

Pakistan Govt. Promotes Open Source Software

It must be quite flattering when a government sits up, takes note of the potential of a Linux-users group, and prominently features it in advertisements noticed nationwide.

This happened recently in Pakistan, where a small but growing band of GNU/Linux enthusiasts—and some senior policy planners working at another level—have understood the impact that this alternative computing operating system could have on their plans.

Sometime in June, the English-language newspaper *The Dawn* published from the port city of Karachi, announced: "The Government of Pakistan is committing itself to the reduction of piracy and the protection of intellectual property. Linux and open source technologies are the corner stone of this initiative."

Deploying GNU/Linux to avoid piracy might be unexpected logic. But in the subcontinent of South Asia—covering the populous regions of India, Pakistan and smaller neighbours—per capita income hovers around \$300 US a year.

Affordability of software prices is a key issue, and faced by repeated charges of "piracy" of costly proprietary software, some are beginning to see GNU/Linux as an option.

Don't be surprised if we become the first country.. : Pakistan

Pakistan Ministry of Science and Technology advisor **Salman Ansari** recently told this correspondent that he sees other uses for GNU/Linux deployment.

For instance, some 50,000 low-cost computers are to be installed in schools and colleges all over Pakistan. These will be PII computers, each being sourced for less than \$100 a piece, he says.

Proprietary software for these PCs would cost a small fortune. Surely more than what the computers cost! But, using GNU/Linux as the OS would ensure that the overall price is kept low. Pakistan is seriously considering the use of StarOffice, an open-source productivity tool that does the same work as proprietary software that costs thousands of rupees.

"Don't be surprised if we become the first country in the world to say that all [government-run] services are going to be GNU/Linux-based", says an enthusiastic Ansari.

Ansari points to the belief that if professionals want to enter the software development field, they need to get into open source. "You will be then able to create products, and not just projects", he says.

Source: <http://www.LinuxJournal.Com>, Posted by: Frederick Noronha

(This is perhaps one reason why the many forms of "freedom" offered by GNU/Linux are also sometimes interpreted in terms of the "price freedom" and affordability it offers users here, though this may not be seen as too important an issue in the more-affluent world.)

Pakistan's **Technology Resource Mobilization Unit** has been established by the Government of Pakistan to enable groups of professionals to exchange views and coordinate activities in their sectors. One is to focus on GNU/Linux.

"These physical and virtual groups involve volunteers in Pakistan and abroad, who contribute to policy making by the Government of Pakistan. Each group has national and regional coordinators. Meetings, seminars and conferences are held to debate, crystallize and propagate relevant ideas, concepts and policy directions," the Pakistani government announced recently.

On the GNU/Linux front the Pakistani press announced, "the task force is expected to include committed professionals (e.g. PLUC), academics and practicing software developers to set the future direction for Pakistan". PLUC is the Pakistan Linux Users' Club.

Source: <http://www.LinuxJournal.Com>, Posted by: Frederick Noronha, a freelance journalist (Goa)

Several foreign governments have considered mandating the use of Open-Source or Free software.

- The French Parliament proposed a bill concerned with both the availability of source code for software used by the government and with the use of open standards. Observers say the government is blocking the bill pending European movement on the matter, particularly as it relates to patent issues.

- The Argentina Parliament reviewed a proposal that mandates, with some exceptions, the use of free software in all government offices and in government-owned companies.

- In Germany, the government has funded efforts by the German Unix Users Group (GUUG) to adapt the free privacy software called GnuPG—analogueous to the proprietary PGP privacy software—for use by non-U.S. government entities. The project specifically cites U.S. export restrictions as a reason why PGP itself is inadequate.

- The European Commission has solicited recommendations from the European Working Group on Free Software, which last year raised the possibility that the EC could mandate the use of free software "whenever feasible" but stopped short of recommending that it do so.

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Taiwan opens door to open source

The Taiwanese government plans to start an open-source project as early as next year that could save it as much as \$295 million in royalty payments to Microsoft, according to a report from Taiwan's Central News Agency. Open-source software such as the Linux operating system may be freely modified and redistributed without the legal and financial constraints of proprietary software from Microsoft, Oracle and others. The move to open source is expected to save the government \$59 million in royalty payments to foreign manufacturers, while the benefits to the private sector could be as high as \$295 million, according to Chuang.

Source: Tiffany Kary, Special to ZDNet News: <http://www.Zdnet.com>

What is 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:

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

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.

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

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.

A program is free software if users have all of these freedoms. Thus, you should be free to redistribute copies, either with or without modifications, either gratis or charging a fee for distribution, to anyone anywhere. Being free to do these things means (among other things) that you do not have to ask or pay for permission.

You should also have the freedom to make modifications and use them privately in your own work or play, without even mentioning that they exist. If you do publish your changes, you should not be required to notify anyone in particular, or in any particular way.

