

Desktop Linux by SuSE, Xandros and Lycoris

Window Dressing

There is no such thing as the ideal desktop Linux – at least not yet. All three of our candidates have their own special strengths and weaknesses. Some of them have no qualms about copying the look and feel of Windows. Read on and find out if a desktop Linux can satisfy your needs.

BY RÜDIGER BERLICH

Following the success of Linux in the server business, the operating system is now set for another attempt at conquering the desktop, at least that is what newly released desktop distributions and accompanying conferences would have you believe. In February of this year the Who's Who of the Linux world met in San Diego for what was to be the first Desktop Linux Summit. The event, which was instigated by California based Lindows, goes

to show how much momentum the desktop Linux movement has gained by now.

Having said that Lindows in particular should be aware of the dangers that accompany the introduction of Desktop Linux products. In fact, the FAQ for the Lindows OS product contains the following note: "Lindows.com membership is designed to be exclusive to the individual that signs up. As a member, we ask that you not distribute copies of the LindowsOS to other individuals and that you abide by the end user license agreement that comes with our software." [1]

The products we will be introducing in this article, Xandros, SuSE Office Desktop, and Lycoris offer some commercial add-ons, as is the case for most distributions geared for office use. When commercial products become central components of a distribution, free copying of the distribution becomes an issue. And this clearly contradicts the Linux philosophy.

Not only a free for all

Of course, a customer may profit from add-ons that are not central to the system itself, however, things do become difficult when this separation is no longer feasible. This is the case with Xandros, although the manufacturer itself does not clearly point this out. The

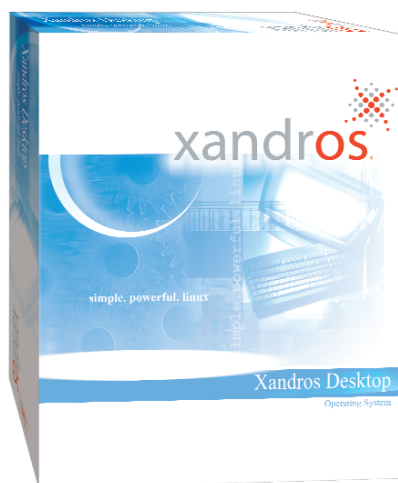
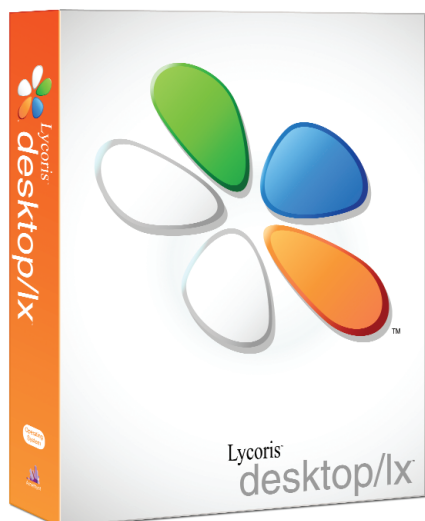
XFM file manager, one of the distribution central components, is not available under a free license [2]. Xandros is available as a standard version without third party programs for a mere US \$40; when accompanied by additional Crossover Office tools and an NTFS Resizer it shoots up to about US \$100.

The SuSE Linux Office Desktop (for about EUR 130) also contains an NTFS Resizer and Crossover Office. If you do not need that, you might prefer to look into the cheaper and more traditional distributions such as SuSE 8.1 Professional. This could prove to be the better alternative, particularly with respect to copying the product freely within an enterprise.

Lycoris, formerly Redmond Linux, is more clearly Open Source oriented, and does not include any commercial applications with the basic package, although it has emulated the look and feel of Windows XP. The product costs approx. US \$30.

Reboot and Resize

SuSE uses separate software for resizing NTFS partitions called Acronis OS Selector. We risked using Acronis to resize an NTFS partition on Windows XP in our lab. The Acronis OS Selector CD is bootable. After launching the system, the boot selector prompts you for a 25-digit



serial number. After entering the number the program automatically downsizes an existing NTFS partition and creates a 15 MB FAT partition. After rebooting, you are once again prompted to enter the serial number.

The program then goes on to install itself in the FAT partition it created. Following this, it is time to reboot again – from the hard disk this time. Now you can either point and click, or type the required size, to resize any common file system type. Finally, after rebooting once more, you get to install SuSE Linux (or an operating system of your choice) on the partition you have freed up.

