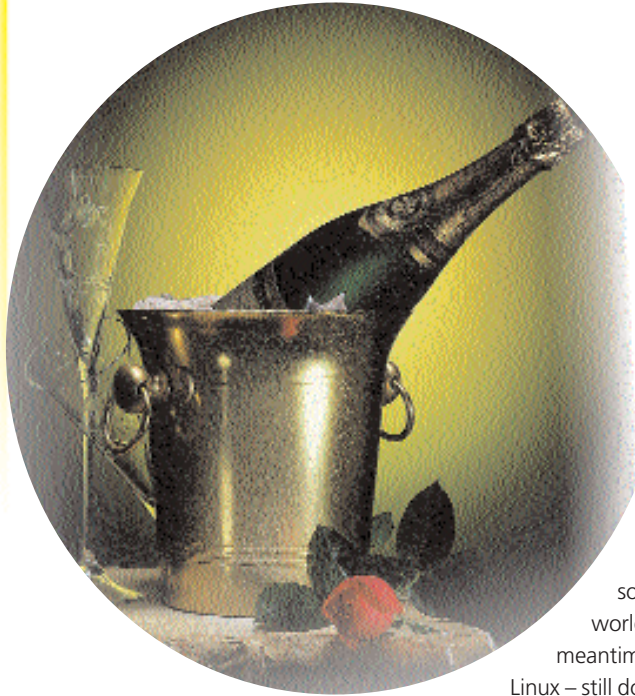


# The year 2000 through the eyes of Linux

# THE MORNING AFTER THE PARTY

ULRICH WOLF



**The year just passed was as eventful as any in Linux's history. Here we take a look at the business movers and shakers involved with the free operating system.**

By the end of 1999 there had been a rapid succession of news stories to bring a smile to the face. Young companies who felt they had a duty to free software appeared to be on track for a victory parade without equal. The more established ones were rushing so as not to miss the boat. The world was in upheaval. In the meantime it was "Business as usual" for Linux – still doing okay but with just a few of the revellers suffering the morning after the party.

Let's begin with the good news. Free software in general and GNU/Linux in particular has definitely found its way into the mainstream of the computer business. As a server-operating system at least, Linux is fully accepted by the big boys in the sector such as Hewlett Packard who, in August, declared the free operating system a strategic platform. This ranks it alongside HP-Unix and Windows 2000. Following this there was an interesting reaction from Eric S. Raymond who challenged the HP-CEO Carla Fiorina in an open letter to make her loyalty to free software clearer and, for example, to give away the code for HP Unix. The letter ended with the words: "Show us the code, Ms. Fiorina. That's where the real co-operation starts." The letter and Fiorina's reply can be found at [1] and [2] respectively. The latter contains numerous references to Linux and Open Source activities at HP but we do not have space here to mention them individually.

## Big fish break the nets

Compaq is continuing the strategy it began last year to get Linux on the Alpha platform. This is bearing fruit in the Sandia research laboratory in New Mexico where a cluster of Linux-run Alpha servers is

being created, currently working with some 1300 nodes. This cluster, called Antarctica, is intended to become number 20 in the top twenty of the world's fastest computers [3]. On Intel-based servers, too, Compaq is embracing Linux – you'll find it among the actively-supported operating systems in the Proliant range. The company is mainly building its strength in this area with the introduction of enterprise features such as high availability or hardware monitoring. An overview of Compaq's Linux activities can be found at [4].

Most of the positive Linux headlines in 2000 were generated by IBM. The investment of 200 million dollars in Europe alone, announced by IBM in July, was made it into even the daily newspapers. However, the fact that IBM is also investing the same amount in East Asia for Linux was overlooked. Nevertheless IBM currently appears to be the only group which has a company-wide open source strategy complete with more or less clearly defined interfaces to the community.

## Symbiosis between great and small

For the young start-ups in the open-source domain the commitment of the heavyweights was a double-edged sword. On the one hand, there might be something like a symbiotic relationship between the developers of free software and companies such as Hewlett Packard or IBM. The further development of the operating systems does devour quite a bit in terms of resources, which can scarcely be recouped with licence sales alone. With Linux as a cross-platform Unix-type operating system on the other hand this expense can be saved in the first place, and secondly can make a considerable contribution to the consolidation of the company's own server lines, as shown, among others, by the rebranding at IBM. Everything there, from RS/6000 via AS/400 to the S/390 mainframes, is now trading under the generic term 'e-server'. And on all these platforms,

Linux porting is largely completed. This means the opportunity is opening to dispense with the development and upkeep of a company's own operating systems altogether in the long term and nevertheless not have to fall into a disastrous dependency on an individual software company.