The freedom to use a program means the freedom for any kind of person or organization to use it on any kind of computer system, for any kind of overall job, and without being required to communicate subsequently with the developer or any other specific entity.

What is Open Source Software ?

The basic idea behind open source is very simple: When programmers can read, redistribute, and modify the source code for a piece of software, the software evolves. People improve it, people adapt it, people fix bugs. And this can happen at a speed that, if one is used to the slow pace of conventional software development, seems astonishing.

We in the open source community have learned that this rapid evolutionary process produces better software than the traditional closed model, in which only a very few programmers can see the source and everybody else must blindly use an opaque block of bits. Open Source Initiative exists to make this case to the commercial world.

Open source software is an idea whose time has finally come. For twenty years it has been building momentum in the technical cultures that built the Internet and the World Wide Web. Now it's breaking out into the commercial world, and that's changing all the

What is Copyleft ?

Copyleft is a general method for making a program free software and requiring all modified and extended versions of the program to be free software as well.

To copyleft a program, we first state that it is copyrighted; then we add distribution terms, which are a legal instrument that gives everyone the rights to use, modify, and redistribute the program's code or any program derived from it but only if the distribution terms are unchanged. Thus, the code and the freedoms become legally inseparable.

Proprietary software developers use copyright to take away the users' freedom; we use copyright to guarantee their freedom. That's why we reverse the name, changing "copyright" into "copyleft."

Why Free Software is More Reliable !

There are good reasons why free software tends to be of high quality.

One reason is that free software gets the whole community involved in working together to fix problems. Users not only report bugs, they even fix bugs and send in fixes. Users work together, conversing by email, to get to the bottom of a problem and make the software work trouble-free.

Another is that developers really care about reliability. Free software packages do not always compete commercially, but they still compete for a good reputation, and a program which is unsatisfactory will not achieve the popularity that developers hope for. What's more, an author who makes the source code available for all to see puts his reputation on the line, and had better make the software clean and clear, on pain of the community's disapproval. The bugs in free software are fewer, and are fixed much more quickly, than in proprietary software.

Apologists for proprietary software like to say, "free software is a nice dream, but we all know that only the proprietary system can produce reliable products. A bunch of hackers just can't do this."

Empirical evidence disagrees, however; scientific tests, described, have found free software to be more reliable than comparable proprietary software.

This should not be a surprise; there are good reasons for the high reliability of open source software, good reasons to expect free software will often (though not always) have high reliability.

What Is Software Productivity?

If software were free, there would still be programmers, but perhaps fewer of them. Would this be bad for society?

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Why Open Source Software / Free Software (OSS/FS)? Look at the Numbers!

Source : David A. Wheeler dwheeler@dwheeler.com
Revised as of July 17, 2002

This paper provides quantitative data that, in many cases, using open source software / free software is a reasonable or even superior approach to using their proprietary competition according to various measures. This paper examines , reliability, performance, security and total cost of ownership. It also has sections on , unnecessary fears, usage reports, , and ends with some conclusions. You can view this paper at http://www.dwheeler.com/oss_fs_why.html (HTML format); it is also available in PDF format. Palm PDA users can view it in (you will also need Plucker to read it). Old archived copies are also available.

Here, the society is publishing only one of the heading "Unnecessary Fears" of the mentioned paper (http://www.dwheeler.com/oss_fs_why.html) due to shortage of space. We will try to publish other points in our next issues. The contents are as follows :

9. Unnecessary Fears. Is proprietary software fundamentally better supported than OSS/FS? No. There are actually two kinds of support for OSS/FS: traditional paid-for support and informal community support. There are many organizations who provide traditional support for a fee; since these can be competed (an option not available for proprietary software), you can often get an excellent price for support. Again, an anti-trust lawyer would say that OSS/FS support is "contestable." For example, many GNU/Linux distributions include installation support when you purchase their distribution, and for a fee they'll provide additional levels of support. There are many independent organizations that provide traditional support for a fee as well. The article "Teamwork Pays Off for Linux" evaluated four different technical support services for GNU/Linux systems, and found that "responsiveness was not a problem with any of the participants" and that "No vendor failed to solve the problems we threw at it." It's very important to understand that OSS/FS support can be competed separately from the software product; in proprietary products, support is essentially tied to purchase of a usage license.

As an alternative, you can also get unpaid support from the general community of users and developers through newsgroups, mailing lists, web sites, and other electronic forums. While this kind of support is non-traditional, many have been very satisfied with it. Indeed, in 1997 InfoWorld awarded the "Best Technical Support" award to the "Linux User Community," beating all proprietary software vendors' technical support. Many believe this is a side-effect of the Internet's pervasiveness - increasingly users and developers are directly communicating with each other and finding such approaches to be more effective than the alternatives (for more on this business philosophy, see [The Cluetrain Manifesto](#)). Using this non-traditional approach effectively for support requires following certain rules; for more on these rules, consult "How to ask smart questions". But note that there's a choice; using OSS/FS does not require you to use non-traditional support (and follow its rules), so those who want guaranteed traditional support can pay for it just as they would for proprietary software.

