier to accomplish. Like most people, members of this group have been using computers for a while, mostly Windows, and mostly proprietary software. Through this use, they have formed habits—patterns of how to accomplish certain tasks. So, when they say that it should just work, what they actually mean is that it should work exactly how they have been conditioned to complete a particular task. Although I'll give away my age here, I remember a time when everyone who used a personal computer was accustomed to a command-line prompt—how times have changed. The joy of the PC and MS-DOS was that it was still significantly more efficient, even liberating, compared to not using a PC to complete some of these tasks.

My final generalization is that few members of this group ever will want to contribute within any of the software development communities that produce free software.

Continuing our research, when we look for generalities to describe advocates of free software, one would first have to read some background essays by Richard Stallman and others to better understand how members of the Free Software Foundation (FSF) perceive software. These essays are available on-line at <http://www.fsf.org/licensing/essays>. One thing that you can guess from reading a few of these essays is that while attempting to be nontechnical, most of the essays are very technical. For many, the stereotypical free software advocate is extremely technical. Within this group, typically everyone enjoys the four software freedoms.

Members of this group prefer to use only GNU Public Licensed software, which guarantees the freedom of that software. For this they are willing to accept any extra time spent or lack of efficiency, if any, that results from using that software. Because they might be more technically inclined, they don't mind if it is necessary to tweak the software, learn new habits and even become

involved in the software development communities to improve that software.

Finally, to understand this group, we also must revisit the free software definition to clear up two myths. These myths also are a major reason for the chasm between these two perspectives. As I mentioned in my introduction, the misuse of the term free is troublesome, so we should take care to use it correctly. First, I have the unique experience of living in a society where Spanish is the first language. Here, free software is called *software libre*, *libre* is from the root word *libertad*, or liberty. When you receive something without paying for it here, it is *gratis*. To bring this full circle, for the FSF, free software does not mean something you get without paying for it. It is software that is provided with certain freedoms (the four software freedoms)—the freedom of choice—in other words, liberty. Second, nowhere does the free software definition guarantee that software will be *gratis*, or free of charge.

Now, let's do some planning, and see if we can't get our bridge built. It should be clear from reading some of the free software essays and thinking about the free software definition that a great deal of thought and planning

has already been done. Therefore, we cannot expect any compromise or change to the free software ideals. There has been one attempt to soften the ideals held by the FSF, and the result was the open-source definition. Although all free software is open source, the reverse is not true. Although their goals often align, the FSF is clear in distinguishing itself from the Open Source Initiative.

When we look at new Linux users, and maybe expand our profile to include new free software users, I see the following trend. For the most part, although not required, most free software is also available without a fee. Most new Linux users are very happy to obtain all of this free, *gratis*, software. So much so, they forget about the freedoms guaranteed by the GPL with which much of it is licensed. Linux, or more appropriately GNU/Linux, is one such software guaranteed by the four software freedoms. Because those in the new user group think of the computer only as a tool, it's easy to forget about those freedoms—even more so when the price is right, \$0. If I give you a hammer without charging you, you'll probably not be interested if I were to tell you that the knowledge necessary

to reproduce that hammer was guaranteed to be available. Anyway, you just got one without paying for it, so you'd probably be able to get another one if everyone knows how to make them. However, if you were someone that loved to make hammers, those guarantees might be very important.

As this trend continues, more and more people will want to use free software. Although this software continues to improve, it will not evolve quickly enough for the majority of new Linux users to satisfy their conditioned use of their computers. Linux and the host of free software will never replicate the experience millions of Windows users currently receive. Back in the late 1980s as personal computers were switched from MS-DOS to Windows, there was a mass migration of users that required massive training and the elimination of many old command-line habits. We are now on the brink of a new migration, and whether the current Windows community or the new Linux user community agrees, they will have to adapt to the new realities of mass migration to Linux and free software.

For some, this may come sooner than expected. July 11, 2006 is the last day

Microsoft will publicly support Windows 98, Windows 98 Second Edition and Windows Millennium Edition (Me), <http://support.microsoft.com/gp/lifean18>. In addition, Microsoft will no longer provide security updates, creating a significantly increased security risk for users of these operating systems. What can we expect when millions of users of these operating systems migrate to Linux? Will they embrace Linux and free software with full knowledge of the true meaning of free software, or will they be blinded by the potentially low price tag?

In conclusion, I'll share my plan to build our bridge. First, we need to accept that a change is coming—first Windows 98, 98SE and ME. Next, how many users will be able or willing to upgrade their hardware to meet the requirements for Vista? Very quickly, how many of you have a computer with at least a gigahertz processor, at least 512MB of RAM, a video card with at least 64MB of RAM, and who knows how much, but maybe a 120GB hard drive or more (<http://www.microsoft.com/technet/windowsvista/evaluate/hardware/vistahardware.mspx>)?

Second, if you are uncomfortable with the introduction of more choice,

more complexity and more personal responsibility, become familiar with the leaders of the companies that package Linux for new users, such as Linspire, Mandriva and Xandros. They are going to be your best bet. Third, if you're not going to choose from one of the previous vendors, be prepared to get more involved with your computer. You will have to learn new tools, and you will find it hard initially, but in the end, there won't be any regrets. You will find that after an initial productivity hit, you'll be back up to speed before you know it. The bottom line, however, is that you will have to change. Microsoft will not release the source code for its obsolete operating systems. Very soon, millions of users of these obsolete operating systems will have to change. There is no way to avoid this future. Lastly, the biggest challenge may fall onto the Free Software community. It will have to expect a massive increase in the demands for support, improved software usability and more software releases, as all of these new Linux and free software users become acclimated to the other side of the chasm. ■

Kevin Shockey is Editor in Chief of TUX.

LETTERS

A *TUX* Fan Offers a Suggestion for Obtaining Linux Distributions

First, let me say, great mag! I have been doing Linux and UNIX since the 1980s, but I still am a newbie with many applications and so on. Your magazine is both fun (Mango Parfait is very funny!) and helpful.

In the February 2006 Letters, Owen Berio reports on a problem that many have—poor bandwidth! A service I have been using for a few years now to get Linux, <http://budgetlinuxcds.com>, has started a new service where you simply send them a list of URLs, and they will download and burn to CD/DVD and mail it to you. Their services have been excellent and very reasonable so far—haven't tried this one yet, but would bet it is also good. Thanks for the great mag and for saving trees!

--
Tom Bigford

Request for Printed Version of *TUX*

I started my PC experience with a magazine called *PC Novice*, which has now evolved to *PC Computing*. I still subscribe, because the articles continue to be written in the plainest and most detailed manner for those of us who are not nerds. I even give gift subscriptions to friends who are experiencing their first PC.

This brings me to my point—many of us older duffers have become addicted to hard-copy material. This being the case personally, I would like to know if there are any plans to issue a subscription-based printed copy of *TUX* magazine?

--
Owen

A Stark Description of Linux Adoption and the Challenges Encountered

This in reference to your earlier write-ups and the one in the June 2006 issue of *TUX* by Kevin Shockey [see "Introducing the New Linux International"] about Microsoft's FUD campaigns.

In India, most computer users just want the system to "work out of the box". I have rarely come across users who would want to extract more performance out of their boxes. This is relegated to the fan-boy clubs and hobbyists who make it happen for themselves. Either way, no one bothers about the "locked-in formats", because of wide-spread piracy. Microsoft is more keen to have users working on its OS than to shift en masse to Linux or any other alternative platform.

The major target for the International Software Alliance has been corporations who use pirated versions on the sly. Huge fancy sticker prices may work for corporations that can absorb the cost of the product; what is the rationale for giving out "student editions" or free products to schools and colleges? It is clearly aimed at locking out any alternative. This perverse action is essential for the corporations' own survival.

Primarily in India, most computers are assembled by local guys acquiring "spare parts" and selling them more cheaply than branded products like HP, Dell and so on. This is the reason the branded products have hardly made any dent and the majority of their sales come from the government/business sector. The government in India (or its agencies) remain the largest buyers of computers, and this is where the money is.

Microsoft is running expensive print ad campaigns (I have never seen such a splurge of the ads ever from its stable) and is keen to partner with the local assemblers (for "Genuine Software Initiatives" by paying a hefty commission) and lock in the branded players. The branded players offer "Free DoS" to keep the product prices low on some models to entice the customers.

In this give and take, Linux doesn't feature greatly. The distro is usually an outdated version of Mandrake or just a plain shell kernel minus the GUI. I have hardly seen any live demonstrations on the Linux-based PCs, and every dealer would be "obliged" to load up pirated versions of Windows.

This is the broad outline, in my opinion. The initiative has to come from the government to move its processes to open source and extend the benefit of the same to the public. The callous media has to mention the benefits and advantages over the existing proprietary formats and create a felt demand for the product. A strong initiative has to come from those who design the school curriculum to make introduction to Linux mandatory; thus, some students might get motivated to discover it on their own. The status of Linux-based magazines is really disappointing. Most of the write-ups get juvenile treatment, and their treatment of the subject remains confused.

The problems are indeed manifold, but there seems to be some ray of hope on the horizon. Life Corporation of India (LIC) is one of the largest government-owned and run life insurance companies. It recently migrated to Red Hat. The exact details are elusive, but definitely worth emulating.

The choice of distro may be debatable though. In my opinion, the shift might have been prompted by the assurances

of enterprise support. Your magazine can highlight such developments through its sister publications (since this could be out of place for a newbie-based magazine). I am sure that this can be highlighted via editorials. The idea behind this is to build up opinion in favour of Linux and open source.

--
Dr Abhishek Puri

Clarification for *OpenTTD* Review

I just read the article about *OpenTTD* in the June 2006 issue, which is a game I love and have been playing for a year or so on my Linux computer. Contrary to what is stated in the article, I do not need the original game to play *OpenTTD*.

By installing the game with autopackage (<http://autopackage.org>), I do not need to copy any files or even own the original game. By navigating to <http://autopackage.org/packages>, finding the openttd package and downloading the file <http://www.familie-kirchhofer.de/openttd/autopackage/openttd-0.4.7.x86.package>, the installation amounts to typing `sh openttd-0.4.7.x86.package` and entering the root access code two times.

I hope you will note this or something similar in the next issue, as this game is so great, everyone should know that it is freely available and does not require any parts of the original game.

--
Thomas R. N. Jansson

Student Requests Help for Web Development Applications

I hope that I am directing this letter to the right person. I am a student at a university in Sweden, studying for a major in

Computing/Web Design. I run Linux at home and have tried a lot of different distributions—probably around 20 during the past year, though I have grown very fond of Ubuntu, mostly for the great forums. Now to my problem at hand—in most courses I take, the applications used are for Windows. Most of them I can find alternatives for in Linux, but for some of my tasks, I experience great problems.

The primary one is Flash. I would find it very interesting to read an article on this matter—such as, “Toolbox for Web Developing” or something like that. I realize that this, of course, would be hard to do with all the different applications out there. But, maybe give a hint as to which applications can be used for PHP, ASP.NET, Flash and more. There must be some Web designers out there who aren’t using Windows or Mac OS. Thank you for a great magazine!

--
David Vikstrom

First of all, you may want to check our sister magazine, Linux Journal, for more information regarding development tools. However, I'll give you a few pointers to get you started. To develop pages in PHP, there are some vendors like Zend and Active State that might have some good tools; otherwise, you'll want to use a plain-old text editor—maybe vi, with syntax highlighting or KDevelop for KDE. Monodevelop is going to be your best bet for ASP.NET development. Finally, although there are a few open-source projects listed on SourceForge for Flash development, last time I checked (more than a year ago), they were not ready for prime-time use. However, you may want to give them another look.—Ed.

A Reader Offers Praise and Suggests Some Video and Animation Tools

First, thank you for having so graciously published my letter [June 2006]. It makes me feel like someone’s out there listening. I’m glad to see that you will be publishing an article on Scribus as well. Seeing as how you are planning a Media Center issue in August 2006 (if I’m not too late), I figured I would put a bug in your ear about some Linux apps that seem to—or have potential to—get the job done. Granted, I’m not a video professional but I know what works for me:

ZS4 (<http://www.zs4.net>): for this one you need the manual and all the tutorials to wrap your head around it, but it is indeed very powerful. The programmers are also musicians and (it appears) created this software to make their own music videos. Users will need their t@b encoder to encode other formats of video files into the format that ZS4 uses to edit, which is motion PNG (not MNG—motion PNG, as in “motion JPEG”). The GUI is not the most user-friendly, but it makes sense after you go through a few tutorials.

Jahshaka (<http://www.jahshaka.org>): I mentioned this one in my last letter, and since then, the RC3 update has been released. It seems pretty solid now. It now has more options for importing as well as taking advantage of the FFmpeg update to export video in SWF format. Jahshaka is a motion graphics and limited 3-D animator, as well as an NLE software and text generator.

Blender (<http://www.blender3d.org>): there’s not much more I can say about this one; go to <http://www.blendernation.com> to see some of the wondrous work being done with Blender.

Wings3D (<http://www.wings3d.com>): a fantastic open-source modeler; model in Wings3D, then animate in Blender.

Just thought I'd try to make a contribution to your efforts.

--

Graphixgeek

A Frustrated Reader Shares His Perspective on Linux Usability

Why I keep going back to Microsoft: *TUX* magazine, is without a doubt, an answered prayer for me. *Finally*, an "understandable" Linux magazine that focuses on more than just OpenOffice.org, Firefox and Thunderbird—a genuinely *useful* magazine with real-world Linux *users* in mind. Each month, I can't wait for the new issue to come out. It's so good (dare I say it...), I would be willing to pay a reasonable amount to continue on as a subscriber if it came down to it!

Robert Smits' Letter to the Editor on page 9 of the June 2006 issue is right on the mark. I fully agree with him; if Linux supporters are truly *serious* about displacing Microsoft Windows as the predominant computer desktop, they're going to have to put their egos aside and make the installation of Linux programs *understandable*!

Several times over the past two years, I've dabbled with various Linux distributions and always headed back to Windows because of how incredibly difficult it was to load new software, or upgrade the software that came with a particular Linux distribution.

I am not interested in being a Linux super-geek. All I want to do is load the software and get on with business! I don't

want to spend countless hours trying to understand some vague and cryptic terminology, trying to make sense of what some FAQ is trying to relate, struggling to "compile" downloads, pounding my fist against the desk and asking why KPackage and Synaptic aren't working the way the article said they're supposed to and so on.

Even when I do find "understandable" information on the Web, often times the screen shots, illustrations and other items are out of date, as the program or distribution has been upgraded to something that hardly resembles the illustration shown on the Web site.

I buy Linux books only to find either: 1) they're written at such a basic level as to be an insult (for example, "this is how you resize a window, this is what a word processor does, this is how you shut down your computer") or 2) the book is so over my head in technical details that it might as well be written in Hindi! Where's the middle ground in Linux books?

Finally, out of total frustration (once again), I remove Linux from my computer and reallocate the disk space back to Windows. Then, a few months latter, something about Linux captures my interest, such as KOffice 1.5. So, I once again approach MEPIS or SUSE to see if things have improved any—only to...once again...end up saying to myself "the hell with it" after spending 3–4 hours struggling to get MEPIS or SUSE to load KOffice 1.5 successfully (as one of many such examples).

Do you honestly think that following these episodes of wasted time and complete frustration that I would speak favorably about Linux? Especially to other small-business people

who, like me, are interested only in using a computer productively? The best advertising *any* organization can get is positive “word of mouth” between people. And, until Linux gets its act together and makes software installation as straightforward as Microsoft has, Linux supporters will never see their dreams of displacing Windows become a reality.

--
Ken

An Impassioned Linux User Pays His Respects to Windows

I discovered Linux a couple of years ago and have loved it ever since. I still use XP for games, but everything else is Linux. My daughter has Edubuntu, and I use Kubuntu on my desktop and various other distros on my laptop test machine. I figure if it runs all the peripherals on my Toshiba 7010CT, it will run on anything. I never pass up on a chance to introduce people to the delights of Linux and open-source software.

To my point, and please don't get me wrong, I love Linux and the *freedom* it gives me, but I feel that the Linux community does have one thing that it owes Microsoft. If it wasn't for Microsoft, there would not be so many PCs in people's homes capable of running Linux in the first place. If you recall, until Microsoft started producing an OS that you could, as a home user, install on almost any hardware ranging from the high-end shop-bought PCs to the home-built geek boxes, there were only home computers with built-in proprietary OSes that tied you into buying both software and hardware from a few selected suppliers for that particular brand of machine. Think of Amstrad, Apple, Atari, Commodore, Sinclair, Oric and BBC computers to mention a few. Microsoft software enabled the non-techy public to purchase a PC and use it for something

meaningful and not be tied to one particular piece of hardware. For the first time, the home user could properly upgrade machines without having to buy a whole new computer, and the OS for the most part, drivers allowing, would take the strain of the burgeoning upgrade industry.

Without the possibility to use a wide variety of software and hardware, there would not now be what was considered a business-only machine, sitting in so many homes around the world, on which the general populous could install Linux!

How different would the home computer industry be if it weren't for the likes of Microsoft opening the way for IBM-compatible PCs to make it in to people's homes? I feel the only real mistake that Microsoft made was getting too greedy. It has the lion's share of business and home use sewn up, and yet it still charges a huge premiums for software.

The Linux community needs to grow up and get professional, and stop playing the Microsoft game of slating the opposition. What it needs to do is start removing the reasons people have for sticking with Microsoft in the first place, settle on a couple of desktop environments and pump as much development into them as possible. Get all of the hardware industry to recognise Linux as a legitimate alternative to Windows and supply drivers for the hardware. Get more game producers on board, as let's face it, if people wanted only to write a letter they could use a typewriter. If I could go out and purchase more decent games for Linux, I would love it, and I am sure that I am not the only one.

If Linux wants a piece of Microsoft and Apple's playground, it needs to get down to the gym and beef up its profile for starters! Why not get some of the big boys of the Linux

community to put together an ad campaign for example?

Please keep up the good work at *TUX*, I have read it since issue 2, and I love its openness and friendliness.

I know that I might get a slating for these comments, and I don't suppose for a second that there would be enough room in the publication to post this letter, but thanks in advance for reading it anyway.

--
Mick Cassell

Praise and a Distribution Recommendation (Zenwalk) from France

I've been using only GNU/Linux and other open-source software for several years now, so I'm not a newbie anymore, but I still have a lot of things to discover. Your magazine is a great help to accomplish this goal.

I'm a member of a local LUG in France, and I particularly liked the article in the May 2006 issue titled "Linux's Fundamental Difference", because this is, in essence, the idea we are spreading. To go a step further in your direction, let's study the situation in France. For your information, there is a new law (DADVSI) that promotes DRM to protect music/movies/software and protects their skirting from a legal point of view. These DRMs are generally software that controls the usage of, not only the access to, the file they protect. To enforce their efficiency, they should be rooted in the OS and even in the hardware (think of Sony's rootkit and TCPA/Palladium). My point is that the problem with DRM is exactly control: the more DRM you accept, the less control you have, even if the hardware/music/movie is yours since you bought it!

Another remark, I discovered the April 2006 issue and in particular the "Distro Smackdown" articles, thanks to the letters from readers. I agree that testing could have been more fair, but I know it is a difficult thing to do with small resources. So, I will not enter discussion about that. I would simply suggest that some newbies test the Zenwalk distro (<http://www.zenwalk.org>). It is based on Slackware, with graphical package management tools and graphical configuration tools. Moreover, the installation is simplified, in the sense that you install (quickly—in 25 minutes) a light and minimal, but fully functional, OS, and then add packages you want using the graphical tools.

In my opinion, this is the best distro, because several levels of expertise in its use are possible in parallel. On the one hand, newbies can use it even if they don't know GNU/Linux, using only the graphical tools, and on the other hand, experts can install packages manually and can modify by hand the (very easy-to-understand/well-commented) scripts. Another advantage is that you don't have to wait for the availability of any distro-dependent package to be able to use software. The packages available range from Zenwalk .tgz to Slackware .tgz, and even the direct sources. You can also install .rpm and .deb using alien, but I would not recommend that.