Xandros control

Xandros provides a far more relaxed method of downsizing your NTFS partition. Although the Canadians still use commercial software, it is far more tightly integrated with the installation procedure than in SuSE's case, and thus completely transparent to the user.

After booting from the distribution CD, you simply choose "Custom Installation", and can then opt to downsize any Windows partitions recognized by the system. Xandros does not tell you if these are FAT or NTFS partitions, but then again, most people will not be interested in that anyway.

After displaying a warning that the resizing procedure can take several hours on highly fragmented file systems, Xandros took about three minutes to downsize a four gigabyte partition, where we had just installed Windows XP, to two gigabytes.

Xandros uses the scripted version of Powerquest's Partition Magic to perform resizing operations, however, the tool is only available during the installation procedure, which means users will be able to perform NTFS partitioning operations at a later stage. Having said that, time is running out for commercial parti-

tioning tools. The free Linux NTFS Project [3] also includes an NTFS partitioning tool, and Mandrake 9.1 will be the first distribution to use it.

The Xandros installation tool is extremely friendly to Windows users, and even quotes the drive letters for existing Windows partitions, such as "C:\", for example. Both the ReiserFS and Ext 2 file systems are available, although Ext 3 is missing.

Windowing with Lycoris

Lycoris, which was named after a kind of amaryllis-type flower, is the successor of what was formerly known as Redmond Linux. As such, its look and feel is extremely similar to its role model – right down to the Teletubbies style background. Lycoris uses the Lizard installer developed by Caldera — so the installer lives on despite Caldera or SCO having left the Linux development scene.

The neat desktop follows the principle of simplicity by design, just like Xandros. Users opting for this product will not have a choice of applications, however, the applications that are provided will work without any hitches at first attempt.

The "My Linux System", "Network Browser", "Personal Files" and "Recycle Bin" icons again indicate an intentional proximity to Microsoft Windows. The "Network Browser" provides a convenient way of browsing Windows shares. Although Lycoris looks like Windows, it does not actually provide a Crossover Office application which would allow it to run MS Office.

Of course, there are some office applications, but in contrast to most competitive products Lycoris offers them as separate packages. For example, the so-called ProductivityPak contains the Lycoris Office Suite 1.0. But taking a look behind, revealed only Open Office and a synchronization tool for PDAs. This add-on package is available at a 'mere' 50 dollars. Localized versions of Lycoris are not available at present.

Communications

We used a SuSE Linux Office Server, a recently launched product aimed at integrating Windows and Linux desktops in a shared network, to simulate an networked office environment. The Office Server can be used both as a firewall and as a file and print server. It also provides

Table 1: Desktop Linux (selection)

Product	SuSE Linux Office Desktop	Xandros Desktop Deluxe	Lycoris Desktop/LX
Version	8.1/Office Desktop	1.0	Amethyst
Kernel	2.4.19	2.4.19	2.4.18
Glibc	2.2.5	2.2.5	2.2.5
C/C++ Compiler	no	2.95.4	no
XFree86	4.2.0	4.2.0	4.2.1
Office	Star Office 6.0, KOffice 1.2	Open Office 1.0.1	KOffice 1.1.1
Gimp	1.2.3	1.2.3	1.2.2
Installer	YaST 2	No Name/Installation Wizard	Caldera Lizard
BOOT MANAGER	Grub	Lilo	Grub
Standard Desktop	KDE 3.0.4	KDE 2.2.2 with extensions by Xandros	KDE 2.2.2b
Basis system	SuSE Linux 8.1	Debian Woody	Caldera Open Linux
Commercial Add-ons	Crossover Office 1.3.1, Crossover Plugins, Star Office 6.0, Acronis Boot Selector	Crossover Office 1.3.0, Crossover Plugins	–
Add-on Products	SuSE Linux Office Server, SuSE Open Exchange Server	Xandros Server (planned)	Productivity Pack (Open Office), Game Pack, Desktop/LX Interconnect
Manuals	424 pages, Installation, Introduction and System Management	User Guide, 220 pages	Installation & Quickstart Guide, 30 pages
Price	approx. EUR 130	approx. US \$100	approx. US \$30
Web site	www.suse.co.uk/private/products/suse_linux/office_desktop/index.html	www.xandros.com/readmore.html	www.lycoris.com/products/desktoplx/

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an Internet gateway and the DHCP server for the internal network. Installation of this is greatly simplified by a mainly automatic setup routine. SuSE stipulates a maximum of 25 clients; presumably this limit is based on the expected load that a typical machine will generate.