Conversely, Linux is profiting from the enterprise features which the hardware manufacturers are having to bring into development in their own interest if their strategy is to succeed. The image of Linux is also being boosted by its association with large companies. A win-win-situation, then?

## Do you hear the people sing?

The evidence that this is not quite so true is becoming more evident. At the moment it does seem that neither Microsoft or Sun will be among the losers in this development, but that the revolution is beginning to claim its own children.

The "victims" appear in the first instance to include the young start-ups who build their business plan solely or primarily on service – firms such as Linuxcare in the USA or ID-Pro in Germany, to name two prominent examples. Linuxcare had in the summer of last year (and primarily on the grounds of personnel problems) cancelled its IPO. It is now certainly glad it did! ID-Pro, with its massive liquidity problems, is now facing either bankruptcy or a not-so-friendly take-over... or at least that's what the rumours say. A whole range of factors play a role in the stories of such companies, which start with an "exulting to the skies" phase and end-up usually in the "worried to death" stage. Both examples are also hard to compare with each other, taking place on different continents in different environments. Nevertheless, the market for consulting, support and services of all kinds is a dangerously slippery path for those who, apart from services, have little or nothing to offer.

## Growth opportunities or niche existence?

The symbionts described above rapidly turn into competitors in the service domain and woo key customers and staff. It is not wholly improbable in this case that the consulting divisions of the company groups such as IBM Global Services, Siemens Business Services or, in the future, the Debis system houses which have joined up with Telekom, will pull ahead. The "youngsters" would then be left with more or less large niches, or unattractive markets, populated by competing companies of similar size and origin where they would be forced to perform gladiatorial combat. But the time has not yet come for definitive statements. It may be the "early adopters" have just come to the market a little too early and the age of the big, successful companies with a business plan based solely on open source software is still ahead of us. That would be a topic

for a review of the year which lies ahead of us. Instead, let's take a look at the fiscal events of the year 2000 in double-quick speed.

## Linux and the stock market

Where there is light, there is also shadow. The year 2000 has of course brought Linux widespread recognition in the IT world and beyond but it has also been a year of disillusionment for all those who wanted to use Linux to make a fast buck. The year started with a continuation of the high-altitude records for technology stocks which had begun in autumn 1999. Linux shares profited from this more than others. Stocks being traded for the first time on the market were given a vote of confidence which expressed itself in price rises seldom previously experienced. In Autumn 1999, VA Linux set a NASDAQ record, when the share rose on the first day of trading from 30 to 240 dollars. If the auspicious stock market launch of Red Hat last year was a surprise success, the successors such as VA Linux, Caldera or Linuxmall immediately became the pampered children of analysts and investors. On 13 January Caldera Systems announced its stock market launch in the wake of these high-altitude flights and was traded on NASDAQ for the first time on 21 March.

But by Spring the mood was already changing. Linux stocks were badly affected even more than average by the drop which followed. By now many shares were below their launch price, despite positive reports and the continuing good economic situation, and scarcely a single company, because of the continuing bad feeling, dared to venture onto the market.

So nothing came of the planned stock market launch of SuSE in the autumn, about which insiders had been gossiping even in early summer. The irrationality of stock markets works strongly in other directions too – also hard hit by the effects were the Linux activists who believed in the rapid success of Linux and were investing in the corresponding shares. The success of Linux has certainly come true but not as expected. The fact that the operating system is winning through does not now necessarily mean that Red Hat is making a lot of money, for example.

**Open Sesame:** Some commercial software products which became Open Source in 2000:

- **Interbase 6**, Enterprise databank, announced in January by Borland, released in Spring under its own licence[6] which is largely identical with the Mozilla Public License.
- **Motif**, the veteran of GUI toolkits, receives an Open Source Licence [7] in May 2000 after decades of use; the licence roughly corresponds to the GPL but is only applicable to free operating systems. A commercial licence is valid for proprietary systems.
- **OpenCascade**, released on 1 June by the French company Matra Datavision, is a highly-professional multipurpose CAD tool. The core of the program is an object library programmed in



[top]  
Adversaries in the fight for code release – Eric S. Raymond, hacker (in the true sense of the word), and Carla Fiorina, boss of Hewlett-Packard

[above]  
The Linux supercomputer "Antarctica" in the Sandia Laboratory.

C++, quickly extendible, for the creation of one's own CAD applications [8].