--
G. Muller

Problems Building MPlayer? Try KPlayer

MPlayer is arguably the best media player available for Linux. But, I am having considerable problems with package dependence, and so far, I can't install it. I guess rpm will not work, and I will have to go for a tarball (I use SUSE 9.0).

Can the guys at MPlayer make a .tar file, just as Firefox is

doing nowadays, so I can just unzip it, and run it? I hate to reboot to Windows for viewing AVI files. I don't know why these guys compile MPlayer and so on for Windows. This tends to make Linux unnecessary.

--
Nihal Arju

I would recommend trying to install KPlayer. That should get you the AVI file playback that you want. If not, you might want to try VLC Media Player. Both of these should be available through Synaptic.—Ed.

A Call for a VectorLinux Review

When I saw that you are planning on doing a review on Slackware, I thought you might be interested in looking at VectorLinux too. Maybe you recall that I was trying to install Linux on some old hardware, and VL5.1STD did the trick. And like it says on the VectorLinux site, it is fast, even on a PII with 64MB.

One of the other things I like about VectorLinux is that it doesn't have a RTFM policy on the forum. Even the most obvious question is answered, and if the answer is already on the forum, they will point you to it (politely) and give you suggestions on how to do better searches (politely).

Slackware, like you said, is not popular for newbies, but maybe VectorLinux can help make the transition easier. You may need to use CLI once in the while, but most of the administration tools already have a GUI front end. (See <http://vectorlinux.com>.)

--
Nelson

This topic is something I've become very interested in. As I mention in my editorial this month, with July 11 looming large on the horizon, we need to help people find their way from these legacy operating systems to Linux. So, I appreciate the recommendation.—Ed. ■

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Q&A with Mango Parfait

Mango advises about filesystems, languages, SATA, flaky network drivers and a little WINE.

MANGO PARFAIT

Thank you for your nice questions this month. I have many more questions this month than last month, and I like that very much. Please send me more. I like to have too many questions because I get to pick the easy ones! I am teasing you. I pick easy questions and hard questions.

I am surprised to get many questions from people who run Windows and Linux. Why are you running Windows? Do you play games on Windows you cannot play on Linux? This is a good reason. I do not know another good reason except if your boss makes you run Windows. Otaku runs Windows because he cannot stop playing games all the time and he likes some Windows games. I like some of the games he plays too. But I do not need to play the games like he does.

I like the games on the GameCube and the PlayStation 2 better than the games on the PC. I think the PlayStation 3 is going to have better games than games for the PC. I give many hints to Otaku to buy me a PlayStation 3 when it is ready. Otaku, are you reading this? My birthday is over already but you can still buy me another present. Can you guess what present I want?

I do not know if the games for the Xbox 360 are good, but I know that the power supply for the Xbox 360 gets very hot. Otaku complains that I do not cook for him enough. Maybe Otaku will give me an Xbox 360 so I can cook on the power supply. But I think that is a very expensive cooking machine. I think a rice cooker or electric skillet is cheaper and will work better for cooking.

I am done cooking the answers to your questions and the answers are ready. I hope you like the taste.

Q Dear Mango, to be honest, your Mango style of writing used to annoy me! I guess it must take some time to get used to. I seem to be over it now! I have been using Linux only since March of this year. I installed Fedora Core 5 and immediately formatted my Windows drive. Bye Bye! I have never been happier! Well except for GNOME—these GNOME dwellers are quite whiney! I quickly made the switch to KDE. I do not like GNOME. Oh alright, on to the question. In Windows, I used to have to do OS maintenance: Scandisk, Defrag, Disk Cleanup and things of this nature. I have read that the Linux filesystem does not need defragging. So, what system maintenance needs to be done to keep my system purring?—*Dwight, Olympia, Washington*

A Dear Dwight Olympia, please do not cry. When you say “Bye Bye!” to Windows, you can say “Bye Bye!” to scandisk, defrag and those other headaches. I know about only one defrag utility, and it is very outdated because nobody needs it. I will not make you go to sleep by telling you the technical information about Linux filesystems and fragmentation. But Linux filesystems do not fragment very much. Even if you can figure out how to know that your disk is fragmented, you should not worry about this fragmentation. Linux filesystems store and access information in a different way from Windows filesystems. So, Linux does not slow down even when your disk fragments.

I have a server that has been running for almost ten years. I

use this server very much every day. If a disk gets fragmented, the longer you use it, my disks on this server must be very fragmented. But I never think about disk fragmentation with this server. It still runs as fast as it did when I put it together. Okay, that is not very fast because the machine is almost ten years old. But that does not have anything to do with the filesystem.

If you are still very worried about filesystem performance, choose ReiserFS when you install Linux. ReiserFS is fast. But, if you did not choose ReiserFS, it should not matter. You should not have to defrag your disks.

Linux has a program like scandisk, but you should not have to use it. All the modern versions of Linux use what is called a journaling filesystem. You say you are using Fedora Core 5, so I think you are using the ext3 journaling filesystem. Linux will check the filesystem every time you boot Fedora Core 5. If you do something silly, like turn off your computer before you shut down Linux, you may lose data that you did not save. But it does not make Linux check the disk for a long time, because journaling filesystems make it easy to put the filesystem back to normal after you do something silly. Just remember that all it does is put the filesystem back to normal. It does not bring back the lost data.

You can set ext3 so that it will also protect your data so that you do not lose data when you do something silly. I do not recommend this for most people. This slows down your computer performance a lot. It is better to remember to save your files and not do something silly like turn off your computer without shutting down Linux. It is also good to get an uninterruptable power supply so that you can save data when you lose power.

Can you corrupt your filesystem? Yes, but it does not happen very often. Most of the time you boot the install CD or DVD disk or a CD or DVD recovery disk. Then you follow instructions on how to restore your filesystem to normal. You can go to a

command line after you boot from the CD or DVD and type a command like `fsck.ext3 /dev/sda1`. I say “like” this command, because I am guessing your filesystem is ext3, and I make up a disk partition for you and call it `/dev/sda1`. Your corrupt disk partition could be `/dev/hda1` or `/dev/sdb3`. I do not know. You figure this out.

The only thing I can tell you to do to keep your system purring is to leave it on. Log off when you are done, but leave your computer running. Linux is not Windows. You do not need to reboot it to keep it running stable. So leave it on.

Why? Well, you do not have to leave it on, but here is why I think you should. Linux automatically runs some maintenance programs on a schedule. These programs do things like compress and rotate log files so they do not take up too much space on your disk. Another program searches your disk for every file and puts the information from the files in a database. This makes it easy to find a file on your disk very fast. Some of these programs make your computer busy, so they will slow down your computer if they run while you are doing work. That is why it is better if you let these programs run in the middle of the night when they are usually scheduled to run. If you turn off your computer when you are done working, these programs may decide to start running the next time you turn on your computer. So your computer may be slow and you will not know why. If this happens, I can tell you that you will notice that your computer gets fast again after maybe 10–20 minutes. That is usually the longest it takes for these programs to finish.

Q Dear Mango, I have recently installed Kubuntu and am in the process of installing various applications. I have successfully installed Picasa on a 32-bit version of Kubuntu, but I am having trouble installing it with a 64-bit version. I installed

the ia32-libs and am still having no success. Your help would be greatly appreciated.—Brandon

A Dear Brandon, Picasa is a very nice program to find and manage photos and pictures and edit them. It is a Windows program. The Linux version of Picasa is a Windows program too. Okay, it is not 100% Windows, but it uses WINE (and Mozilla) to work. WINE is a set of libraries to make Win32 programs work on Linux. Do you see the number in Win32? It is 32. It is not 64. That is your problem.

Maybe someday Kubuntu will make it easy to install WINE on the 64-bit Kubuntu Linux. I do not know. It is not easy now. There are two ways to make WINE work on 64-bit Kubuntu. You can run WINE (and Picasa) in a 32-bit chroot environment. Do you know what a 32-bit chroot environment is? If you do not, I do not think this is a good idea. It is not easy to make a 32-bit chroot environment work. It is like installing most of 32-bit Kubuntu on top of 64-bit Kubuntu, so it takes a lot of disk space and you end up with two operating systems. Some people like this. Some people do not. It is not easy for a desktop user to make this work. If you think you want to try this, here is a link for running 32-bit programs in a chroot environment on 64-bit Linux: <http://ubuntuforums.org/showthread.php?t=24575&highlight=32+bit+chroot>.

You can try to compile WINE on 64-bit Linux too. I do not know if this will make Picasa work, but it is possible. I say again that I do not think this is a good idea for a desktop user. It is not easy to do. But if you are geeky and think you can try it, here is a link with instructions on how to get WINE on 64-bit Linux: <http://wiki.winehq.org/WineOn64bit>.

I think the easiest way to use Picasa is to run it on 32-bit Kubuntu. This version of Kubuntu runs well on AMD64 computers. I do not see a big difference between the AMD64

version of Kubuntu and 32-bit Kubuntu. The 64-bit version is faster when you do some special things like encode videos and music—if you do that often. I do not do that often, so I am happy with the 32-bit version on my AMD64 computer.

Q Dear Mango, my network connection stopped working on Linux and I can't find the problem. It used to work and now it doesn't. I know the integrated network card is not broken because I dual-boot to Windows and it works in Windows.—Name Withheld

A Dear Name, I almost chose not to answer your question because you give me very little information. But you say one thing that may be a clue. Did you install Linux first and then install Windows? Maybe your network connection works fine with Linux until you start using Windows. Am I wrong? I think I am the opposite.

I know there are some integrated network cards on motherboards with NVIDIA Nforce chips that stop working in Linux after you use Windows. I do not know if this is a Windows driver problem or a Linux driver problem. Maybe the Windows driver changes how the card works and when you boot Linux it does not know how to reset the card. Maybe it is the Linux driver that makes a mistake after the Windows driver uses the card. I do not know. Maybe someday the Linux kernel developers will find out how to make this problem go away.

Here is how you can find out if this is your problem. Turn off your power supply. I do not mean turn off the computer. I mean use the button that is on your power supply. If your power supply does not have a button, then unplug your computer. Wait 15 seconds or maybe 30 seconds. Now plug in the power again or turn on your power supply. Turn on the computer and boot to Linux. Do not boot Windows first.

Go to Linux first. Does your network connection work again? If your network is working again, you know Windows is making it stop working.

If you find out that Windows is making the network stop working for Linux, I have three answers for you. Stop using Windows. Turn off the power supply or unplug your computer after you use Windows. Wait for the kernel developers to fix or work around this problem. Keep updating your Linux distribution and hope your Linux distribution upgrades to a new kernel with a fix or workaround.

Q **Mango, I have a problem and hope you can help. I updated two different Kubuntu Breezy boxes and had two completely different outcomes. At work, I run an Intel Mobo with a P4 2.4 built-in everything. Upgrading to Dapper worked just fine. At home, I run an ASUS AMD 1500+ ATI RADEON 9550 (which was not easy to get working correctly). I updated them both by changing the repositories to point to dapper instead of breezy in synaptic and then marked all upgrades and applied. At home, X does not come up. It says there is no display. Do I go through reconfiguring Xorg? or should I install Dapper from a CD?—Rob**

A Dear Rob, you say that it is not easy to get the ATI RADEON 9550 working. I am guessing this is because you are using the ATI proprietary drivers. Am I wrong? Here is where I think you get the drivers: <https://support.ati.com/ics/support/KBAAnswer.asp?questionID=1176>.

When I look, I see the ATI drivers work with Xorg X11 6.8. Dapper uses Xorg 7.0. Do you think maybe this is the problem? If this is the problem, you need to change your Xorg configuration to stop using the ATI proprietary drivers and use Xorg drivers instead.

Q **First of all, great magazine. I happened upon TUX just two issues ago, and I've been checking out back issues and waiting on the new ones ever since.**

I'd like to know what programming language you would recommend for someone who is interested in getting started, and also what IDE to use on the Linux platform. I realize that an opinion on the "best language" most likely depends on the target use, but I'd be interested to know your answer to the "I'd like to learn to program, where should I start?" question. As far as IDEs go, I know the whole Emacs vs. Vim is a flame war waiting to happen, but I've seen many other IDEs out there, and I was wondering if a newbie might fare better by trying one of those instead.—Scott

A Dear Scott, I laugh at this letter because it is like asking, "what is the best Linux distribution?" I have to read your mind to find the best answer, and although I am a humble genius, I cannot read minds. But I will tell you some ideas.

If you want to be a serious programmer someday, learn C. C is not the best language. I do not recommend C because it is better than another language. I recommend C because it makes you learn about things like pointers and syntax. If you learn how to make these things work in C, it will be easy for you to learn almost any other language after you know C.

There is one thing C does not teach you. It does not teach you how object-oriented languages work. If you think you want to learn about object-oriented languages, I think you can start with Python or Ruby. Do you notice that I do not say C++ or Java? C++ and Java are like each other in many ways, and they are both good object-oriented languages. If you get serious about programming, you want to learn C++ and Java. But I think it is easier to learn about object-oriented programming from Python and Ruby than C++ or

Java. So I tell you to start with Python or Ruby.

KDevelop (for KDE) and Eclipse are the two best IDEs. Try them both and see if you like them. Many programmers use text editors not IDEs. If you want to try just using text editors, there are too many to suggest. I like Kate (KDE), Cream (a customized configuration for vi), Jedit, J and Jext (three Java-based editors) and some console editors too.

Try an IDE called Idle, if you want to play with Python in interactive mode. Do you have Java installed? Try Jext from <http://www.jext.org>. Nobody is maintaining Jext anymore, but it is a good editor and it lets you run Python scripts.

These are my ideas. If someone reads my ideas and is thinking, "she should have said Perl or Bash or my favorite language or editor", I want you to know I do not care about your favorite languages or your favorite editors or your favorite IDEs. If Scott wants to know about your favorite things then he should write to you and ask. He did not write to you. He wrote to me. So keep using your favorite things and do not yell at me for not having the same favorites as you do.

MANGO ASKS QUESTIONS

Here are two important letters I get. They are similar letters because they are about SATA drives. Mr George and Mr Daniel, you do not give me enough information to know what problems you are having. I do not usually ask questions about questions, but I think because I get so many letters about SATA drives, maybe it is time to do something different. So I ask Mr George, what are the drives you cannot use? The IDE drives? The SATA drives? To Mr Daniel, what kind of system are you using with SATA? Do you know what kind of motherboard it is or what kind of SATA chip it uses? Are you installing Debian from a SATA CD/DVD drive? I hope you will write back to me with more details. Maybe

I can write up answers for both of you and for other people with SATA problems.

Q Dear Mango Parfait, I have three hard drives on my system: one I use for programs, one for data and one for backup purposes. I save images of the other two in it. The first two are SATA drives (they used to be SCSI drives, but I changed them to SATA), and the last one is as IDE drive. Every time I try a Linux distribution (and I have tried several), I have problems getting to my other drives. MEPIS does show that I have them, but I can't do anything on them. I tried resetting permissions on them but to no avail. All the other distributions don't even show that I have them. I guess that their presence is noted in a directory somewhere, but how to get to them is a mystery.

Anyway, I was wondering if you could show me how to get these hard drives on the desktop and actually be able to use them in a distribution such as SUSE 10 or Debian?
—George Emerson

Q Hi, Mango, there are issues these days while trying to install Linux on a full SATA configuration. A couple of days ago, I read that actually the latest versions for distros like Debian, Mandriva and so on would allow installation on such a configuration without the well-known workarounds.

I tried it with Debian, and it did not work. I got the message, "did not find any partitionable media" and so forth.

Do you have any idea of how to install such a configuration without workarounds like "legacy mode" and so on?—Daniel ■

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.

Building a Database with Kexi

Billed as the open-source competitor to Microsoft Access, Kexi provides a rapid application development tool for database systems.

DMITRI POPOV

Although for many the OpenOffice.org Base application is an obvious choice for building a desktop database application, it's not the only game in town. Kexi (<http://www.kexi-project.org>), a relatively new member of the KOffice family, allows you to create simple databases without learning all the intricacies of database development.

HOW A DATABASE WORKS

Although you don't have to be a database guru to create databases with Kexi, you must have some basic knowledge of how databases work. This will help you not only to build better applications, but also will save you from spending hours fixing poorly designed databases.

Like any database system worth its salt, Kexi consists of three essential components: tables, queries and forms.

- Data within a database is stored in tables. Each table consists of rows and columns, and the data contained in one row is known as a record.
- Queries are used to extract, view and manipulate data. Queries can draw together data from many tables, and they also can have forms and reports based upon the data they produce.
- Forms allow you to view and edit the data in a

table. You can think of forms as a GUI for the database; although tables are used to store data, forms are used to display and manipulate data in the table.

You can say that a database consists of three layers. At the bottom layer are the tables where the data is stored. Above the tables are the queries that extract and manipulate the data in the tables. And, finally, there are the forms that are based on the queries or directly on the tables.

INSTALLING KEXI

Of course, before you can do anything useful with Kexi, you have to install it. As with any Linux application, you have several options here. If you're using a mainstream Linux distribution, you can install Kexi using your system's package manager. If Kexi is not available with your distribution, you can 1) download a package for your system from Kexi's Web site, 2) install Kexi using `klik` (<http://kexi.klik.atekon.de>), or 3) try Kexi using one of the many Live CD distributions, such as KNOPPIX or KANOTIX. Of course, you always can download the source code and compile it on your machine.

GETTING STARTED WITH KEXI

Once Kexi is installed, launch it and choose Blank Database from the Choose Project dialog window.

In the Creating New Project dialog window, select New Project Stored in File. This creates a database, where everything is stored in one file on your hard disk. Give the new database a name, and choose where you want to save it. A new blank database is now ready, but before you start working on it, let's take a closer look at Kexi's interface.

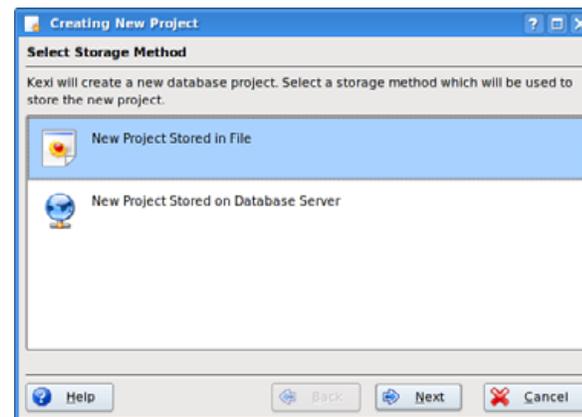


Figure 1. Kexi lets you create databases that are stored either locally or on a remote server.

The main window in Kexi is divided into three main areas (Figure 2). To the left, is the Project Navigator pane that contains database components, such as tables, queries and forms. To the right, is the Properties pane that allows you to define different properties for the currently selected

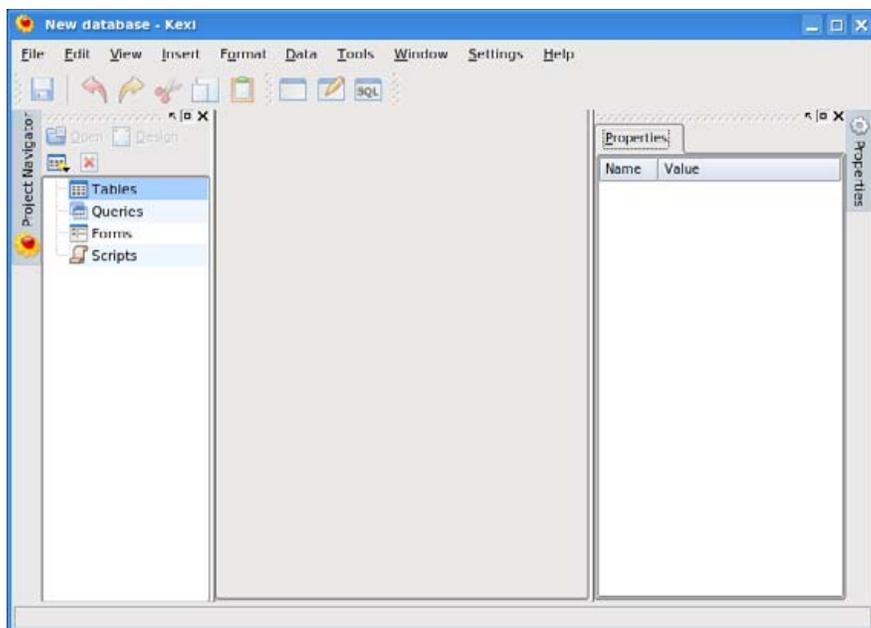


Figure 2. Kexi's Three-Pane Interface

element. Finally, in the middle, is the working area, where you actually build your database.