Our test showed that Office Server lives up to the promises SuSE's marketing department made. Our lab environment comprised a small test network where the server had to connect to an external network that also contained printers. We connected both a Windows ME machine and a Linux client to the server.

Thanks to Samba and NFS, shared folders were available to all users with user accounts being managed centrally via NIS. As far as the Windows machine was concerned the server was a Primary Domain Controller. In fact it should be no problem for experienced users to work through the manual step-by-step and provide this functionality.

Plug & Play Setup

After performing the configuration steps, the Windows machine recognized the server just like the guide said and was capable of accessing the user accounts configured on the server. It was just as easy for the Linux client. We had no trouble whatsoever setting up the printer in the external network (as a Samba printer). The Windows and Linux clients were able to talk to each other and use the shares or the user's home partitions to exchange data.

A perfect system, or so you might think. Unfortunately, there are some niggles. A mail server is missing from the list of server functionality. And this would prevent inexperienced customers using the product as a plug and play server solution, assuming they require centralized mail management. Of course, Linux clients could always mount "/var/spool/mail" from the server, however, this is merely a workaround.

SuSE also offers the Open Exchange Server product that provides both an e-mail server and a groupware solution. But with prices in excess of 400 EUR you can hardly assume that this product is targeted at the same group as the Office Server (SLOS) with an asking price of

only 300 EUR. According to SuSE a successor for SLOS is in the pipeline. In addition to the basic package work is in progress on an extended package with fax and email server functionality.

SuSE continues to advertise the SuSE Linux Office Server (SLOS) and SuSE Linux Office Desktop as: "Office Server and Office Desktop — the perfect Linux Duet." This doesn't mean to say that the duo didn't work together well. But this also applies to most traditional Linux distributions and particularly to SuSE's own Professional distribution.

Office Server off the boil

One would tend to expect far more integration from an Office Server. In fact, Linux clients could download their entire configuration from the server using LDAP or DHCP. Administrators would then simply have to install the system from CD, and sit back and enjoy the automatic configuration. This would additionally resolve issues that occur when the "FROM" header is not set correctly on local clients. It might be a good idea to think about adding install server functionality to SLOS in future.

There are so many ideas and Linux provides the means to bring them to fruition. It is worth mentioning that SLOS is based on a fairly old (but definitely stable) version of SuSE Linux. The "/etc/SuSE" release file indicates that

SLOS is the SuSE Linux Office Server, Version 7.2. And this would explain the fact that the partitions created automatically were mounted as Ext-2 filesystems in "/etc/fstab". One of the four journaling file systems that SuSE now supports would have been preferable for a file server.

Xandros Astray

Not only do SuSE products feel at home on the Office Server network, Xandros co-operated by talking to the Samba based network printer immediately, just like the SuSE desktop. Configuring the printer merely involved selecting an entry in an extended Xandros file manager list — this is similar to accessing network shares. It is hard to imagine a more simple approach.

If you opt for Xandros you should be aware of the fact that the KDE environment is not yet been upgraded to KDE 3.x; this is probably due to the high-level of integration of the Xandros file manager, and the manufacturer's limited resources mean that it may take a while to complete development in this area. New users will probably not be too perturbed by this restriction. The file manager has a Windows look and feel that even includes flying page icons for file copying operations. Windows shares and printers, but also NFS shares are integrated automatically.