- In October SAP put its company's own databank [9] under the GNU General Public License.
- Long-announced and warmly welcomed by the developer community, the source of StarOffice was placed under GPL by Sun at the start of November. OpenOffice [10] is to be closely meshed with the GNOME desktop with development taking place mainly at Sun as before.

### Capital: Investments in open-source firms

Many Linux and open-source companies had no need to worry in 2000 about a lack of capital. By January, even before initial quotation and NASDAQ, Caldera was given an injection of 30 billion dollars. Those involved included, among others, Sun, Citrix, Novell and SCO. TurboLinux was able that same month to celebrate the receipt of over 57 million dollars. The knock-on financing of Eazel also went without a hitch; this is the company in which Macintosh veterans hope will raise the user-friendliness of the GNOME desktop to a new level. 15 million flowed in January into the start-up from, among others, Intel. In April, Accel Partners handed over another eleven million. The venture capital company was in the past involved at an early stage in UUNET, Realnetworks and Macromedia.

Free web application servers were also at a premium among investors, even if they did not recognise the trend until towards the end of the year. In August Lutris Technologies, the home of Enhydra, received 16 million dollars from a consortium consisting of Compaq, NEC, Deutsche Bank, Alex Brown and the Chase Manhattan Bank. Wherever Enhydra is, Zope can't be far away. And Digital Creations (<http://www.digicool.com>), the firm which created Zope, was still able during 2000 to complete a financing deal for 12 million dollars. Those involved

included among others, Intel once again.

The first big take-over the year caused a stir in the Linux community. In February, VA Linux bought Andover.net which includes the community sites Slashdot and Freshmeat. The purchase price was just under a billion dollars in shares, if one takes as the basis their price at the date of take-over.

In January SCO announced server products for Linux and in Summer there was talk of their own Linux distribution. Then Caldera suddenly declared that it wished to take over the entire server software division of SCO. Announced in August, there remain some formal legal problems posing an obstacle to the merger. But the union of the two companies may even have taken place by the time you read this. Caldera will then possess a fully-grown, well-organised distribution channel and with Unixware, a product which is well-established, especially among medium-sized companies, a good, strong position compared with other distributors which have to put a lot of energy into distribution.

A few more take-overs: Lineo is buying, among others, the potential competitors in the embedded domain, Zentropix and RT-Control (uCLinux); VA Linux is bringing in-house, with its purchase of Precision Insight, the graphics know-how of Daryll Strauss, David Dawes and Brian Paul, and their hardware basis will be further extended by the acquisition of TruSolutions (1U-Rackserver) and NetAttach (Network Attached Storage).

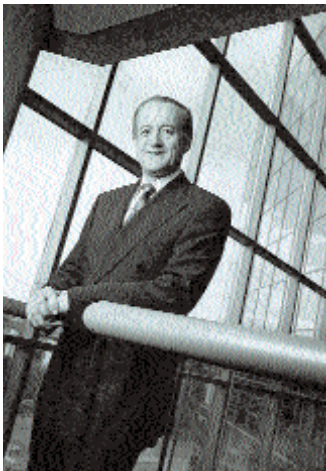
SuSE came to the fore, less by aggressive purchasing of companies than by steady expansion. Sales in the USA has been expanded and branches have been founded in, among others, the Czech Republic, Italy and Venezuela. Turbolinux is building itself a European presence and lots of other activities of this type have occurred in the course of this year. But to list them all here is impossible for reasons of space.

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The stock market rewarded the resignation of Corel founder Michael Cowpland as CEO with a price leap of 13 percent.



#### The Corel Story

*It would be arguably incorrect to describe Corel as the Linux Company Of The Year 2000. But in terms of its appearances in various news columns and news tickers, the traditional Canadian company definitely deserves ranking. Corel Linux came to the market at the end of 1999. The sales figures in the first quarter appeared to be highly promising. But turnover went into a decline and then, at the same time, Corel surprised the world by announcing a take-over of Borland/Inprise. This was meant to take place by a share swap. The stock market price of Corel, however, collapsed by 70 percent with the result that Borland shareholders refused to approve the deal. Corel fell into financial difficulties and a wave of redundancies followed. The investment plan to rescue the company became more daring and less transparent from one round of financing to the next. Then in Autumn, Microsoft, of all people, leapt in as the white knight. One part of the contract is an obligation to port Microsoft's .NET technology onto Linux on demand. Rumours say that the port is already in existence. In the meantime Corel plans to separate completely from its Linux activities.*