Note: you can undock both the Project Navigator and Properties Editor panes, which can come in handy when you are working on a complex database and you want to free more space in the working area (Figure 3). To undock the pane, click on the tiny Detach arrow; to dock it back, click on the Dock arrow.

For this project, let's build a simple database to use for keeping track of computer equipment in your company or home. Start with deciding what kind of data you want the database to store. Obviously, you'll want to keep track of the type of hardware (laptops, printers, routers and so forth), model, serial number, purchase date and so on.

This means the table should contain fields like product for product type, maker for brand, model for model name, serialno for serial number, purchased for purchase date and notes for any additional information. Also, it's a good idea to have a unique identifier for each row in the table, which in database parlance is called a primary key. The primary key helps not only to identify each record in the database uniquely, but it also plays a crucial role in creating relationships between tables in more complex databases.

Now you are ready to add a table to your database. Left-click on the Tables icon in the Project Navigator, and select Create Object: Table. Switch to the Design View mode by pressing F7. Click on the first row in the Field caption column, and type id. From the Data type list, select Integer Number, and add an optional description in the Comments column. The id field is going to be the primary key, so set the Primary Key property in the Properties pane to Yes. This also sets other primary key properties—Unique, Required, Autonumber and Indexed—to Yes. Now, add the rest of the fields and their appropriate data types to the table as shown in Figure 4. Press the Save button to save the table, and give it a name, for example, hardware. To populate the table with

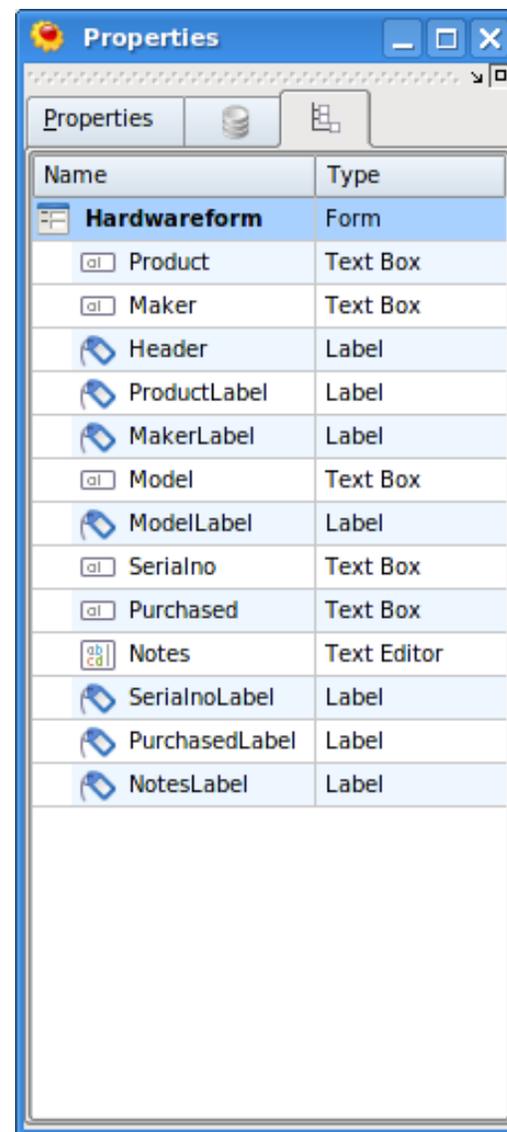


Figure 3. You can undock the Properties Editor window to free space in the working area.

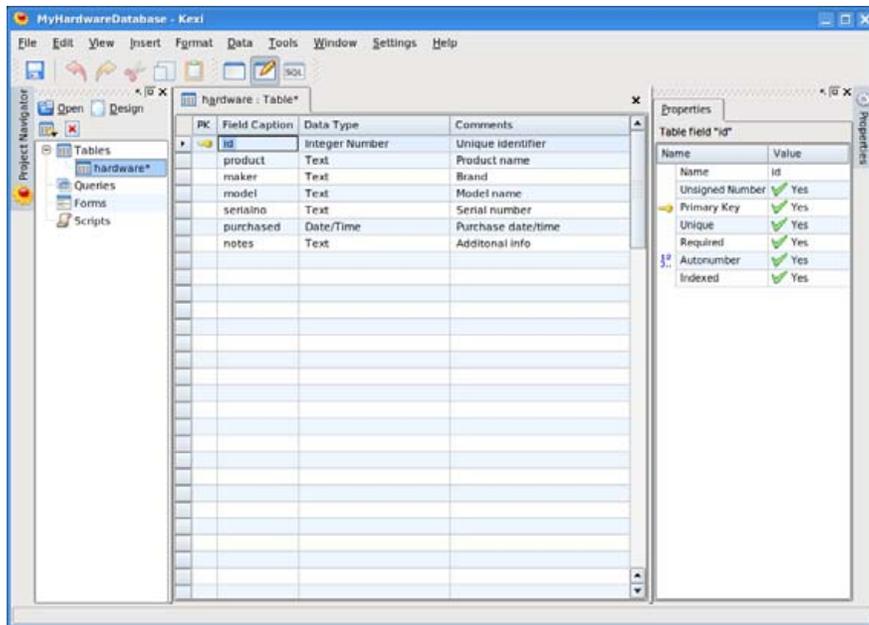


Figure 4. The Finished Table

records, switch to the Data View mode and add a few rows of data.

The next step is to add a form that will act as the user interface for the database. To create a blank form, left-click on the Forms item in the Project Navigator and select Create Object: Form. This creates a blank form. First, you have to “connect” the form to the table, so you can use the form to view, add and modify data from this particular table. Click anywhere in the form, then click on the Data sources tab in the Properties pane (the tab in the middle), and select the hardware table from the Form’s data source drop-down list.

Now, if you take a look at the main toolbar, and you will notice some additional buttons. These but-

tons let you add so-called widgets to the form. The widgets include text boxes, check boxes, radio buttons and different design elements. Let’s start with adding text boxes to the form. Make sure that you are in the Design View mode (press F7), click on the Text Box button on the main toolbar, and draw a text box in the form. Next, connect the text box with the appropriate field in the table. Click on the Data sources tab in the Properties pane, and select the product field from the Source field drop-down list. Switch to the Properties tab, and configure the text box’s properties. At the very least, you might want to give the text box a more descriptive name, so you can locate it easily in the form using the Widgets tab in the Properties pane. Save the form, and give it a name, for example hardwareform. To see whether the form works properly, switch to the Data View mode by pressing F6. The text box should display the contents of the product field in the hardware database. If for some reason the text box is empty, try to use the Previous and Next navigation buttons at the bottom of the form to browse through the records. If everything works as it is should, return to the Design View mode, and add the rest of the fields. You also can add some design elements, such as field labels, headers,

tons let you add so-called widgets to the form. The widgets include text boxes, check boxes, radio buttons and different design elements. Let’s start with adding text boxes to the form. Make sure that you are in the Design View mode (press F7), click on the Text Box button on the main toolbar, and draw a text box in the form. Next, connect the text box with the appropriate field in the table. Click on the Data sources tab in the Properties pane, and select the product field from the Source field drop-down list. Switch to

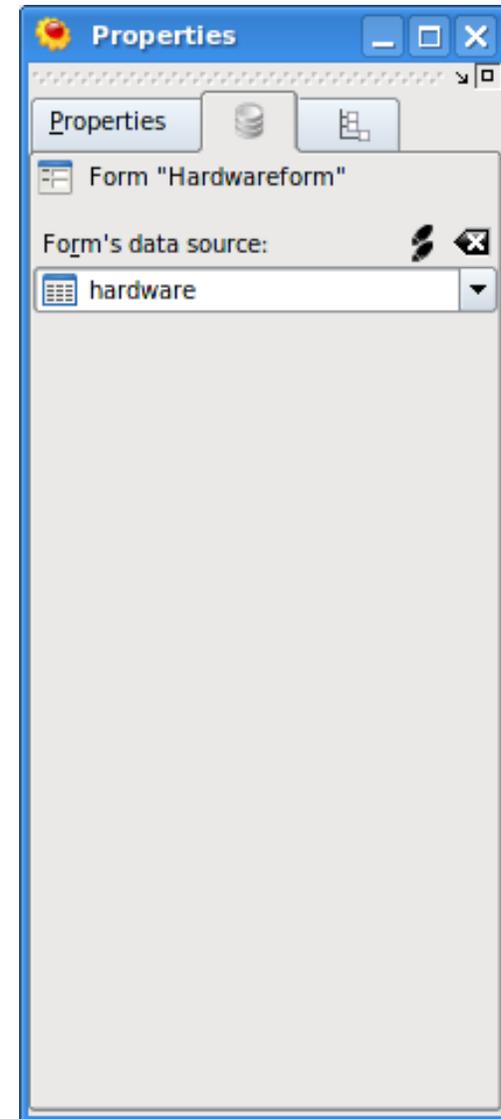


Figure 5. Use the Data sources tab to “connect” the form to the table.

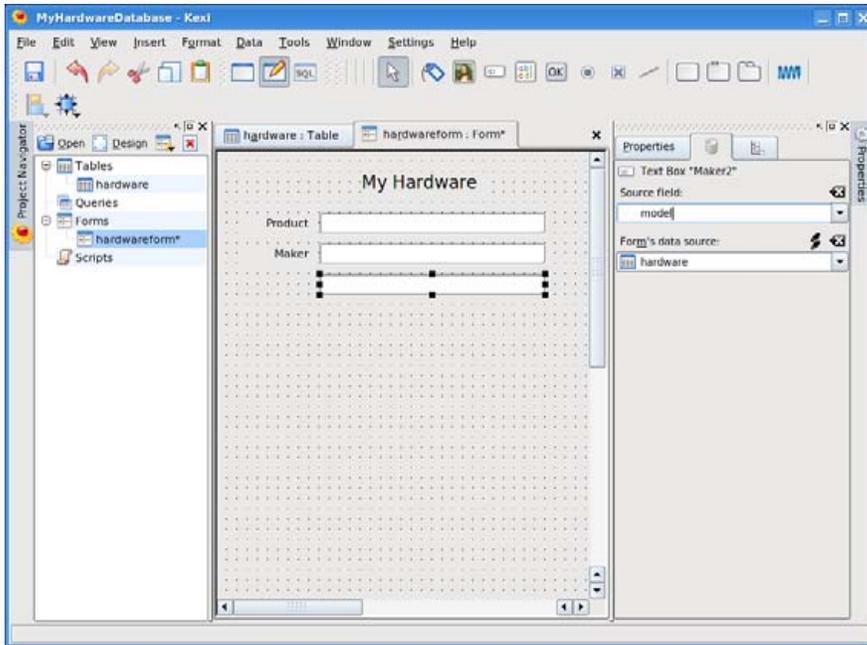


Figure 6. Adding Widgets to the Form

images and so on, to spice up the form a bit.

Your very first Kexi database is almost ready, but the introduction to database development won't be complete without taking at least a brief look at queries. Let's say you have several laptops, and you want to locate their info in the table quickly. You can, of course, use the search feature, but you also can create a simple query that allows you to find all laptops with a single mouse click. To create a query, left-click on the Queries item in the Project Navigator pane and select Create Object: Query. Switch to the Design View mode by pressing F7. In the working area, select hardware table from the Table drop-down list,

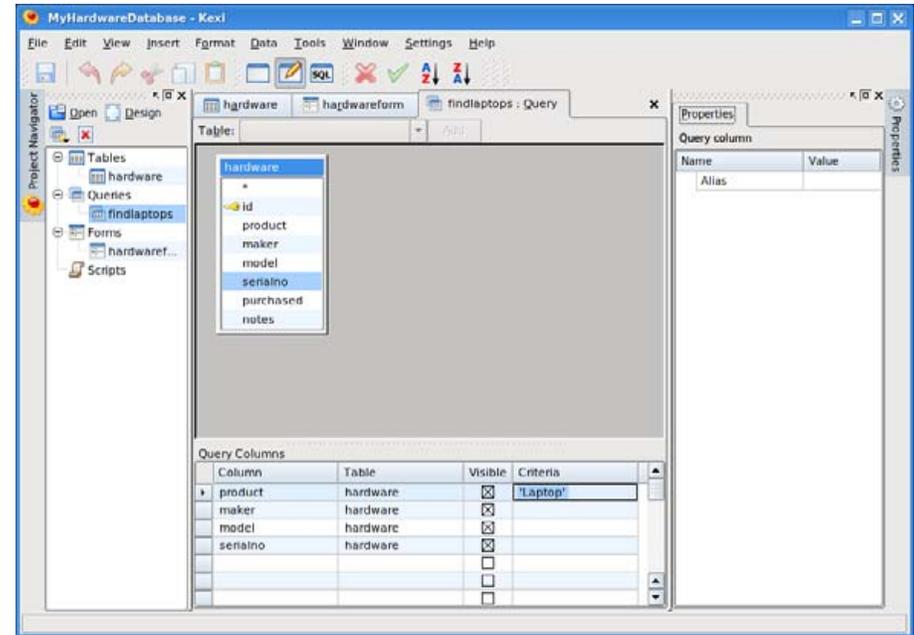


Figure 7. The Finished SQL Query

and press the Add button to add the table to the query. Now, drag the fields you want onto the Columns part of the Query Columns window. Set the Criteria of the product row to Laptop. The final query should look like the one shown in Figure 7. Save the query, and give it a name, for example, findlaptops. Switch to the Data View mode to see the results of the query. That's it—your first Kexi database is ready to go.

FINAL WORD

Thanks to Kexi, creating a database doesn't have to be complicated. Better yet, knowing the basics of database design, you easily can

apply your skills to other database management applications, such as OpenOffice.org Base, Knoda, Recall and many others. And, if you want to know how Kexi stacks up against other database systems, check the following page: <http://kexi-project.org/wiki/wikiview/index.php?KexiComparisons>. ■



Dmitri Popov is a freelance writer whose articles have appeared in Russian, British and Danish computer magazines. His articles cover open-source software, Linux, Web applications and other computer-related topics.

Connecting Evolution to MS Exchange

With the Exchange Connector, you can use Evolution to connect with a Microsoft Exchange mail server and use all of the messaging and calendaring functions available.

DANIEL MCCARTHY

At the office, I have the great privilege of choosing the operating system for the laptop provided to me by the company. I have, of course, chosen Linux, with the specific distribution being Fedora Core 5. Linux generally increases my productivity. One area that has been cumbersome, in the past, has been e-mail/collaboration.

My place of employment uses Microsoft Exchange, and until recently, I was able to use Evolution only to check my e-mail. With the open-sourcing of the Exchange Connector for Evolution, I am now able to use the calendaring features also, and if I chose, the Global Address Book of the Exchange server.

Being able to use the calendar was a must, as I am a forgetful person. The reminders of the many meetings are a must. In addition, my supervisor loves to assign me tasks via the Exchange server. I can no longer claim the inability to retrieve these tasks from my Linux machine as an excuse for ignoring his task list.

All modern Linux distributions come with Evolution as the primary mail client by default. Some, however, do not install the connector piece necessary to connect Evolution to a Microsoft Exchange server automatically.

This article is an outline of how to install the Exchange Connector under Fedora Core 5. As each Linux Distribution has its own package manager, the process will vary from distribution

to distribution. Before getting started, you should ask your Microsoft Exchange administrator for the Outlook Web Access URL. You also will want to make note of the domain for which your Exchange Server is configured for Windows authentication.

To begin, open the Add/Remove Software application by clicking the Application Menu and choosing the Add/Remove Software menu option. Figure 1 displays a screenshot of how this looks on my system.

Once the Add/Remove Software application has launched, you must provide the root user's password, as software management is considered a system administration task. With the application launched, click the Search button located on the left side of the screen. In the search field, type evolution. You may see many results, most of which are irrelevant to what we are trying to accomplish here. From the list, select evolution-connector by clicking the check box next to the item. Notice the version number next to the software description. You need to be sure to select the version number that most closely matches the version of Evolution you have installed. Because you searched on Evolution, you should be able to view the Evolution version number in the same search window.

With the item selected, click the Apply button. The Add/Remove Software application then



Figure 1. Starting the Add/Remove Software Application

presents you with a summary of the actions to be taken, namely the installation of the Evolution Connector. Proceed by clicking the Continue button. The evolution-connector is now downloaded and installed on your system.

With the Apply button clicked, the Software Manager downloads the evolution-connector software in the form of an RPM and proceeds by installing the software. See Figure 2 for an illustration.

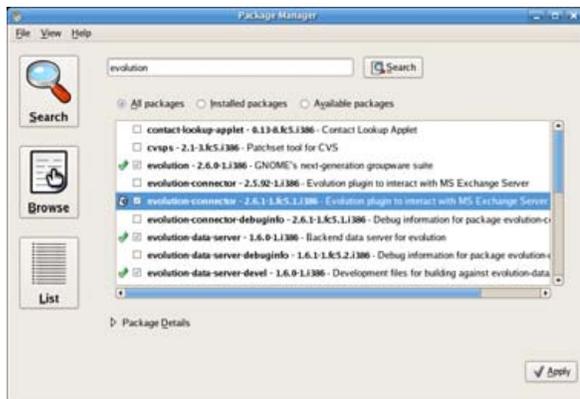


Figure 2. Add/Remove Software Search

With the required software now installed, it is time to launch Evolution! For the purposes of this article, I assume this will be the first run of Evolution. On the first run, Evolution walks you through the steps necessary to configure an e-mail account. The first screen presented is a summary screen that informs the user of the configuration that is about to take place.

The second screen presented allows you to enter the e-mail address for the account you are going to set up, as well as your full name. Following this screen, you are presented with the server type configuration. We choose Microsoft Exchange from the drop-down menu. With the correct server type selected, two additional fields appear: one for the Microsoft Exchange user name and one for the Outlook Web Access (OWA) URL.

An important note here: when I use OWA, the URL should not be a Secure Sockets Link (SSL) URL—meaning do not use a URL that begins with https, instead use one beginning with http. The

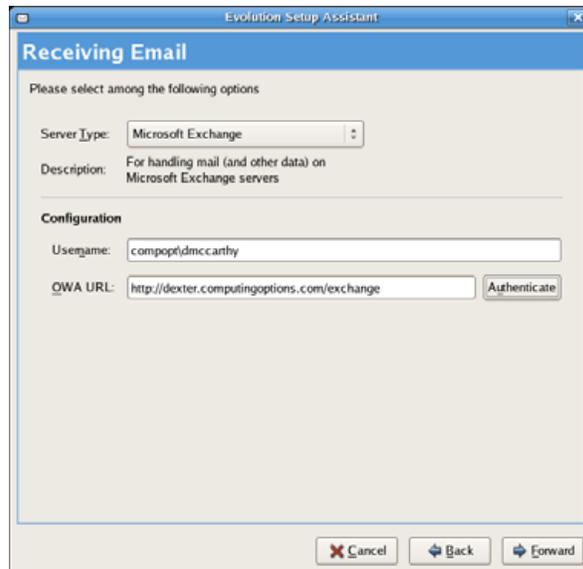


Figure 3. Receiving Mail Options

https option uses forms-based authentication, and the http option uses HTTP authentication. I have had success only using HTTP authentication. Notice the URL in Figure 3.

I've found that many people do not realize they are logging on to a domain when working in Windows and consequently when accessing OWA. The domain portion of a user's login credentials may be hidden by making use of a default domain. In the user name field in Figure 3, you will notice "compopt" followed by a backslash, followed by my actual user name. The compopt portion is the domain I am a part of. The backslash is simply a separator for the domain and user name.