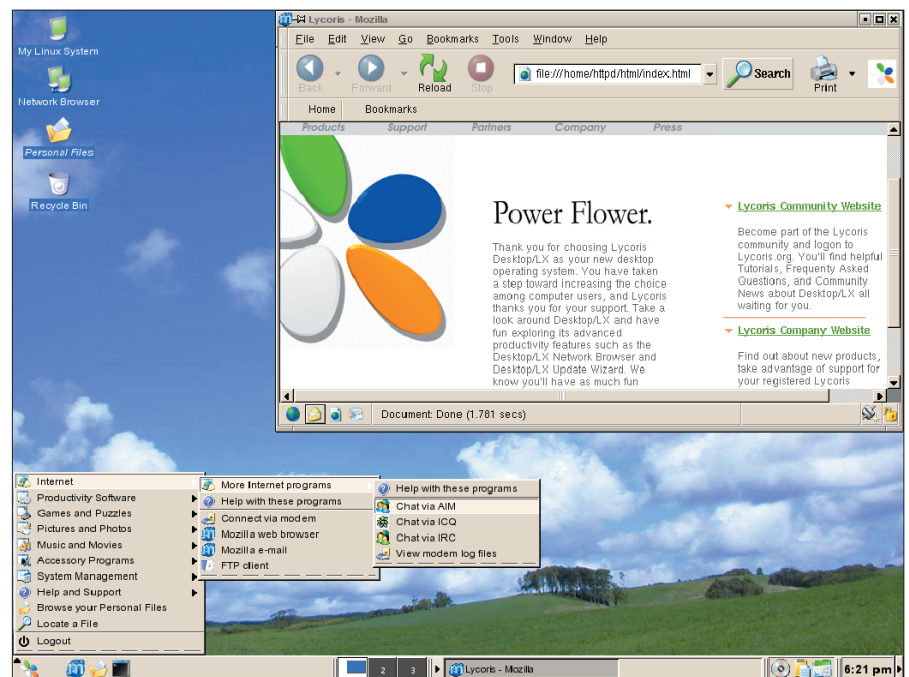


Figure 1: Lycoris, the Redmond Linux successor, demonstrating perfect XP look and feel

Network printers can cause occasional issues – in our case the printer only worked if we used its IP address instead of its name, although name resolution was working perfectly on the system. In contrast to this, there were no problems whatsoever with USB devices: a memory stick was displayed in the file manager immediately after we inserted it.

Request List for Distributors

In the first part of our test we already mentioned that distributors are having a hard time of adding new bells and whistles to their desktops which already boast a large range of features. Of course, it is easy for back seat drivers like the

author to suggest improvements – after all we will not need to implement them. But still one of two suggestions should not go amiss.

The innumerable boot messages displayed on the SuSE Linux Office Desktop got on our nerves. It might make more sense to follow Xandros example of hiding messages and only displaying them if the problem occurs. The boot procedure took too long for all the products we tested.

Although it is understandable that the manufacturers do not want to drop the typical and standardized Linux boot process, is there really anything wrong with writing boot scripts in Perl instead of using Bash shell scripts?

Compiled scripts running as functions of a main program could speed up the boot process considerably. At present, all the boot scripts start either with “#!/bin/sh” or “#!/bin/bash” and this means launching an interpreter for each and every script. Additionally, to speed the boot process up further, configura-

tion options that can be run simultaneously could be placed in their own threads.

A remote control facility would be a good idea for admins wanting to move they users from Windows to Linux. VNC would make it easier for the enlightened members of workgroup to help their colleagues remotely.

In contrast to Xandros, SuSE does not supply developer tools with the Office Desktop product. This immediately becomes an issue if the administrator needs to compile a new kernel on a client that has exotic hardware.

Although it is sensible that newbies should be refused access to a compiler, it is something the administrator can not do without. And it surely cannot be wrong to have some additional software included on a CD or DVD to aid this administration task.

The only argument against this philosophy would be that new users should not be overawed by too many programs and features, but this could be achieved by providing a simple and uncluttered

INFO

- [1] Lindows License: http://help.lindows.com/cgi-bin/visitors.cfg/php/enduser/std_alp.php
- [2] Xandros License: http://www.xandros.com/Xandros_EULA.html
- [3] NTFS-Linux-Project: <http://linux-ntfs.sourceforge.net/>

Corel Linux: Rise, Fall and Resurrection

When Corel announced the release of a Linux desktop on March 2 1999 this could have been the beginning of the end for commercial Linux distributors. The established manufacturer of office applications had everything it needed to make a success of its own Linux version: a closely meshed, global dealer network, with marketing machinery in place, and established standard applications such as WordPerfect or Corel Draw. Competitors had nothing similar to offer. Additionally, Linux distributors like Red Hat or SuSE had grown with the market, whereas Corel was already a large company when the Linux booms set in.

Perfect Preconditions, but No Success

Corel's product was based on Debian, and strategic partnership already been established with the KDE team. Corel was thus in the position to leverage a large volunteer developer community and concentrate on perfecting an installer suitable for desktop Linux and extending the KDE desktop. The ensuing advertising campaign was something new to the world of Linux. These developments climaxed in the announcement of a “Linux Powerhouse” in cooperation with Borland at the beginning

of 2000 – in this would have meant a product with top-notch compilers and database systems for Linux.

Everybody would have expected a success story equaled to none. But it didn't turn out that way. The merger broke down only three months later in May 2000. Development work on Corel Linux continued for about 14 months despite this, but Corel was unable to conquer the market share it had hoped for, at least in Europe.

This also coincides with Microsoft purchasing Corel shares worth 135 million dollars. Now, we are not suggesting any kind of conspiracy in this – after all it is not uncommon for large corporations to hold shares in their competitors.