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## What a year

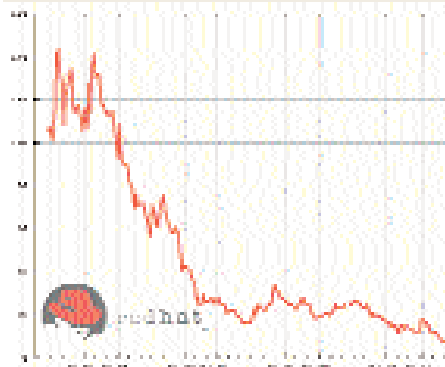
Linux has built itself a stronghold in the IT world and is becoming established on more and more systems. This has been made more than apparent by the developments in 2000. But not all business plans based on open source have a chance of survival. The advance of free operating systems is most marked at present in the lower to middle server domain and in embedded systems (which unfortunately have

### Info:

- [1] „Show us the code, Ms. Fiorina.“ Open letter from Eric S. Raymond: [http://linuxtoday.com/news\\_story.php3?itsn=2000-10-18-009-06-NW-CY](http://linuxtoday.com/news_story.php3?itsn=2000-10-18-009-06-NW-CY)
- [2] Carly Fiorina's reply: [http://www.linux.hp.com/open\\_letter.html](http://www.linux.hp.com/open_letter.html)
- [3] Antarctica-Supercomputer: <http://www.sandia.gov/media/NewsRel/INR2000/antartct.htm>
- [4] Linux information page at Compaq: <http://www5.compaq.com/products/software/linux/>
- [5] The gentle giant, IBM and Open Source: Linux Magazine 08/2000, page 52 (German edition)
- [6] Interbase Public License: <http://www.borland.com/interbase/IPL.html>
- [7] The Open Group Public License: <http://www.opengroup.org/openmotif/license/>
- [8] Open Cascade: <http://www.opencascade.org/>
- [9] SAP DB databank: <http://www.sap.com/solutions/technology/sapdb/>
- [10] OpenOffice: <http://www.openoffice.org/>
- [11] GNOME Foundation: <http://www.gnome-foundation.org/>
- [12] KDE League: <http://www.kdeleague.org/>

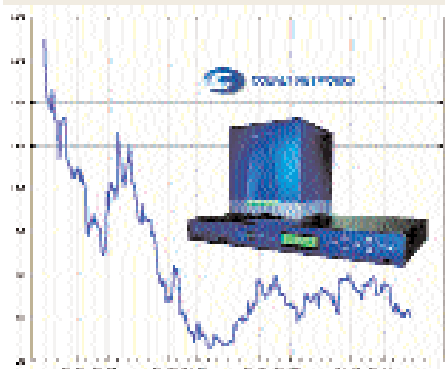
been given short shrift in this report). It remains to be seen how the world of desktops is going to look but this report would be incomplete without at least a mention of the GNOME Foundation [11] and the KDE League [12], lobby organisations which, with the aid of the industry, will create a breakthrough in precisely that field. ■

### A few stock market-quoted Linux companies in figures



**Red Hat** was only able to record moderate increases in sales compared with the previous quarter. The loss rose in proportion to turnover.

	Total turnover	Loss
1st quarter 2000	\$16,029	\$14,851
2nd quarter 2000	\$18,493	\$15,713
Price on 31.12. 1999		105.625
Price on 15.11. 2000		11.625



**Cobalt:** Cobalt Networks showed itself to be remarkably unimpressed by the general sinking feeling. „Only“ 40 percent share price drop is celebrated by many as a grandiose success. Cobalt is now on the shopping list of Sun Microsystems.

	Total turnover	Loss
1st quarter	\$12,033	\$2,583
2nd quarter	\$16,242	\$6,021
3rd quarter	\$20,370	\$12,239
Price on 31.12. 1999		78.5
Price on 15.11. 2000		46.688



**VA Linux:** As a hardware manufacturer they were less severely affected on the whole by the general price slide. VA Linux is an exception in particular for two reasons. Firstly the price at the end of the year was still massively overvalued, and secondly VA was forced to issue a profits warning shortly before the second reporting date, which almost halved their share price.

	Total turnover	Loss
3rd quarter 2000	\$34,595	\$20,627
4th quarter 2000	\$50,662	\$47,515
Price on 31.12. 1999		206.625
Price on 15.11. 2000		12.563



**Corel:** Stagnation in Corel's sales figures. In the year 2000, there is nothing to be seen for miles around of the earlier profits in the software sector.

	Total turnover	Loss
1st quarter	\$44,141	\$12,401
2nd quarter	\$36,639	\$23,618
3rd quarter	\$36,357	\$10,745
Price on 31.12. 1999		15.125
Price on 15.11. 2000		3.625