At this point, you are required to test the connectivity to Exchange by clicking the

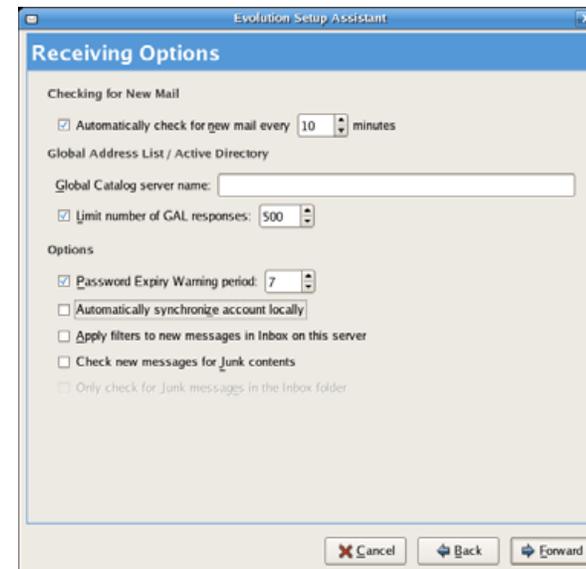


Figure 4. More Receiving Options

Authenticate Button. Clicking this button presents a dialog requesting your password. Enter your password, and click the Ok button. This tests the URL and user name provided to ensure that Evolution is able to communicate with Exchange. Determining whether there is a problem in the entry of the user name or OWA URL early on usually saves headaches in the future. If authentication succeeds without any error messages, you can proceed by clicking the Next button.

The next screen presented lets you configure various options, such as server side filtering, how Evolution checks for new messages, junk mail settings and so forth. I have noticed that checking the Apply filters to new messages in Inbox on this server option noticeably slows

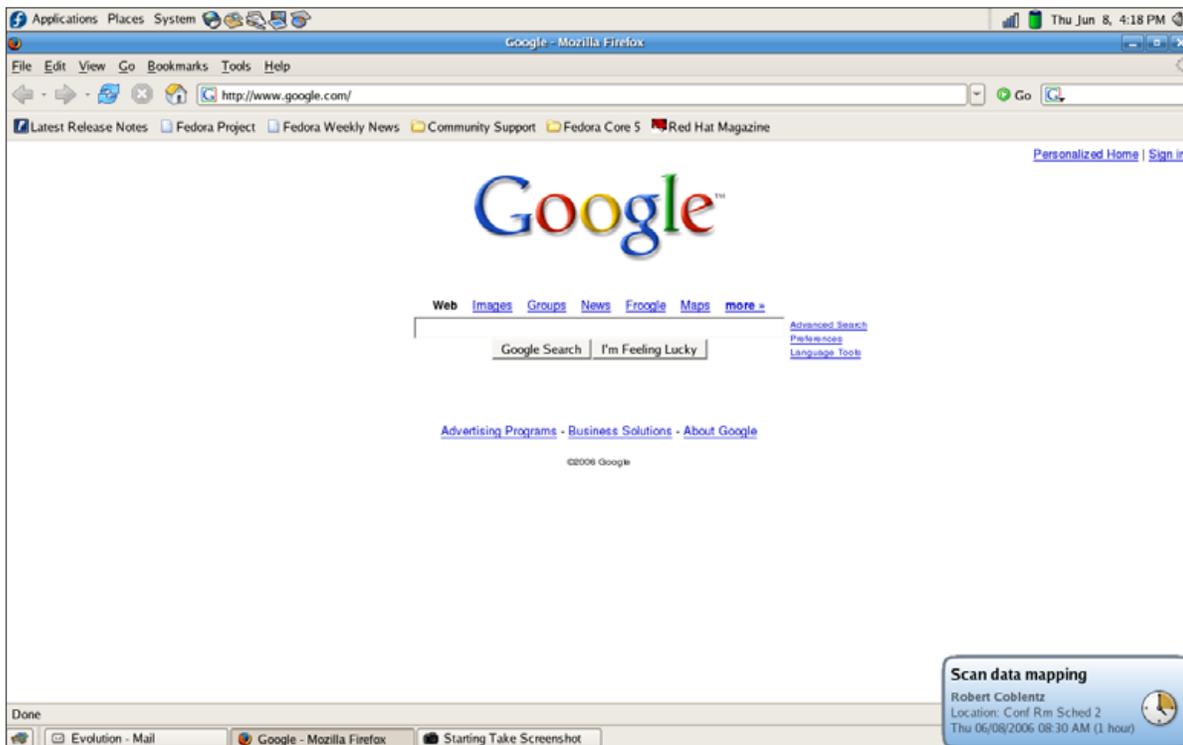


Figure 5. Calendar Reminders

Evolution down. Figure 4 provides an illustration of the receiving options available. After choosing a name for the account you have just set up and selecting the appropriate time zone, you are done!

Setup is done, but the waiting is not over. I have roughly 2,500 messages waiting for me on Exchange. The first time Evolution connects to Exchange to download these messages the process is incredibly slow; however, things tend to speed up a bit after the first run.

When the Exchange account is added, Evolution automatically adds the Calendar from your account. For me, being able to access my Exchange calendar while working within Linux is the best feature of the connector. I am able to receive reminders and accept meeting invitations all within Evolution. Although I now receive the reminders, I don't always pay them any mind, as you might notice from Figure 5.

Speed is one of the two complaints I do have with the functionality. As mentioned previously,

the initial download of e-mail messages is hugely time consuming if you have a large number of messages. During this time, Evolution may appear to stop responding. I recommend patience. Evolution will come back. Second in the list of complaints is speed. When Evolution drags during the download of the e-mail messages, I have inadvertently caused it to crash. Sometimes when this happens, I simply can re-open Evolution and continue; other times it appears that some back-end Evolution process has stopped working. Having not taken the time to discover how to restart this process manually, I often do the usual Windows fix and reboot.

While writing this article, I endeavored to explore a little deeper into the functionality I thought missing. One of the areas I discovered support for upon the conclusion of writing this article is shared calendars. At my office, we have a company-wide calendar where vacations, client visits and the like are placed. With a little RTFM and a little bit of help from Google, I have discovered that switching to the Calendar view and then selecting File→Subscribe to Other User's Calendar enables me to do this. I am working with our Exchange administrator now to make sure our Global Catalog Server is set up so that I can make use of this feature. Overall, the Evolution Exchange Connector has greatly improved my productivity—or at the very least, increased my ability to be productive. ■

Daniel McCarthy works by day as a configuration manager for Computing Options Company developing software in both Java and PHP. By night, he works as the system administrator for <http://techguy.org>. He is an avid Linux enthusiast and promoter of open-source software.

Using VMware Player to Introduce Linux into the Enterprise

Virtualization opens new Linux users to a fresh approach to obtain, assess and hopefully adopt Linux.

KEVIN SHOCKEY

One of the potentially most influential categories of software applications for introducing Linux into an enterprise is virtualization. With a virtual machine, you can remain compliant with many strict information technology department guidelines and still run Linux. Even if those guidelines stipulate that all desktop computers must run Microsoft Windows, you still can comply by installing a virtual machine on top of Windows and then installing the Linux flavor of your choice within the virtual machine. In this review/tutorial, we show you where to get software free of charge that will give you the tools necessary to download prebuilt virtual machines and then run Linux.

This is a review and a tutorial rolled into one. First, this article introduces the VMware Player and explores its capabilities. The review part of the article also explains the tools you'll need to get the most of the VMware Player. Second, because this issue targets Linux in the enterprise, we thought it would be useful to show you how to run Linux on top of Windows. As a clever way to introduce Linux into the enterprise, virtual machines provide great flexibility while delivering superior performance.

VMWARE PLAYER

First, within the last 18–24 months, VMware, Inc., has risen to the top of the industry by providing a

wide variety of virtualization choices. These choices include two freely available virtual machines: VMware Player and VMware Server. The focus of this article is the VMware Player.

Before diving into the review, we need to make something perfectly clear. Although part of this article covers how to install VMware player in Microsoft Windows, VMware Player is also available for Linux. And, for us, there is very little difference between the two versions. The installation experience is nearly the same, and the functionality is the same as well. So, everything covered in this article is equally true for Linux. Never thought of trying virtualization to obtain Linux? Why bother? Here are a couple reasons to consider:

- **Testing:** first and foremost, virtualization has opened up many options by allowing users to create an exact mirror copy of their production configuration and test the impact of installing new packages and software. Further, if you're not sure which Linux distribution you want to try, there are about 40 different options just in the Operating Systems category of the VMware Technology Network. Try one, or try them all. And, if you don't find the distribution you're looking for, I bet it'll be available soon.

- **Secure browsing:** through the use of a Browser Appliance, available at <http://www.vmware.com/vmtn/appliances/directory/browserapp.html>, you instantly can make any computer highly secure for completing on-line transactions, such as purchases and bank transfers.

Finally, if you think your IT department won't let you install VMware Player, go ahead and ask. Most likely, the systems administrators are already using a VMware product inside the server room, so maybe they'll understand that it is safe. If not, make sure they know that installing software within a virtual machine is the safest way of all to operate, because the virtual machine creates a barrier between the the virtual machine and the host operating system, so there is no way to damage the underlying system.

INSTALLATION

The steps necessary to install VMware Player within Microsoft Windows are simple. Simply download VMware Player from <http://www.vmware.com/products/player>, and double-click the file when the download is complete. Once again, the Linux installation is equally as easy. We give VMware Player an excellent rating for installation.

EASE OF USE

Because most of the action goes on within the virtual machine, that means the application itself is quite easy to use. For example, after the installation is complete, all that is necessary to launch a virtual machine is to double-click a *.vmx file. (When speaking of virtual machines in conjunction with VMware, they are referred to as virtual appliances.) This starts the VMware application using the virtual

machine defined in the *.vmx file.

It can get a little confusing switching between the virtual machine and the host computer, but with a little practice it becomes second nature. To capture the input for the virtual machine, press Ctrl-G. To return control to the host computer press Ctrl-Alt.

DOCUMENTATION

Six different sources of documentation are available for VMware Player. On the VMware Technology Network (VMTN) are the release notes for the current version of the VMware Player, the VMware Player Manual, Guest Operating System Installation Guide and the Virtual Machine Mobility Planning Guide. In addition, when you download the prebuilt Browser Appliance, it comes with its own

Browser Appliance Getting Started Guide. Finally, the VMware Player itself comes with embedded help files as well.

Although the VMware Player is simple to use, having this documentation available should ease the most inexperienced user's task of learning how to use virtual machines. We give the documentation a good rating.

CAPABILITY

In this section, we analyze whether the VMware Player fulfills its primary function—virtualization. In the months we have been using the Player, it has continued to impress us. With the ever-growing list of virtual appliances provided at the VMware Technology Network, obtaining the leading-edge Linux distributions is only a few clicks away.

Now, some might worry that because VMware Player is such a cutting-edge product, it might require cutting-edge hardware to accomplish its task. You might be surprised to find the requirements rather modest:

- Processor speed: 400MHz or faster (500MHz or faster recommended).
- Memory: 128MB minimum, 256MB recommended. You must have enough memory to run the host operating system, plus the memory required for each guest operating system and for applications on the host and guest.
- Hard disk: at least 1GB free disk space for each guest operating

system. For installation, VMware Player requires approximately 150MB.

In terms of host operating systems, although it supports a wide range of options, to install VMware Player on a Windows machine, you must have Windows XP or Windows 2000. All major Linux distributions can serve as hosts. So although the requirements aren't bare-bones, I would be surprised to find many machines capable of running Windows XP that can't run VMware Player.

Two especially handy features are worth mentioning. First, once you have a virtual appliance installed and in working order, you can make a copy of that virtual appliance, just in case something goes horribly wrong while testing. To do this, make sure your virtual machine is not active, and simply copy the directory where it is installed. To restore your working virtual appliance, copy the backup back into your virtual appliance directory, and everything will be restored back the way it was.

The other great feature is the ability to suspend any virtual appliance by simply exiting the application. Make sure you set the preferences of the VMware Player to suspend the virtual machine when exiting.

For being able to do everything that one might expect from a virtual machine, we give the VMware Player an excellent rating in capability.

COMPATIBILITY (WHICH AND HOW MANY DISTRIBUTIONS WORK WITH VMWARE)

VMware Player supports a wide range of both host and guest operating systems. Nearly every major Linux distribution is supported as both a host and a guest. Definitely, it deserves an excellent rating for compatibility.

CHEAT SHEET FOR PRODUCTS AND CAPABILITIES

VMware Player: can play only virtual appliances. It can use a Linux Live CD virtual appliance to boot CD images.

VMware Workstation: can create and play virtual appliances.

You can author your own virtual appliances here: <http://www.consolevision.com/members/dcgrendel/vmxform.html>.

Another, easier, Web site for creating virtual appliances: <http://www.easyvmx.com>.

Note: on April 3, 2006, VMware announced the Open Virtual Machine Disk Format Specification (<http://www.vmware.com/news/releases/vmdk.html>). This announcement made the Web sites listed above possible.

SUPPORT

Because VMware Player is available free of charge, the amount of support available is limited. There is the product documentation, the included help information, a Frequently Asked Questions (FAQ), a discussion forum and a knowledge base. Out of curiosity, we looked up a question we had and quickly found an answer in the VMware Player Forums. We rate the support for VMware Player average.

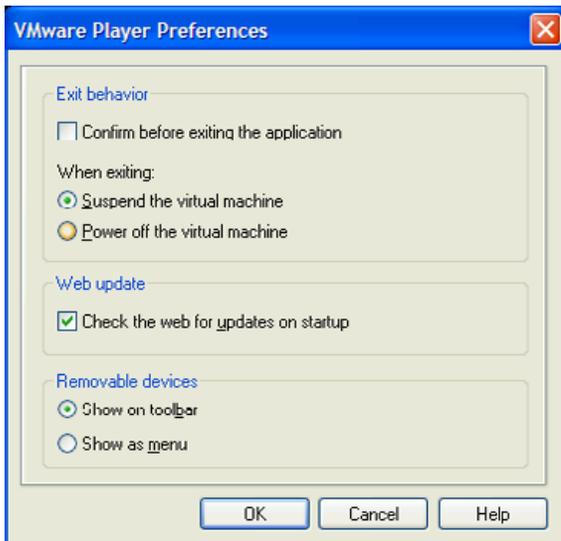


Figure 1. Suspend Preference in VMware Player Preferences

PRICE

It's hard to beat software of this quality that is available without charge. Plus, if you consider that VMware made the file formats for its virtual appliances available to the Free Software community, the price is even better. This lets you use publicly

available Web sites to generate your own blank virtual appliances. These are suitable for installing the operating systems of your choice. Our rating is excellent for price.

HOW TO RUN LINUX ON A COMPUTER RUNNING MICROSOFT WINDOWS

Now that we've reviewed the VMware Player, let's get Linux installed on a host Microsoft Windows XP computer. For the purpose of this tutorial, let's assume that you've gotten permission from your Information Technology department to install a secure Browser Appliance to prevent your computer from being infected by viruses, spyware, adware or malware. So, let's install the VMware Player and the Browser Appliance, and within a matter of minutes, you'll be safely browsing the Web in your very own Ubuntu Linux and Firefox virtual machine.

INSTALLING THE VIRTUAL MACHINE

Navigate over to the VMware Player Web page (<http://www.vmware.com/download/player>), and download the Player. It is approximately 29MB, so if you have a broadband connection, it shouldn't take too long. Once the download is complete, double-click on the VMware-player-x.x.x-nnnnn.exe file (the x.x.x corresponds to the version number, and the nnnnn corresponds to the build number).

After starting the installation, click the Next button to continue the installation. The next dialog is the VMware Player license; please read it carefully. The VMware Player is not licensed as open source. You may not redistribute it freely. If you agree, click the agree radio button, and click the Next button. The next dialog prompts for the installation directory. Change the directory, if desired, and click the Next button. Now you need to select the installation shortcut options. Select your preferences for

whether the installation should install a shortcut on the Desktop, in the Start Menu Programs Folder or in the Quick Launch Toolbar.

The next step in the installation process requires you to set your VMware configuration options. We recommend staying with the defaults. Click the Next button to advance the installation. Once you click Next, the installation routine has everything required for the installation and the installation begins.

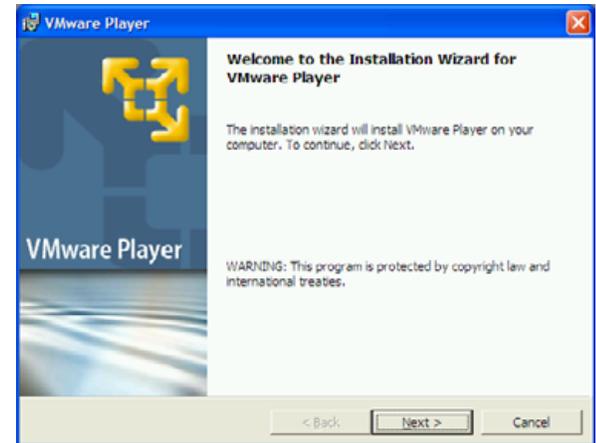


Figure 2. Initiating the VMware Player Installation

SUMMARY

INSTALLATION: excellent

EASE OF USE: excellent

DOCUMENTATION: good

CAPABILITY: excellent

COMPATIBILITY: excellent

SUPPORT: average

PRICE: excellent

OVERALL RATING: excellent

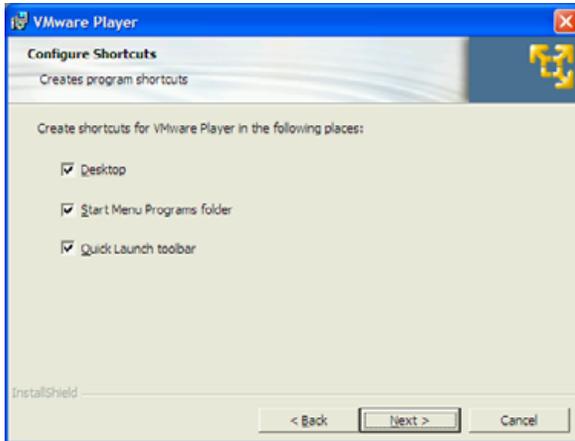


Figure 3. VMware Player Installation Options

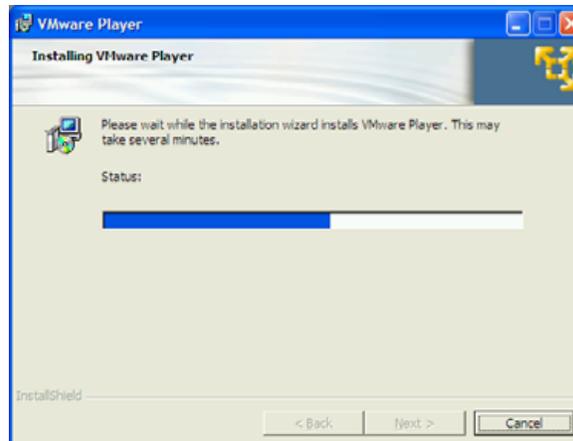


Figure 5. VMware Player Installation In Progress

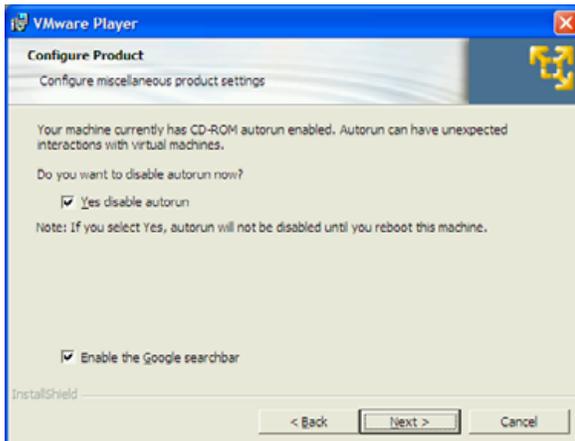


Figure 4. VMware Player Configuration Options

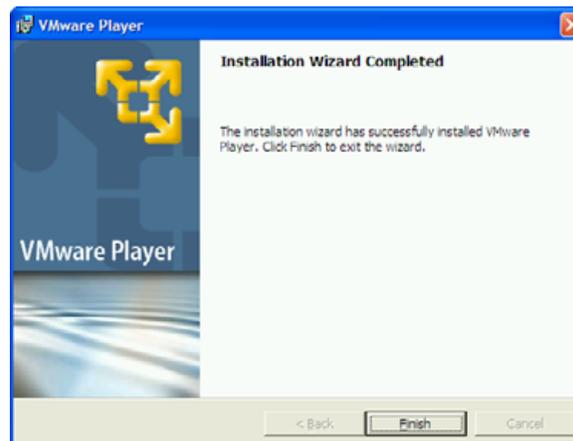


Figure 6. Successful VMware Player Installation

When the installation is complete, the installation routine presents a successful installation dialog. Click the Finish button to conclude the installation. Now that the VMware Player is installed, we can obtain a virtual appliance

from the VMware Technology Network.