Corel Lives On as Xandros

On August 29 2001 the Linux division was taken over by Xandros, a recently founded company, and Canadian like Corel. It is difficult to obtain figures on the size of this com-

pany, or the number of former Corel Linux staff employed by Xandros. However, it is safe to assume that Xandros is not a small business, and the fact that the new release, now known as Xandros Desktop, took until the end of 2002 would tend to confirm this.

Xandros was supported by venture capital from a New York investment company called Linux Global Partners, whose portfolio comprises well-known names such as Ximian, Codeweavers, and Metro Link.

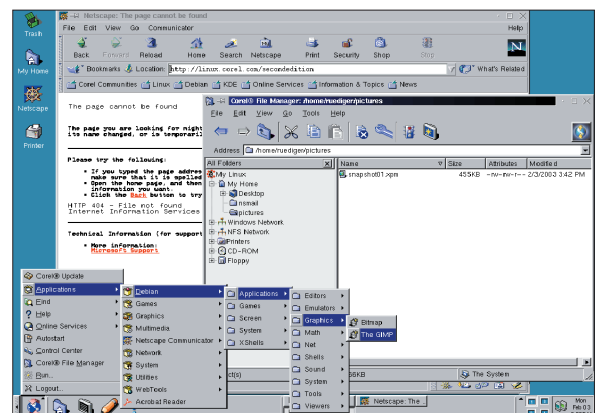


Figure 2: Xandros is similar to its predecessor, Corel Linux, in many respects. In the background: an attempt to contact Corel's Linux web site led to a discreet notes to the effect that technical support is provided by Microsoft

desktop. In fact it might even be possible to do an about turn and offer special desktop functionality as a commercial add-on for an existing product – in the form of a YaST or Lizard plug-in, for example.

Conclusion

Our initial assessment proved to be correct: the SuSE Office Desktop has got its nose ahead of Xandros, due both to superior localization, and to a recent and numerous commercial add-ons. A localized version of Xandros would keep SuSE on its toes – the distribution is quite clear cut and has numerous innovative features.

Of course, nobody really needs a desktop distribution. SuSE Linux Professional would do the job just as well in many cases. A desktop solution alone is not the answer. To make Linux available at the desktop you need servers working in the back-office to ensure seamless integration of office computers with the minimum of installation effort.

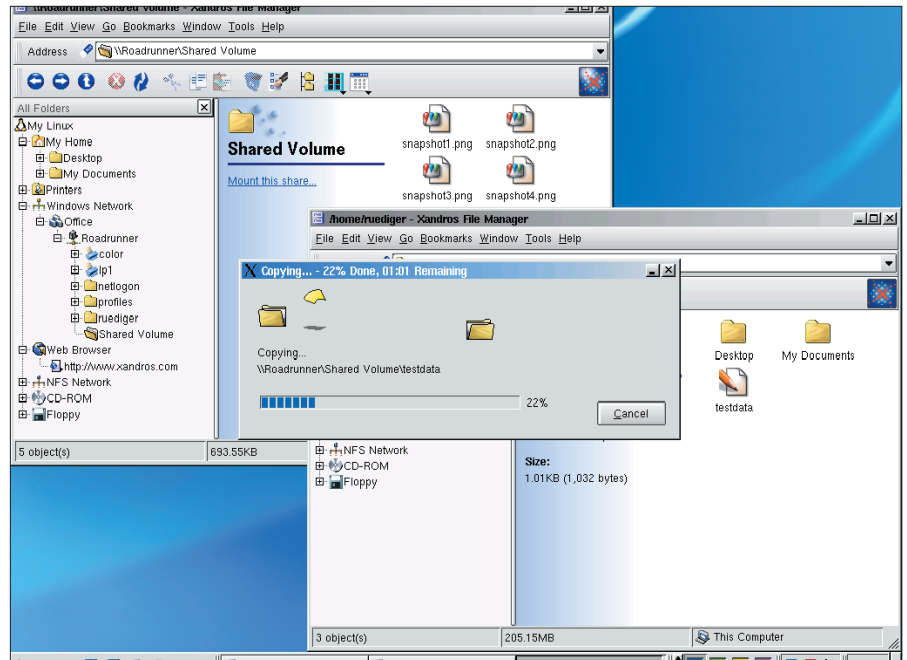


Figure 3: Windows and NFS shares on the network are no problem for the Xandros file manager

Adding proprietary code is a big temptation for manufacturers of desktop distributions. Although a degree of commer-

cialization is useful, and has furthered the cause of Linux in the past, the dangers of this approach cannot be denied. ■