As I prefaced this tutorial, our objective is to install a secure browser capability. Therefore, we need to download the Browser Appliance from the VMTN Virtual Appliances, available



Figure 7. Selecting the Extraction Directory for the Browser Appliance

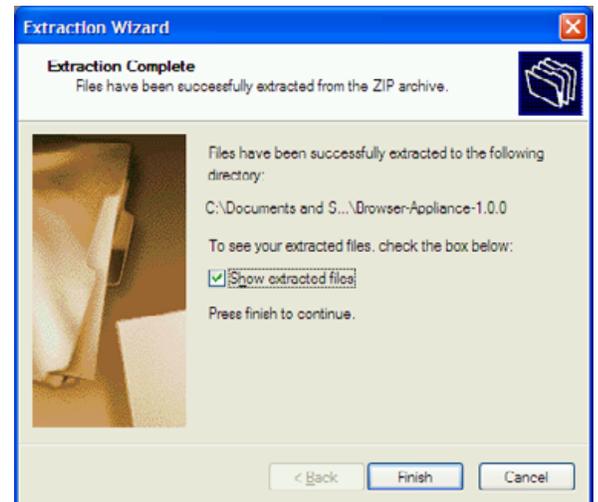


Figure 8. Extraction Complete



Figure 9. VMware Virtual Machine Initialization

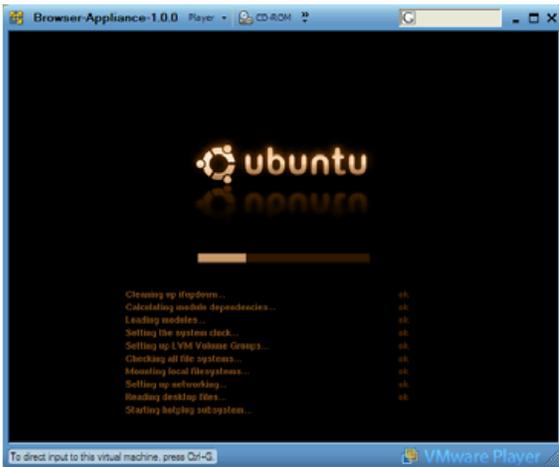


Figure 10. Ubuntu Linux Boot-Up Process within VMware Player

at <http://www.vmware.com/vmtn/appliances/browserapp.html>. This file is significantly larger at 258MB zipped, but at least there is a BitTorrent



Figure 11. Firefox Running on Ubuntu within the VMware Player

download available. Once you've downloaded the Browser Appliance successfully, extract the files from the compressed file. Right-click on the file, and select Extract All to start the extraction wizard. Click the Next button, and select the destination folder for the virtual appliance, and click the Next button again. The extraction process requires approximately 962MB of space decompressed.

When the extraction process is complete, the Extraction Wizard displays the Extraction Complete screen. Leave the Show extracted files option selected, and then click the Finish button. When the directory with the virtual appliance appears, locate the Browser-Appliance.vmx file and double-click on the file. This launches the Browser Appliance. First, the VMware Player initializes the virtual machine, and then the Ubuntu boot process begins.

Following a successful boot, the next thing that should appear is Firefox. Congratulations—you're now running Linux within your enterprise. Although

this is a stripped-down installation of Ubuntu, you can start adding applications with Synaptic Package Manager or simply use this bare-bones installation to learn more about Linux and enjoy secure browsing.

CONCLUSION

The combination of VMware Player and the many different virtual appliances available in the VMware Technology Network provide a wide variety of options for trying Linux. If you're cramped for space, try the Puppy Linux virtual appliance. Puppy Linux 1.0.7 is very small, reliable, easy to use and fully featured; it's 62MB zipped and 167MB unzipped. Although I would prefer that VMware Player was free or open source, the company has been very accommodating to the community. Other virtualization tools are free or open source, but I don't believe any deliver the same level of sophistication, maturity and ease of use as VMware Player. Let's hope, however, that the example set by VMware and its leadership in virtualization bring equal advances in free and open-source alternatives. ■



Kevin Shockey is Editor in Chief of TUX.

EDITOR'S NOTE

Getting Linux into the enterprise and onto more desktops is essential. More than anything, we need to build more Linux awareness and skills across all enterprises. If installing Linux via a virtual machine is the first step to enable that building process, it is worthwhile.

OOoHG

Oui, oui. We can do maps with OOoHG and OpenOffice.org Gallery.

DMITRI POPOV

Creating maps is by no means an easy task. Although there are a few open-source Geographical Information System (GIS) applications available for Linux, they are all geared toward professional users, and as such, they have quite a steep learning curve. Even if you manage to master a GIS application, you still have to produce maps or find pre-made map templates, which quite often are rather expensive. Fortunately, there is an easy-to-use software package called OOoHG (<http://ooo.hg.free.fr/ooohg/ooohg.html>) that

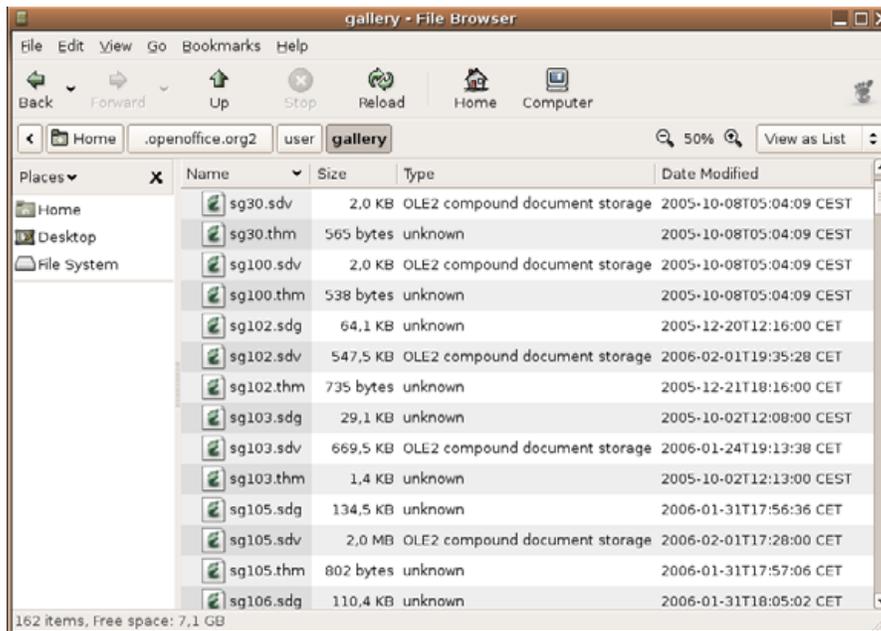


Figure 1. OOoHG is an extensive library that resides in the gallery folder inside OpenOffice.org.

includes everything you need to create virtually any type of map. OOoHG is not a standalone application, but a huge collection of maps and mapping elements stored as OpenOffice.org Gallery files. This means instead of learning a completely new application, you can use OpenOffice.org's familiar tools. Better yet, the entire process of designing a map can be done via drag and drop. However, there is one drawback. OOoHG is developed with French users in mind, and its documentation is available only in French. But don't despair; this article will help you get started with this amazing map library.

OOoHG'S CONTENTS

The core of OOoHG consists of three libraries. CART'OOo is designed to create maps and geographical drawings quickly. It consists of 189 vector-based (vector graphics are the creation of digital images through a sequence of commands or mathematical statements, allowing the images to enlarge without losing quality, as opposed to bitmap graphics, which contain a bit for each pixel and become blurry as the image is enlarged) geographical and historical maps divided into 13 themes and 135 geographical objects that can be used to create maps—legends, drawings and so on. The CHRON'OOo library is designed specifically for creating chronological timelines using the supplied objects. The third library, ATLAS'OOo, allows you to create bitmap maps using 21 geographical and nine historical themes, which total an impressive 413 maps.

DOWNLOADING AND INSTALLING OOoHG

To download the latest version of OOoHG, point your browser to <http://ooo.hg.free.fr/ooohg/ooohg.html>, locate the OOoHG.zip file on the page, and download it to your computer. Unpack the archive using your favorite archiving tool; on KDE, left-click on the file and choose Extract→Extract to ooohg/. This creates the ooohg folder containing the unpacked files. Next, move the contents of the ooohg folder to the

`/home/username/.openoffice.org2/user/gallery` directory, where *username* is your user name. Note: to access the invisible `.openoffice.org2` folder, you must enable the Show Hidden Files feature in your file browser. Once the files are copied, launch OpenOffice.org Draw, and click on the Gallery button, or choose Tools→Gallery. This opens the Gallery window, and if the OOoHG library has been installed properly, you should see the OOoHG themes in the Themes pane. By default, all the themes have French names, but you easily can rename them: left-click on the theme you want, select Rename and give the theme a new name.

CREATING A MAP

Now it's time to design a map, and for this article we design a map of Germany. In the Themes pane, select the Cartes 04 Europe Etats, and from the gallery pane, select the Allemagne Landers map (to locate the appropriate map quickly, you might want to switch to list view). Drag and drop the

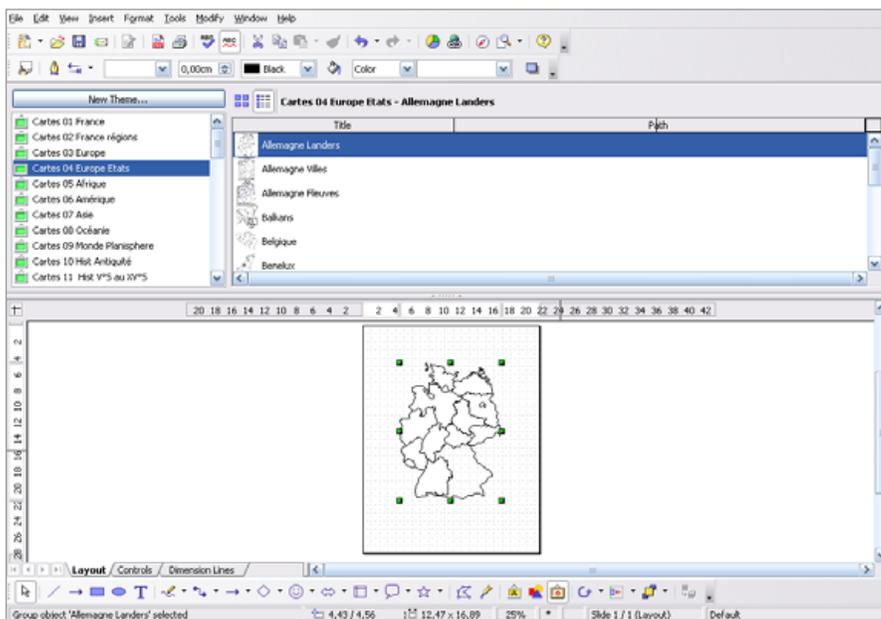


Figure 2. Creating a map is as simple as dragging it from the Gallery onto the drawing.

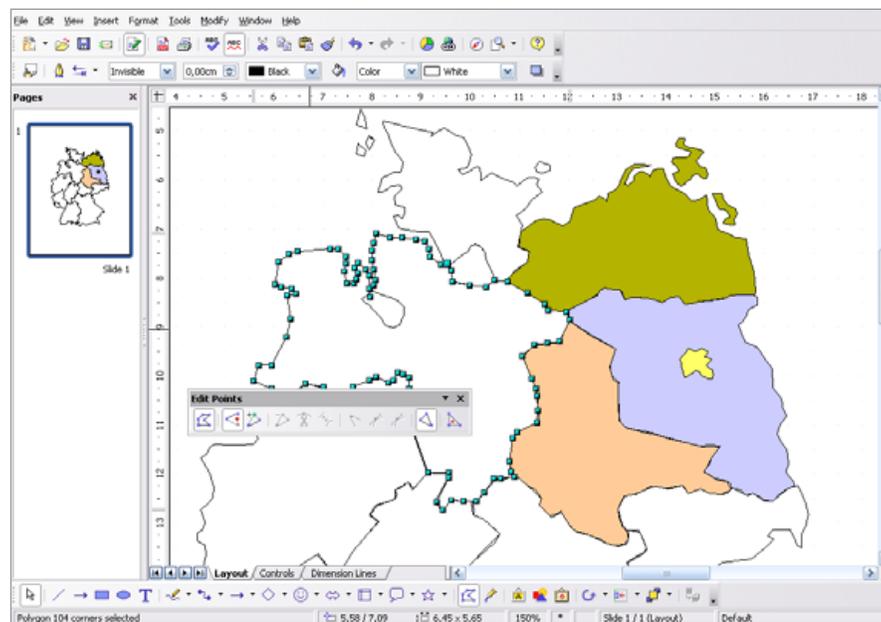


Figure 3. Each element of the map is drawn using Bézier curves.

map onto a blank drawing. As you may know from your geography classes, Germany consists of several federal states (or just states), and you can see their borders on the map. As it is, the map is pretty bare-bones, and you can spice it up a bit by applying different colors to the states. But before you do that, it is important to understand how OOoHG's vector-based maps are made. Each element on the map is drawn using Bézier curves, and once all the elements are done, the map is assembled using the Group tool, so it acts as a single vector drawing.

To see why this is important, let's put some colors on the Berlin and Brandenburg states. To modify the individual elements of the map, select the entire map by clicking on it, then choose Tools→Enter Group (or press F3). Now select the Berlin state, left-click on it and select Edit Points. Alternatively, you can either choose Edit→Points or press F8. In the Edit Points toolbar, press the Close Bézier button, and then select the color you want from the Area Style/Filling drop-down list in the Line and Filling toolbar. Repeat these steps for each element (state) on the map. Once you've colored

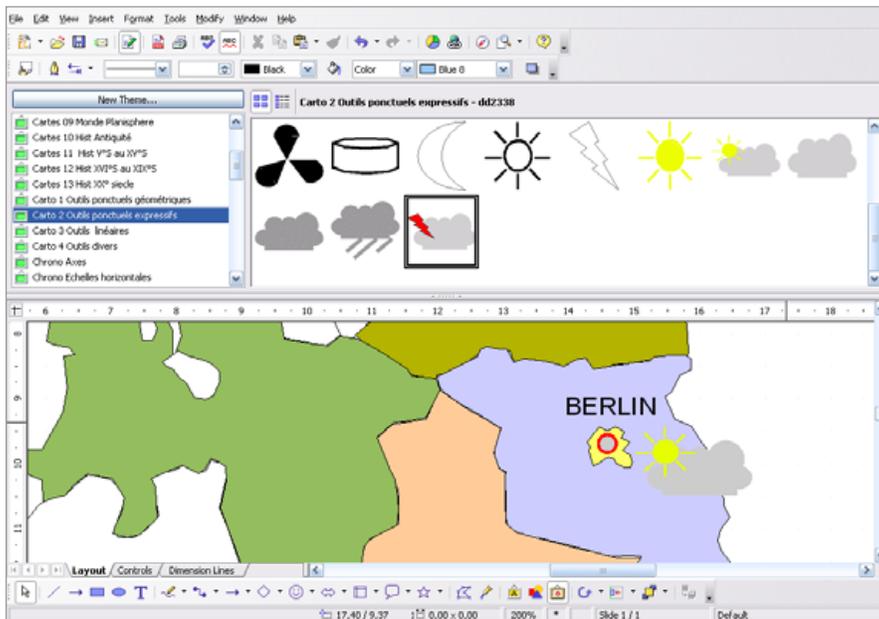


Figure 4. OOoHG includes a wide range of map elements, including weather symbols.

the map, leave the Edit Points mode by pressing F8. Now you have a professional-looking map, but the fun doesn't have to stop here. OOoHG includes an impressive collection of design elements that you can use to add virtually any type of information to the map. For example, let's add Berlin to the map. Select the Carto 1 Outils ponctuels géométriques theme, and drag the dd2269 element onto the map. Place it where Berlin is supposed to be, and adjust the circle's size (to keep the circle's proportions, press and hold the Shift key while resizing the circle with the mouse). Select the colors you like for the circle's border and filling. Next, use the Text tool to add a city's name so you can identify it on the map.

Want to turn your creation into a weather map? OOoHG has what you need. Select the Carto 2 Outils ponctuels expressifs theme, and use the weather symbols (elements from dd2333 to dd2338) that represent different weather conditions.

CREATING INTERACTIVE MAPS

The great thing about OOoHG is that it's not limited to Draw; you can use it with other OpenOffice.org applications as well. And, using OOoHG with Impress is particularly intriguing, because it allows you to create interactive maps. For example, you can create an interactive weather forecast for several days using Impress's built-in tools and OOoHG.

Start with creating a blank Impression presentation. As you already have the map of Germany with Berlin on it, you can just as well insert it from Draw into the presentation. Simply copy it in Draw and paste it into the currently selected slide in the presentation. Add a header to the slide—for example, Weather Today—and add the appropriate weather symbol from OOoHG Carto 2 Outils ponctuels expressifs theme to the map. Next, left-click on the slide in the Slides pane to the left, and select Copy. Left-click anywhere in the Slides pane, and select Paste.

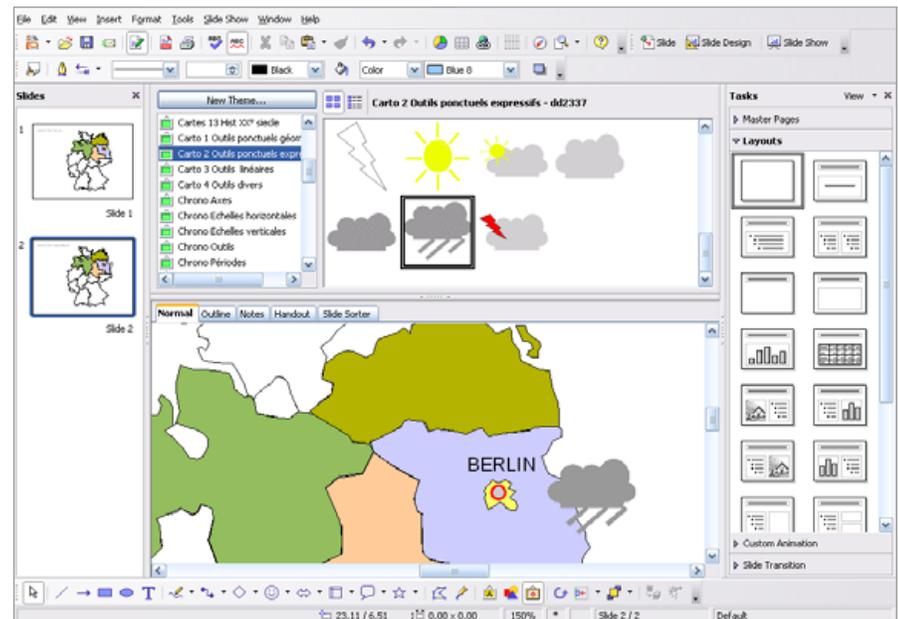


Figure 5. Using OOo Impress you can create interactive maps.

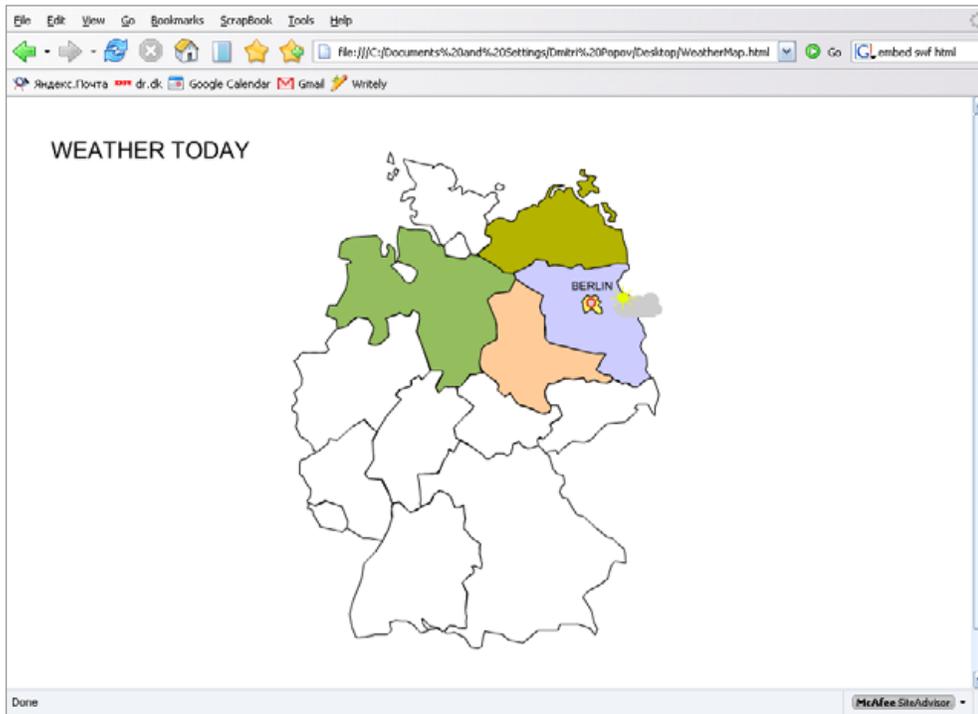


Figure 6. The exported Flash-based map can be published on the Web.

This creates a new slide identical to the original one. Replace the header with, for example, Weather Tomorrow, and replace the weather symbol with another one (assuming the weather is going to be different the next day, of course). To make the map a bit more snazzy, you can add transition effects to the slides.

Now you can impress your peers by showing them your interactive map, but you also can publish it on the Web either as an HTML or Flash presentation. To export your interactive map in Flash format, choose File→Export, and select the SWF format from the File format drop-down list. This creates a Flash version of the interactive map, but before you

can publish it on the Web, you have to create an accompanying HTML page and embed the .swf file into it. The most basic code can be as follows (remember to substitute the “WeatherForecast.swf” with the name of your Flash file):

```
<html>
<body><object width="800" height="600">
<param name="movie" value="WeatherForecast.swf">
<embed src="WeatherForecast.swf" width="800" height="600">
</embed>
</object>
</body>
</html>
```

Exporting the map into an HTML-based presentation is equally easy. Choose File→Export, and select the HTML format from the File format menu. This opens the HTML Export wizard that guides you through the entire process.

FINAL WORD

This article has barely scratched the surface of what you can do with OOoHG. It is a truly amazing package that allows you to create anything from historical maps and timelines to maps of population density and immigration charts. The best part, though, is OOoHG’s sheer ease of use. You can create professional-looking maps with minimum effort and export them in a variety of formats. If you need to create a map for your class or business presentation, look no further than OOoHG. ■



Dmitri Popov is a freelance writer whose articles have appeared in Russian, British and Danish computer magazines. His articles cover open-source software, Linux, Web applications and other computer-related topics.

KDE Kontact

How can the Kontact Personal Information Management suite help you? By uniting many popular KDE organization tools, the challenge is choosing which tool to use first.

COLIN MCGREGOR

KDE Kontact is a personal information manager that allows you to keep track of many different types of information. It also can tie this information to some brands of handheld devices. If you are in an office setting and have a suitable office groupware server, you can use Kontact to keep up with coworkers' scheduled meetings and activities. For this feature, Kontact's motto is "Share information!"

One of the philosophies that always has been behind UNIX and related operating systems, such as Linux, is that it normally is better to build several small programs and tie them together than to build one monster program. We see this philosophy in Kontact, which ties together several existing programs in one very neat, slick package. In Kontact, the mail program is KMail, and the calendar function is provided by KOrganizer and so on. The big advantage to this idea is that if a serious bug is found in one area, it affects only one function, not everything. It also means that upgrades can be done in several areas at once.

To run Kontact, you need a copy of the Kontact software. In addition, you need to have the KDE environment installed on your system. You don't actually need to be running KDE when you run Kontact, so if you're a fan of the GNOME desktop, you can run Kontact while using GNOME, just as long as KDE has been installed on your system. Many Linux distributions do install Kontact by default when they install KDE, so chances are good you already have Kontact installed.

CONFIGURING KONTACT

So, let's get to work with Kontact, starting with configuring the program. From the top Settings menu, select Configure Kontact. Most of the settings offered are ones of taste, such as what color to use to highlight overdue to-do items. For these options, the program offers reasonable defaults. A

few settings, however, need to be changed before you can make proper use of the program.

If you click Summary→Weather Service, you will see a list of locations, many with further submenus. Select a place, and you will be able to see weather forecasts for the location you chose. In my case, that meant clicking

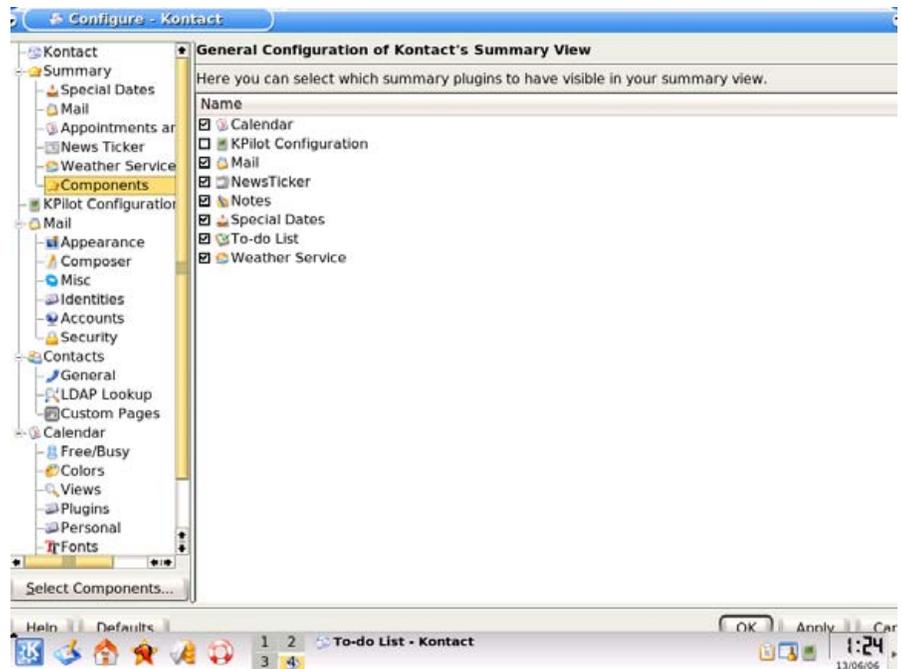


Figure 1. Configuring Kontact's Summary View

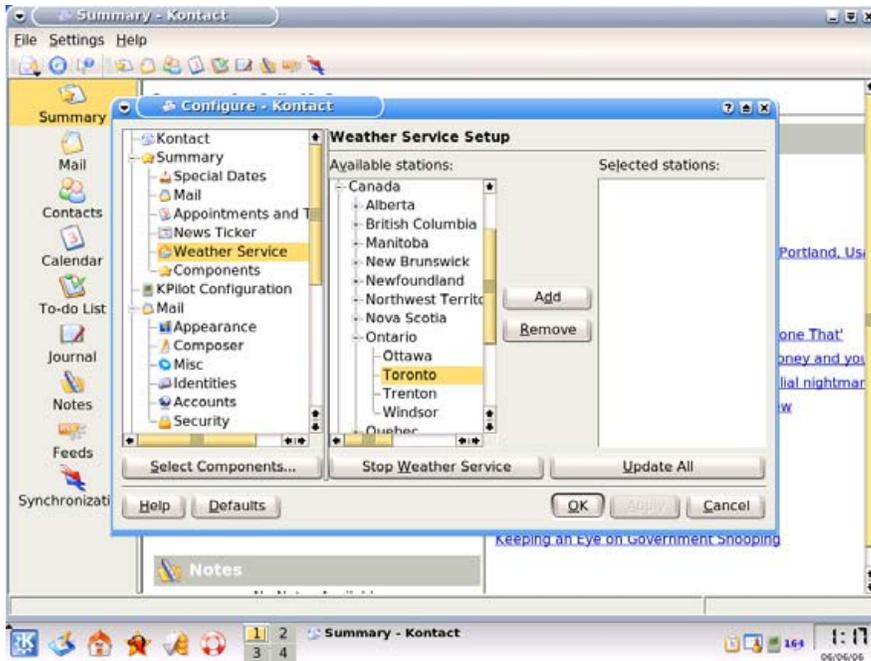


Figure 2. Configuring the Weather Function for Toronto, Ontario, Canada

on Canada→Ontario→Toronto, and then I clicked on Add to make sure I will see forecasts from Toronto's Pearson International Airport. After doing this, or any other settings change, make sure to click Apply to save the change. It's a similar story under Summary→News—you decide which news Web site headlines you would like to see on the Summary screen. Choices include everything from eFilmCritic to CNN headlines—choose according to your taste. Remember, again, to click Apply.

SETTING UP E-MAIL WITH KONTACT

Under Mail→Accounts things get a little bit tricky, as you need some information from your Internet service provider(s), and if you're setting this up in an office setting, this may mean your organization's information technology department. The mail program does support multiple e-mail accounts, so

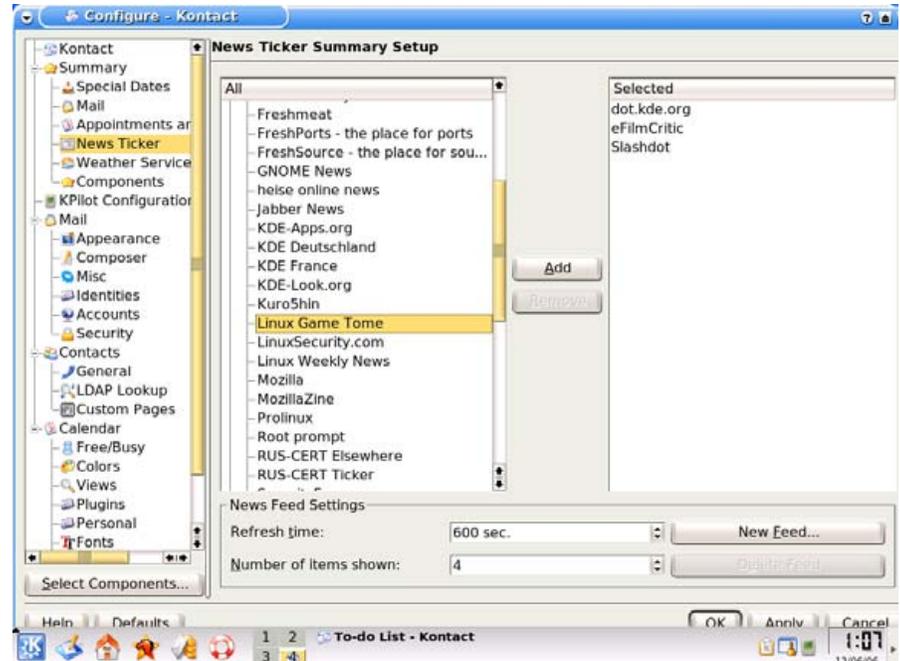


Figure 3. Selecting Default News Feeds

for example, if you have an e-mail account for home, an e-mail account for volunteer work and an office e-mail account, that is fine, but you need information for each account. You can go back and modify information, so correcting errors, and adding or dropping accounts is not a big issue. Start by clicking Receiving→Add and entering a name under Account name. Account name is for your benefit and should be something that will help you remember what this e-mail address is for, such as Home, Charity or Office. The values that follow depend on your Internet service provider. Once those values are entered, click on Extras and check what the server supports to see how your e-mail server wants to be talked to. Repeat this process for each e-mail account you want to receive e-mail from.

Under Mail→Accounts→Sending, you need to create a default place

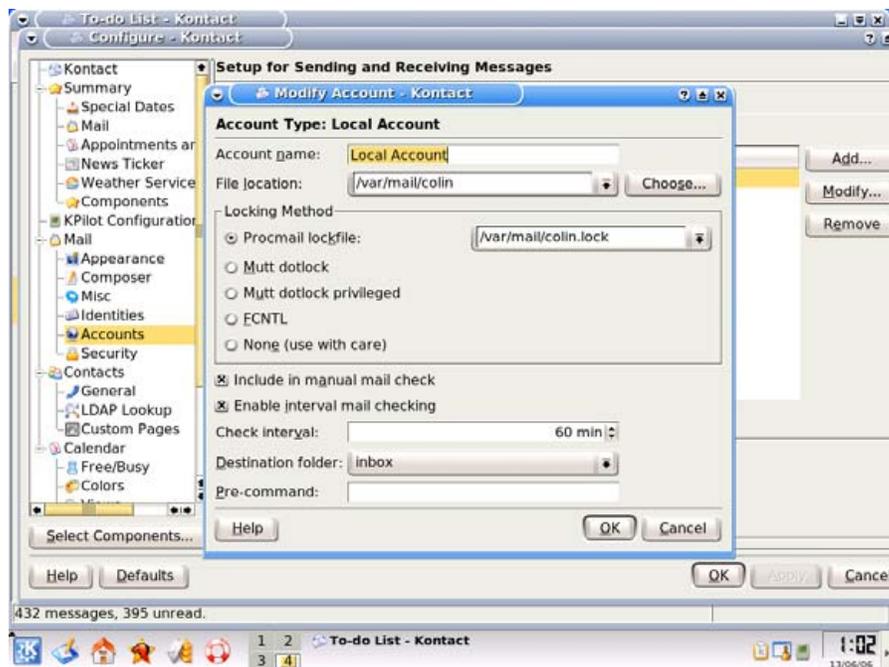


Figure 5. Setting up the system to deal with e-mail from within a local machine—note that the mail folder `/var/mail/<username>` varies between distributions, so double-check it for your system.

from which to send e-mail. As with receiving, the Name area is arbitrary, and it can be anything that helps you remember the particular account. The rest of the settings come from your Internet service provider.

Before we leave the setup of e-mail, you need to create an identity under Mail Identity. Because forged e-mail addresses are easy to create, and because forged addresses are used to help hide the origins of spam, some service providers are taking a hard line against identities that don't appear to be one of theirs. So, for an identity, the safest route is to use whatever you have set as your default Receiving identity.

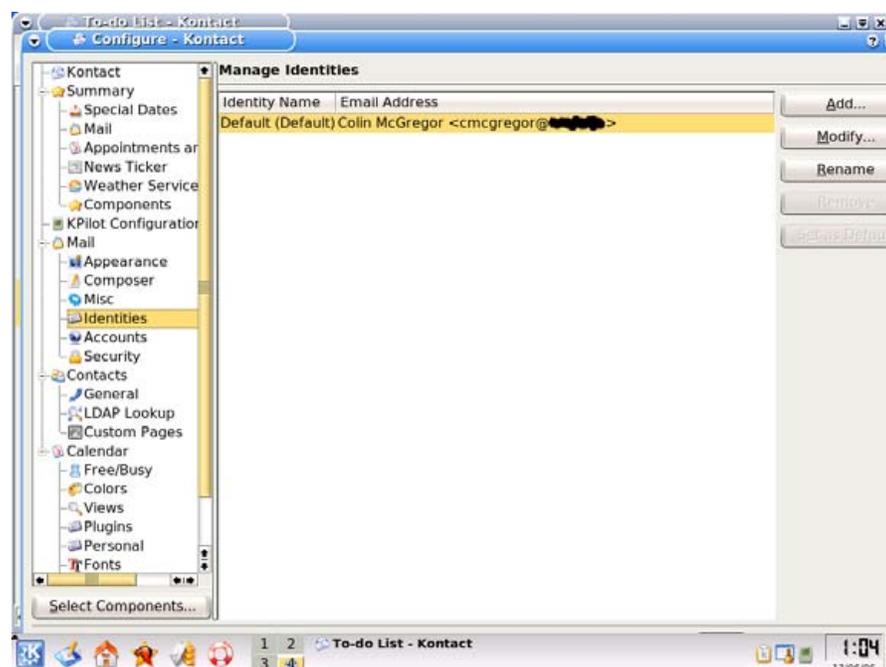


Figure 6. Managing E-Mail Identities with My Default E-Mail Address Party Obscured

USING KONTACT WITH HANDHELD DEVICES

There are times when a Linux-running laptop is not portable enough or easy enough to use. Double-checking a grocery list at the supermarket is not something you want to do with a laptop. This is where handheld devices like the Palm-based devices and some high-end cell phones come into play. In this arena, Kontact works but is somewhat weak. Kontact doesn't currently support the Windows CE-based handheld devices, and the KPilot program that Kontact uses to connect to Palm devices has a reputation for being somewhat troublesome. So, do back up the contents of your handheld with a program other than KPilot before you start with Kontact.

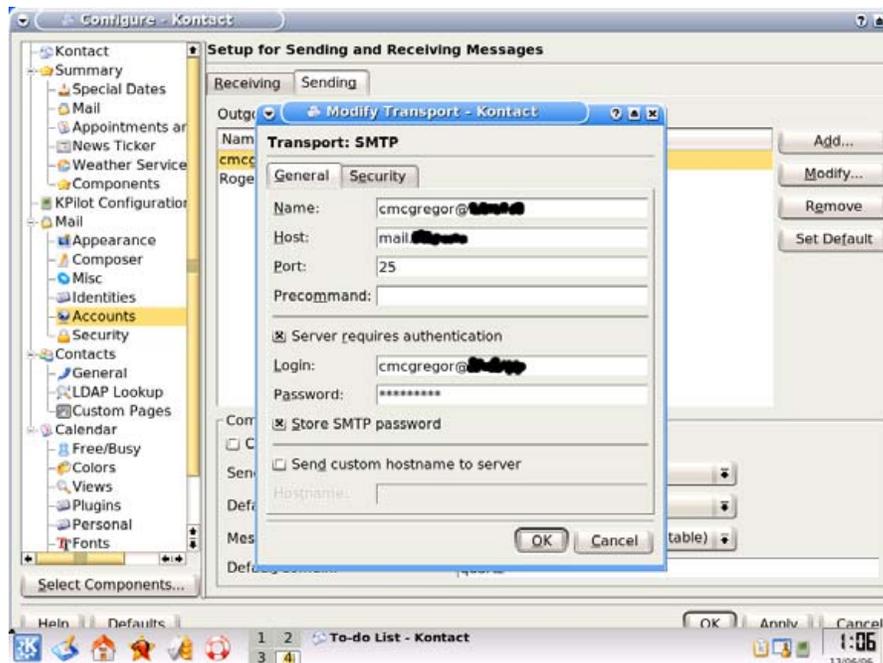


Figure 7. Editing My Default Identity with My Default E-Mail Address Partly Obscured

Turn your Palm device on, connect it to your computer and then go to KPilot Configuration. Click on the Configuration Wizard and follow the instructions given. If you run into problems here, which is very possible, search engines such as Google are a lifesaver. The odds are excellent that someone has run into the same problem you have and posted a way to deal with said problem on-line.

At this point, the basic setup is done, and we are ready to start doing interesting things with Kontakt.

THE SUMMARY SCREEN

Let's start with a quick look at the Summary screen. Simply click on

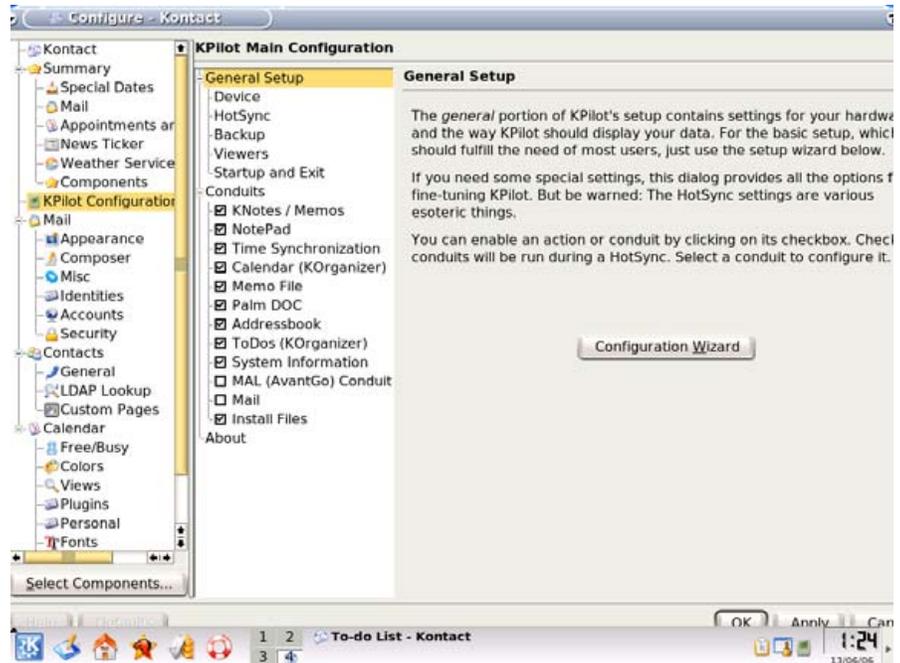


Figure 8. Configuration for KPilot

Summary, and you will see whatever you asked to see in setup. See Figure 9 for an example from my system. Keep in mind that as the news updates or as you change your to-do list, the Summary screen changes.

READING AND SENDING E-MAIL WITH KONTAKT

Assuming the e-mail settings are correct, then clicking the Mail icon on the left-hand side of the screen should bring up the e-mail screen. Depending on the settings for KMail, you may have to check for e-mail manually. This is what you may want if you are on a dial-up connection. The system can check for e-mail automatically every several minutes, which is a great choice for those with high-speed Internet connections.

Once you have your e-mail, sending e-mail is easy, with a few options

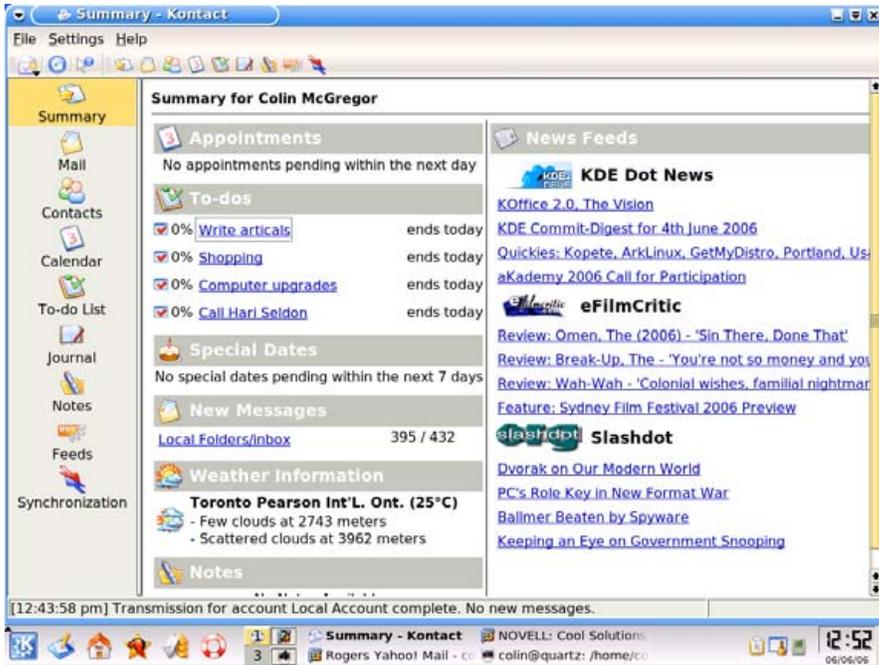


Figure 9. The Summary Screen

available. Click on the New Message icon near the upper-left corner, press Ctrl-N or click File→New Message. However you get there at this point, you see a Composer screen where you can type up your message. Clicking Select brings up a list of people currently in your address book. Once you finish your message, to send it, press Ctrl then Enter, or select File→Send Mail.

KONTACT'S TO-DO LIST

Managing the to-do list is about as easy as dealing with e-mail. There are multiple ways to add new to-do items, including clicking on Actions→New to-do. Simply fill in the boxes on the screen, and click OK. If you're not sure about dates, clicking on the little down arrow

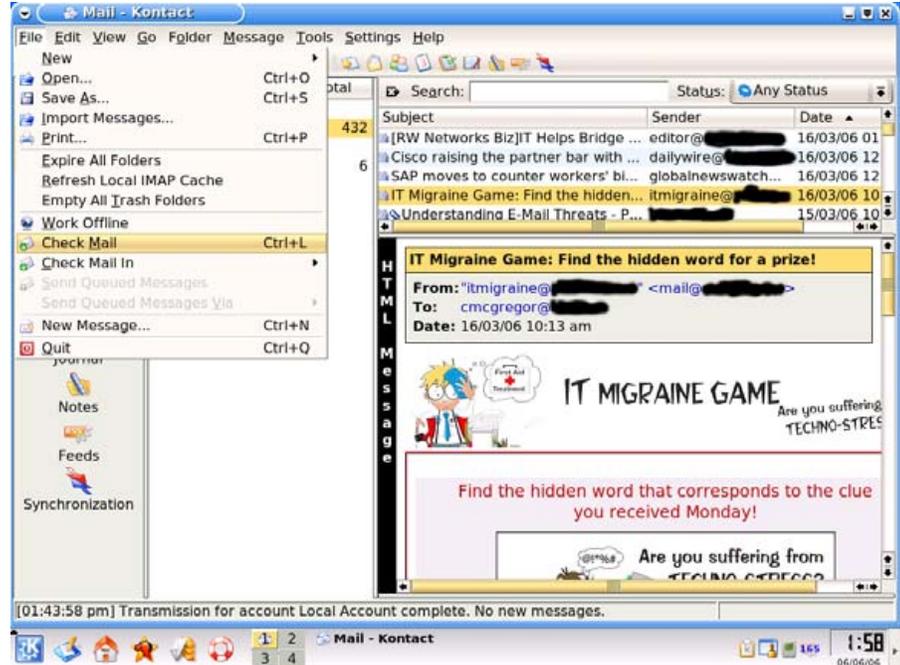


Figure 10. Checking E-Mail (with Parts of Each E-Mail Address Hidden)

beside the due date brings up a small calendar screen from which you can select dates. Over time, to-do items will change—a deadline may be moved forward or back or a priority may change. All of this is altered easily with Kontakt. Simply double-click on the task that needs revision and enter the changes. Once a task is totally finished, click in the little square to the left of the item to mark it as completed. To get rid of all the completed to-do items, click File→Purge Completed to-dos, and follow the on-screen instructions.

KONTACT'S CALENDAR

The Calendar starts by listing items in your To-do list, so if you have something like "Write proposal" on your to-do list for today, it will

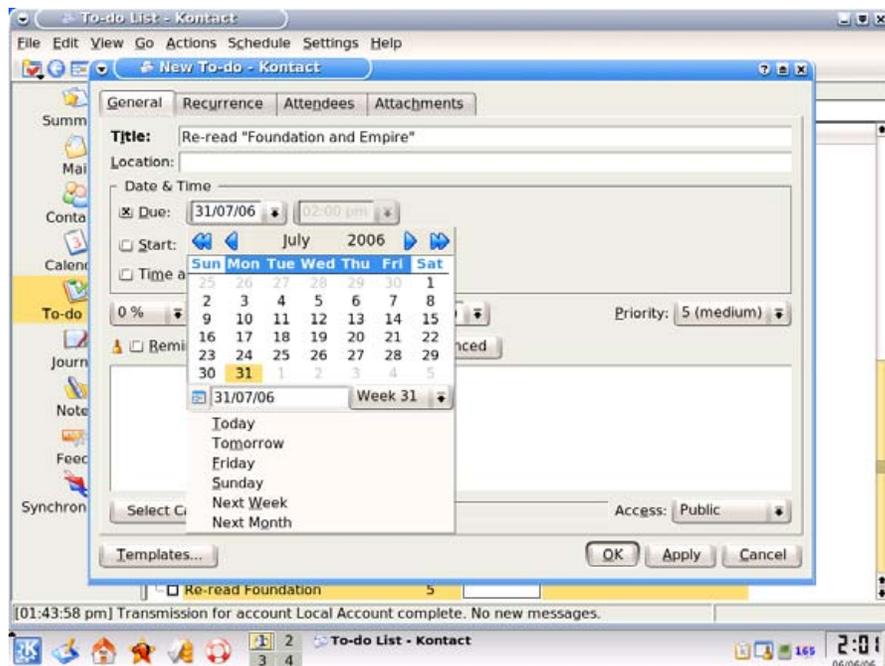


Figure 11. Creating a New To-Do Item

show up on your calendar for today as an all-day event. To get to Calendar, click Calendar on the left-hand side. Beyond that, it is easy to add other things, say a doctor's appointment or a staff meeting—things with a clear start and hopefully clear stop time. Click File→New Event, and enter the information. One neat feature that Calendar offers is the recurrence feature. Some events will repeat on an expected schedule—for example, a staff meeting that happens every Monday morning from 9:00 AM to 9:30 AM, except on the Labor Day holiday. Once you have the New Event screen up, click Recurrence, then click the Enable recurrence box, and then enter the details about how the event reoccurs. Other Calendar functions include Attendees, which lets you track people who are to attend an event, what their role is at the event and what if any action they are to do as a result of the event.

MANAGING CONTACTS WITH KONTACT

For your contact list, click Contacts on the left-hand side. Next, select File→New Contact, and then start entering information on the main screen for the person you want to keep track of. Besides the usual things like name, title, employer, address, phone number and e-mail address, Contacts also lets you keep track of a person's birthday, partner, anniversary, photo and geographic location—in longitude/latitude. All rather impressive!

KONTACT'S JOURNAL FEATURE

If you want to keep a diary of what you have accomplished, a Journal function lets you track day by day what you have done. Simply click Journal, click on the little calendar box for the date that interests you, then click Add Journal Entry and type in your notes.

TAKE NOTES WITH KONTACT

The small Notes function lets you create small files inside Kontakt for use with other programs.

CONCLUSION

The one weak area of Kontakt is the connection to handheld devices. I have had issues getting this set up, and once setup, I have, from time to time, lost data while using the connection. So, if you have an old Palm device, like a Palm III, and want to play with this feature, please do, but be aware that this is the only part of Kontakt that is not fully ready for prime time. The Kontakt developers have announced plans to replace KPilot with KitchenSync. However, KitchenSync is still under development, and it is not yet considered stable enough for general use.

So, in summary, KDE Kontakt is a great tool to help organize your life—be it keeping track of events, people and/or time. The only thing keeping me from rating this a fantastic program is the weakness with connecting to handheld devices. In all other areas, it is first rate! ■



Colin McGregor works for a Toronto-area charity, does writing plus consulting on the side and has served as President of the Toronto Free-Net. In volunteer work, he is secretary for the Greater Toronto Area Linux User Group meetings and is moderator for the Unix Unanimous user group.

IRC: What It Is and Why We Use It

Sooner or later, we all need to obtain support from an open-source project. Internet Relay Chat is the most direct way possible to obtain that support. In this article, Matija Suklje explains the IRC basics to get you started with Konversation.

MATIJA SUKLJE

For those who haven't encountered IRC (Internet Relay Chat) yet, IRC is a means of instant communication over the Internet. In that aspect, it is similar to instant messaging (IM) protocols/programs, such as MSN, AIM and ICQ. The major differences are that unlike most of the instant messaging programs, IRC primarily is used for communication in groups (called channels), and you have to choose a server on which you want to chat.

The advantage of such a concept is that groups can be formed according to interest or theme, which is something the FOSS (Free, Open-Source Software) community utilizes heavily. Almost every FOSS project has a channel of its own where users can ask for (and give) help, and discuss ideas and problems concerning that project.

But, of course, IRC is still very usable as a means of general chit-chatting and meeting interesting people.

CLIENTS, SERVERS, CHANNELS AND MORE

So, what do you need to start chatting over the world-wide IRC? First, you need a client. No problem there—there's a plethora of FOSS IRC clients available for GNU/Linux, ranging from console-based clients, such as BitchX and Irssi, to those with a graphic interface, such as Xchat, (Mozilla's) Chatzilla and Konversation. If

you ask me, I'm more of a Irssi and Konversation type of guy. Irssi is a nice console-based client that has features (especially when it comes to usability) that some others don't have, and Konversation has the usability and a clean look that you could split atoms on. So, I mainly concentrate on Konversation in this article, while still trying to teach you how to survive in pretty much any other IRC client out there using the standard IRC commands.

As already mentioned, there's a vast number of servers to which you can choose to connect. Some servers are dedicated for specific uses only (for example, irc.freenode.net for FOSS projects), and others are generally open for any topic whatsoever.

Another special characteristic of IRC is channels. In its essence, what defines a channel is its name, usually prefixed with a hash sign (for example, #gentoo) and its topic. As a small tip so you don't get lost, it is quite common to refer to a specific channel on a specific server like this: #gentoo@irc.freenode.net, which means the #gentoo channel on the irc.freenode.net server.

FIRST STEPS—GETTING SOMEWHERE

Because Konversation is quite popular and is most likely to ship with your distribution, I'm not going to teach you how to install it—simply use emerge

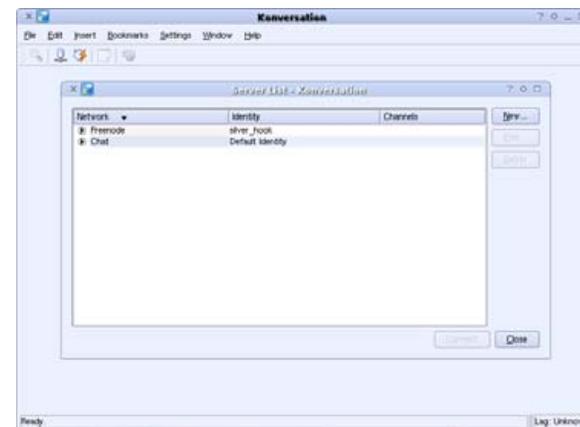


Figure 1. Konversation's Startup Screen

or apt-get install (or whatever you use) to install it. Once it's installed, you can start it by running konversation on the command line, or in KDE, from the K menu: Internet→IRC Chat (Konversation). You will see something like what is shown in Figure 1. To begin, you can use the default settings, and simply clicking Connect→Konversation sets up a connection to the Freenode server by default and automatically joins the #kde channel (on some distributions it might be some other channel—for example, #debian-kde). Also, it guesses the default identity from your user information. The nickname is set as your

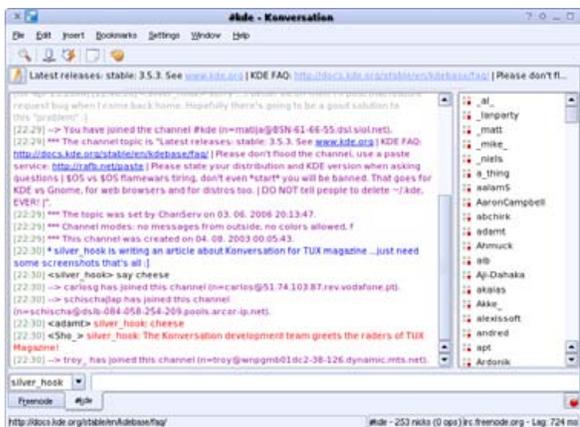


Figure 2. The Normal View, Showing the Channel Tabs, Chat Window and Users' List



Figure 3. Join a Channel

name, and the real name comes from your user account settings. When you finish connecting, you are presented with the screen

shown in Figure 2. From here on, you can start typing messages right away, and when you press Enter, your typed text is sent to the channel and is shown in the main area of the window.

But, surely there must be more to the interface. And, there is. On the right-hand side, there's a list of the users present on the channel, and if you double-click someone's nickname, it opens a new tab with a private chat (called query in IRC terms) with that person. This is rather useful when

you need to talk to someone person to person without others being bothered with the conversation. Right on top of the chat area and the user list is the topic of the channel—sometimes a lot of useful information is available in the topic (for example, behaviour rules and frequently asked questions). Below the two main areas is a pull-down menu where you can choose your nickname if you use an identity that has more than one nickname (more about identities later) and the text bar where you enter text. Remember not to write too much at the same time. Many channels consider big blocks of text as spam, and you can get kicked off or even banned from a channel.

Below that are the channel tabs. Each channel (even the server's notifications and queries) has one, so you easily can switch between them.

To join a new channel, let's say #konversation, you either can open up a dialog with File→Join Channel (shortcut: Ctrl-J) and enter the name of the channel in the pull-down menu as shown in Figure 3. Alternatively, you can type the

IRC command (for example, /join #konversation) in the text box of any channel. To leave a channel, you either can press Ctrl-W (in menu: Window→Close Tab) or press the close tab on the right-hand bottom part of the window.

GETTING MORE OUT OF THE EXPERIENCE

Now that you understand the survival basics, you're probably hungry for more. Here's a few IRC features and some Konversation gems you just have to know about.

Let's assume a typical situation: you're in the middle of a conversation with several channels and you have to leave for lunch. You wouldn't want to

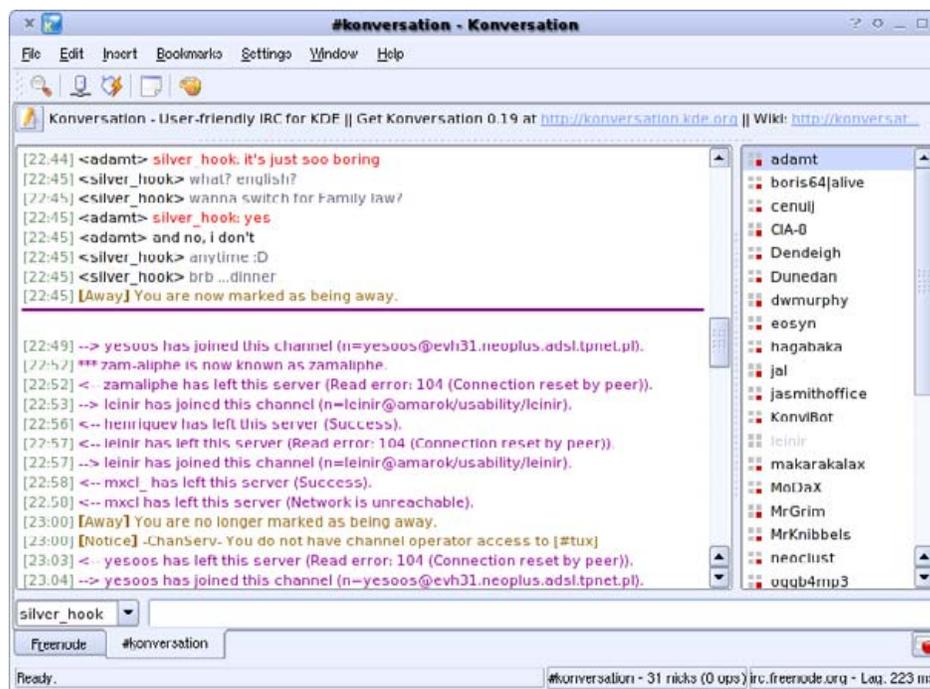


Figure 4. Going Away and Back Again

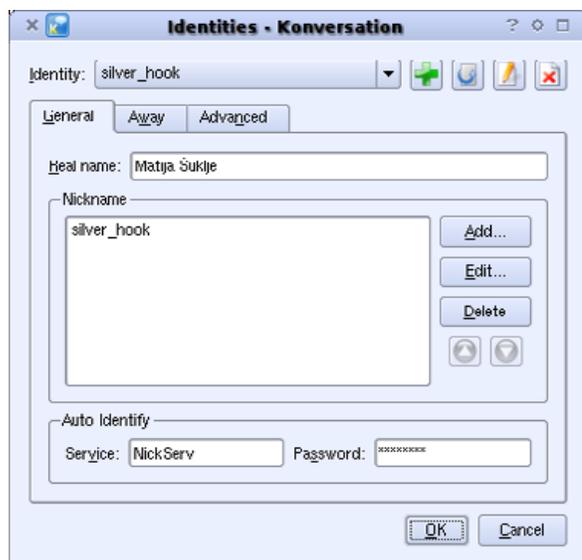


Figure 5. Configure more settings for your identity.

miss messages that are meant for you, and you probably want to let others know you're not there as well. No problem—simply mark yourself as away by going to File→Global Away or by clicking the global away button on the toolbar. When you return, do the same to “get back”, and you'll be presented with all the lines that people sent with your nickname in them. You can change the message that's being displayed when you enter your away status and leave it in the settings for your identity. In Konversation, every identity can have a different away and coming back message.

I've mentioned identities many times already, so I feel I should explain their significance. This is a Konversation feature, but it makes life easier if you talk on different servers (such as Freenode for FOSS and another one for random chatting) on which you use different nicknames or different set-

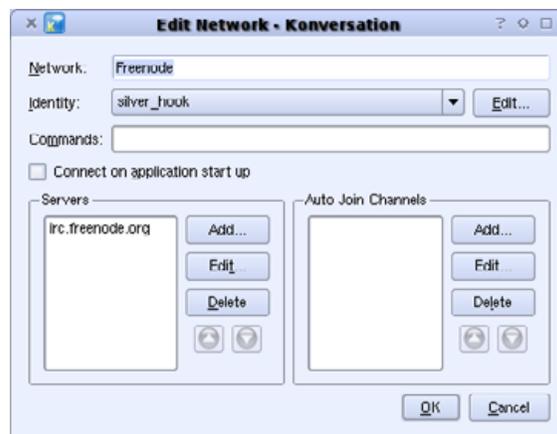


Figure 6. Adding servers and Auto-Join Channels to a Network and Changing the Identity

tings. You can change the settings in Konversation to support adding more nicknames in case one gets taken while you're off-line or changing your away messages and auto identify, which is quite useful on servers like Freenode (which has an option to register your nickname with a password to a service bot like NickServ in Freenode's case, so your nickname doesn't get taken). You can access all this identity magic from Settings→Identities (shortcut: press F8; see Figure 5).

Now, let's say you have a number of channels you want to join automatically, each time you connect to a specific server (or you want to disable auto-joining to #kde). You can do this by editing the settings of a network by clicking Edit on the selected network in the Server List window, which is the first window to show up when you start up, and it also is accessible by going to File→Server List (shortcut: F2). You're presented with a rather self-explanatory window, as shown in Figure 6. The channels in the auto-join list will be loaded in the



Figure 7. Configuration Window

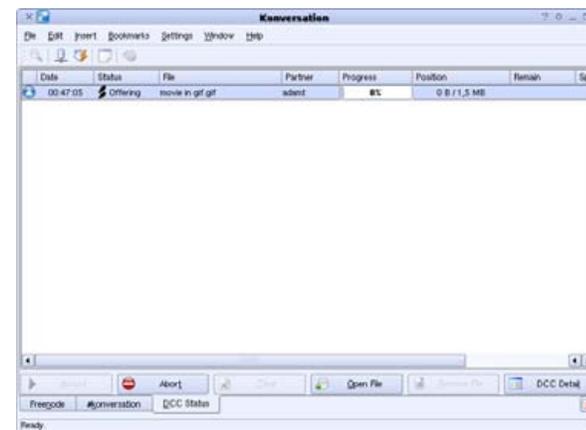


Figure 8. DCC Tab with One Outgoing File Transfer

order they are in—top entry will be joined first. This is even more important in the server list, because it starts to connect to the topmost server first, and then to the one next in line and so on.

There's also a lot of global settings that allow

EXAMPLES OF THE MOST COMMON IRC COMMANDS

- `/connect irc.freenode.net` — connects the client to the `irc.freenode.net` server.
- `/join #gnome` — joins the `#gnome` channel.
- `/part` — leaves the channel in which it was typed/`ran`.
- `/part< #gnome` — leaves the `#gnome` channel from wherever it was executed.
- `/query silver_hook` — starts a private conversation with `silver_hook`. If such a conversation is already running, it closes it.
- `/me does something funny` — in this case, the nickname is `silver_hook`, so this command displays `silver_hook does something funny`.
- `/dcc send screenie.png silver_hook` — sends/offers user `silver_hook` the file `screenie.png`.
- `/dcc accept screenie.png silver_hook` — accepts the offer and downloads the file `screenie.png` from user `silver_hook`.
- `/nick hook` — changes the nickname to `hook`.
- `/whois silver_hook` — displays more information on user `silver_hook`.
- `/help` — lists all the IRC commands available on the server.
- `/quit` — disconnects and quits the IRC client.

you to tweak the behavior of Konversation, available from Settings→Configure Konversation (Figure 7). These settings range from look and feel to advanced settings, such as setting your own command aliases and shortcuts. Among the more interesting preset command aliases is the `/media` command, which if typed, shows the information

about the song currently played on your favorite media player. If you're waiting for someone to bring up a certain topic, the highlight settings also are most welcome—you can add which word (or string) Konversation should look for and in which color it should highlight it.

Of course, sometimes you will want to

transfer files over IRC as well—show off screen shots or share configuration files, for example. This is done simply by right-clicking on the name of the person you want to send the file and selecting Send File. When you select the file from the dialog, a new tab opens where all the file transfers (incoming and outgoing) are shown. In IRC terms, this is called a DCC file transfer. DCC stands for Direct Client-to-Client. If you need to receive a file, Konversation opens a pop-up window asking if you want to accept or decline the transfer.

Note that if you want to send files and you are behind a router or firewall, you will have to set NAT/port-forwarding and match the ports with the ones used by Konversation for the DCC send. By default, Konversation (in version 0.19) uses the port range 1025–7000. If you don't want to have as many ports open, there's no reason to let Konversation try them, so you can shorten the range in Settings→Configure Konversation under the DCC tab. While configuring ports, you also can change (among other settings) the folder into which Konversation saves the files it receives over DCC.

CONCLUSION

As you can see, starting to use IRC isn't hard at all. And, when you get to know it a bit better, you can do all sorts of things with it. It's all even more simple with an easy-to-use client like Konversation. ■

Matija Suklje is a 21-year-old law student and member of Cyberpipe from Ljubljana, Slovenia who has been interested in Linux and F(L)OSS since his early high-school days when he first met Slackware. Currently, his favourite distribution is Gentoo. You can contact him via e-mail at matija.suklje@rutka.net or from his new home page (<http://matija.suklje.name>).

Linux Loft: Family Box with Edubuntu

Linux Loft's bold stand in delivering free and open-source software to children is very commendable; however, Edubuntu shouldn't try to be all things to all children.

KEVIN SHOCKEY

In one of the first packages that targets families, the Linux Loft has created a very welcome entry to the *TUX* review section. The computer, named the Linux Loft Family Box, is intended to orient school-age children to free and open-source software. This durable desktop is pre-installed with Edubuntu, a Linux distribution whose motto is "Linux for young human beings."

In this review, we take a look at the entire package, but we pay most of our attention to Edubuntu and the customizations Linux Loft has done to make the package more complete and satisfying for families.

INSTALLATION

Because the Family Box comes pre-installed with Edubuntu, there isn't much left to set up. Simply connect the keyboard, mouse, power, speakers and Ethernet cables in their respective sockets, and turn on the box. The system should boot up properly, and then you'll be prompted with the Edubuntu login screen. Because the software comes pre-installed, I'd say the installation was good.

EASE OF USE

As the name might suggest, the Edubuntu distribution is based on the Ubuntu distribution. As such, it comes with the GNOME desktop. You will quickly notice that the look of the desktop is different. According to the Edubuntu home page, it provides three different theme setups: Young, for

younger users; Plain, for a clean desktop setup; and Default, which is a general-purpose theme setup. On startup, the Linux Loft Family Box displayed the Young theme. With bright colors and cartoon-like icons, the theme is inviting and appealing—according to my kids.



Figure 1. Default Young Theme for Edubuntu and the Family Box

A few simplifications made to the default menu system make Edubuntu easier to use but a little confusing for experienced GNOME desktop users. Edubuntu targets a wide range of children (ages 6–18), so there are a wide range of games and educational tools. Although older kids will find the distribution easy to use, younger children

may require some guidance and support from parents. Although Linux desktop software is relatively easy to use, it is still based on a user interaction standard that is not intuitive for young children—that is, menus, choosing options to start applications and windows.

Of course, my perception could be spoiled. Earlier this year at the Boston LinuxWorld, I attended a "One Laptop Per Child Birds of a Feather" session, where the presenters unveiled a mock-up prototype of the desktop for the new computers. These computers, obviously designed with children in mind, will have a tabbed interface, which will cycle through tabs so that you can never lose a window. This style of interface seems more suitable for younger children.

I think Edubuntu suffers from trying to be all things for all kids. For children aged 6–10, the system still requires extensive adult supervision; for children aged 10–14, less so; and for children older than 14, I'm not even sure Edubuntu is appropriate. I don't see anything that would attract their attention. For ease of use, I give the Family Box with Edubuntu a poor rating for children aged 6–10, and an average ease of use rating for children aged 10–14.

MAINTENANCE

As Edubuntu is based on the Debian distribution, it features the standard apt and Synaptic package manager for updates. After unpacking and

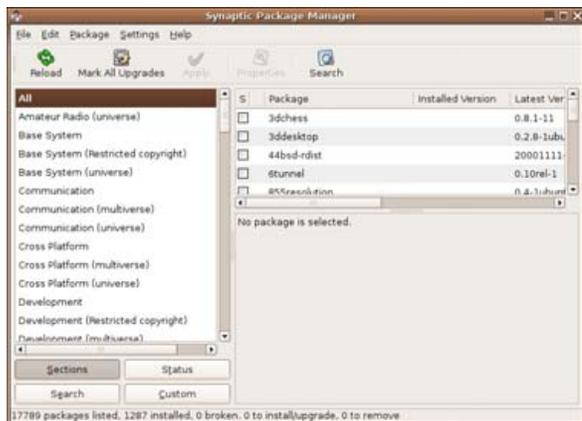


Figure 2. Synaptic Package Manager



Figure 3. Gnome App Installer

installing the Family Box, once the system was powered on and we were logged in, Synaptic validated the installed packages and immediately informed me, via a flashing icon in the task bar in the upper right-hand corner, that updates were available. Installing the updates was only a couple clicks away.

As mentioned before, Edubuntu uses the GNOME desktop. Therefore, the system also includes the Gnome App Installer. This application is an easy-to-use interface that simply displays the most common applications for each application category. Using large cartoon-like icons, the App Installer simplifies the process of finding new applications. To install a new application, browse the directory tree of applications, click the check box of any application without a check mark, and then click Apply. The App Installer confirms your selection with a pop-up dialog window, and then you need to click on the Apply button in the dialog. The system then downloads the application from the on-line repository and completes the installation. Before finalizing the installation, the system displays



Figure 4. Initiate GPeriodic Application Installation

the results of setting up the application. Click Close, and the application installation completes.

Right before testing the Family Box, the Ubuntu Project released the Dapper Drake, Ubuntu 6.06 LTS version. While running the initial update, we received a message that this process would not complete the upgrade to the new version, and that to complete the upgrade, we needed to visit

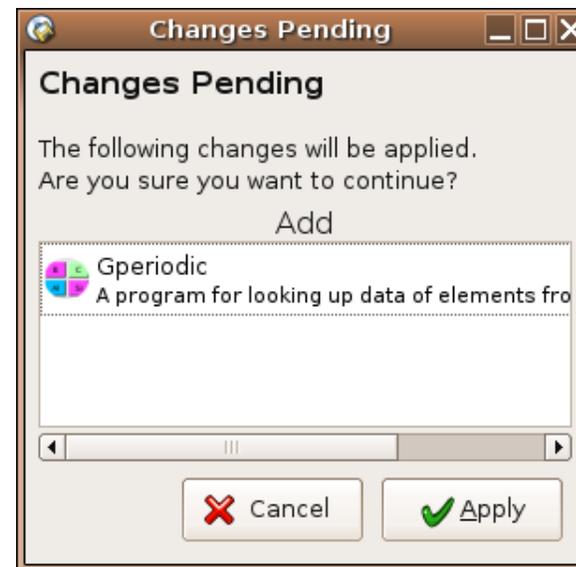


Figure 5. Confirm Package Installation Dialog

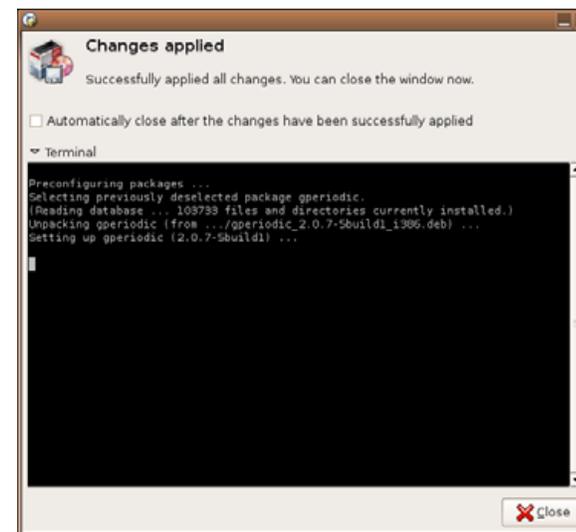


Figure 6. Finished Setting Up GPeriodic Application



Figure 7. GPeriodic Application Installation Complete

<https://wiki.ubuntu.com/DapperUpgrades>. We did not complete this upgrade during this review.

Due to the combined availability of apt, Synaptic and the App Installer, we give the Family Box/Edubuntu combination an excellent rating.

DOCUMENTATION

Included in the Linux Loft Family Box package is an Edubuntu Edition of Linux Loft's Getting Started Guide. This guide is intended for somewhat experienced computer users so they can appropriately assist young children using Linux. The guide covers some initial steps for getting started. The guide is not meant as a replacement for the help included with Edubuntu (available from clicking on the question mark) or on-line Ubuntu resources. Linux Loft's intention for this

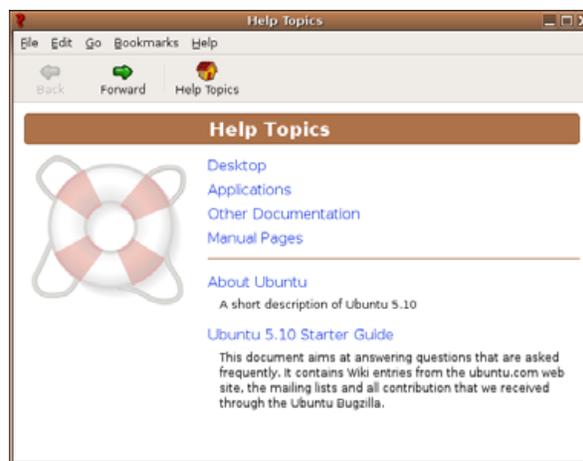


Figure 8. Edubuntu help is included with standard installation.

guide is to give parents, who may have never used Linux, a tool to ease their children's challenge of learning Linux.

The help included with Edubuntu is available via the Yelp documentation browser and viewer for the GNOME desktop. There are two sources of Ubuntu help, "About Ubuntu" and "The Ubuntu Starter Guide".

Between the Getting Started guide and the help included with Ubuntu, I give the Family Box a good rating for documentation. One recommendation I would make for Linux Loft is to include screenshots in the guide. As you can see from reading *TUX*, we believe that screenshots significantly increase comprehension.

CAPABILITY

Although Edubuntu is labeled as "Linux for young human beings", and the Family box is intended to orient school-age children to free and open-source

software, the extension of this system to be all things for anyone in the family is a disservice to children. Now with some tweaking for each user, one might be able to configure each to be more age- and task-appropriate; however, doing this was not covered in the Getting Started Guide. On the other hand, in a world filled with music, cable TV, video games and more, I'm not sure what is the best way to orient young people to free and open-source software, but this is a great first step. Creating a computer that contains nothing but free and open-source software is to be commended.

So, let's examine Edubuntu as Linux for young human beings. Quoting from the Edubuntu home page, "it aims to bring the spirit of Ubuntu to schools, through its customized school environment. The current version of Edubuntu is designed for classroom use, and future versions of Edubuntu will expand to other educational usage, such as university use." As stated earlier, this fits with my perception. Edubuntu would work well in a classroom setting. With teacher supervision, students would respond well to Edubuntu. Moving beyond the 6–14 year range, however, Edubuntu was nothing special. As claimed though, as Edubuntu is fundamentally Ubuntu, it is capable of everything available from a standard Ubuntu distribution.

My daughter is 11, and she was pretty happy when she saw the long list of games available—and she didn't even see the longer list available within the Debian application repositories. So, for children, Edubuntu is very capable. Edubuntu comes with 26 education games. The majority of the games are for languages, math and science. Although a good start, I hope that the Edubuntu Project can add a lot more programs and games to this category.

In terms of rating the Family Box/Edubuntu

combination for capability, I'm split. For children, I think it's between average and good. With the addition of more education-focused applications, it could be good. However, as a tool for the family, Edubuntu is no more capable than any other distribution, so I have to give it an average rating.

SUPPORT

For this review, we did not have the opportunity or need to assess support for the Family Box. According to the Web site, Linux Loft offers a 30-day warranty on the purchase, completed by returning the unit to the manufacturer. Linux Loft also offers an optional three-year, next-day, on-site warranty, which is available at order time. The extended warranty costs \$149 US.

Software support for Edubuntu is available only

from the Edubuntu/Ubuntu community. Options available include the wiki (<http://edubuntu.org/community>), the IRC channel ([#edubuntu](irc://irc.freenode.net)) and mailing lists. Other Linux community support sources are also available.

In general, the Family Box relies too much on the community for support of the software. The hardware support is average, but the support for Edubuntu from Linux Loft needs to improve. I give its software support a poor rating.

PRICE

Let's be clear when we examine the pricing for the Family Box. According to the Edubuntu manifesto, Edubuntu will always be free of charge. Therefore, all costs associated with the offering are directly related to the hardware and the customization necessary to install Edubuntu and tweak the configuration.

When comparing the hardware to similarly priced systems, the first thing I found was that there aren't many non-refurbished desktops around at that price range. The few that I did find also come pre-installed with Linux. So in comparison to non-refurbished systems, the Family Box is excellent. However, in comparison to other pre-installed Linux machines, the price is poor. We'll split the difference and give the Linux Loft Family Box a slightly above average rating for price.

CONCLUSION

Offering this PC for sale with the Edubuntu Linux distribution is a bold and creative move by the Linux Loft. It shows great leadership and belief in free and open-source software. I predict that when the One Laptop Per Child makes its interface available, Edubuntu will quickly move to embrace the new interface and will significantly

improve the usability and capability of the Edubuntu distribution. Until then, through its leadership and prepackaged offer, Linux Loft pushes the Linux desktop closer to reality.

With improved usability for younger children, an even wider variety of education games and improved support for Edubuntu, Linux Loft could have an extremely valuable offer for families everywhere. ■



Kevin Shockey is Editor in Chief of TUX.

SUMMARY

INSTALLATION: good

EASE OF USE: depends (poor for ages 6–10, average for ages 10–14)

MAINTENANCE: excellent

DOCUMENTATION: good

CAPABILITY: average

SUPPORT: poor

PRICE: average

OVERALL RATING: average

LINUX LOFT FAMILY BOX

URL: http://www.linuxloft.com/product_info.php?cPath=22&products_id=42

PRICE: \$443 US

DISTRIBUTION: Edubuntu (Warty Warthog)

HARDWARE PROFILE:

- Celeron 2.6GHz
- Slimline case
- 256MB of memory
- 80GB+ hard drive
- 104 keyboard
- Mouse
- DVD-combo drive (reads DVDs, reads and writes CDs and CDRWs)
- Video built-in
- Sound built-in
- Network interface