Does OSS/FS expose you to greater risk of abandonment? No. Businesses go out of business, and individuals lose interest in products, in both the proprietary and OSS/FS world. A major difference, however, is that all OSS/FS programs are automatically in escrow - that is, if their original developer stops supporting the product, any person or group can step forward to support it instead. This has been repeatedly demonstrated in OSS/FS. For example, the GIMP is a bitmapped graphical editor that was abandoned by its original developers (what's worse, they abandoned it before its initial release and failed to arrange for anyone else to succeed them). Nevertheless, even in this worst-case situation, after a period of time other users came forward and continued its development. As another example, NCSA abandoned its web server "httpd", so some of its users banded together to maintain it - its results became Apache, the world's most popular web server.

Is OSS/FS economically viable? Yes. There are companies that are making money on OSS/FS, or using OSS/FS to support their money-making activities. Many papers have been written about how to make money using OSS/FS, such as [Eric S. Raymond's "The Magic Cauldron"](#) and [Donald K. Rosenberg's "How to make money with open-source software"](#). OSS/FS isn't compatible with some business models, but capitalism does not guarantee that businesses can remain unchanged in changing environments.

Also, looking only at companies making money from OSS/FS misses critical issues, because that analysis looks only at the supply side and not the demand side. Consumers are saving lots of money and gaining many other benefits by using OSS/FS, so there is a strong economic basis for its success. Anyone who is saving money will fight to keep the savings, and it's often cheaper for consumers to work together to pay for small improvements in an OSS/FS product than to keep paying and re-paying for a proprietary product. A proprietary vendor may have trouble competing with a similar OSS/FS product, because the OSS/FS product is probably much cheaper and frees the user from control by the vendor. For many, money is still involved - but it's money saved, not money directly acquired as profit. Some OSS/FS vendors have done poorly financially - but many proprietary vendors have also done poorly too. Luckily for consumers, OSS/FS products are not tied to a particular vendor's financial situation as much as proprietary products are.

[Joel Spolsky's "Strategy Letter V"](#) notes that "most of the companies spending big money to develop open source software are doing it because it's a good business strategy for them." His argument is based on microeconomics, in particular, that every product in the marketplace has substitutes and complements. A substitute is another product you might buy if the first product is too expensive, while a complement is a product that you usually buy together with another product. Since demand for a product increases when the prices of its complements decrease, smart companies try to commoditize their products' complements. For many companies, supporting an OSS/FS product turns a complementary product into a commodity, resulting in more sales (and money) for them.

Fundamentally, software is economically different than physical goods; it is infinitely replicable, it costs essentially nothing to reproduce, and it can be developed by thousands of programmers working together with little investment (driving the per-person development costs down to very small

Will OSS/FS destroy the software industry? Won't programmers starve if many programs become OSS/FS? No. It's certainly possible that many OSS/FS products will eliminate their proprietary competition, but that's the nature of competition. No one mourns the loss of buggy whip manufacturers, who were driven out of business by a superior approach to transportation (cars). If OSS/FS approaches pose a significant threat to proprietary development approaches, then proprietary vendors need to either find ways to compete or join the OSS/FS movement.

OSS/FS doesn't require that software developers work for free; many OSS/FS products are developed or improved by employees (whose job is to do so) and/or by contract work (who contract to make specific improvements in OSS/FS products). If an organization needs to have a new capability added to an OSS/FS program, they will need to find someone to add it... and generally, that will mean paying a developer to develop the addition. The difference is that, in this model, the cost is paid for development of those specific changes to the software, and not for making copies of the software. Since copying bits is essentially a zero-cost operation today, this means that this model of payment more accurately reflects the actual costs.

Indeed, there has been a recent shift in OSS/FS away from volunteer programmers and towards paid development by experienced developers. Again, see [Ganesh Prasad's article](#) for more information. There's even quantitative evidence that OSS/FS developers are experienced; the [Boston Consulting Group/OSDN Hacker Survey](#) (January 31, 2002) surveyed users of SourceForge and found that OSS/FS developers had an average age of 28 and that their programming experience averaged 11 years.

OSS/FS enables inexperienced developers to gain experience and credibility, while enabling organizations to find the developers they need. Often organizations will find the developers they need by looking at the OSS/FS projects they depend on (or on related projects). Thus, lead developers of a particular OSS/FS project are more likely to be hired by organizations when those organizations need an extension or support for that project's program. This gives both hope and incentive to inexperienced developers; if they start a new project, or visibly contribute to a project, they're more likely to be hired to do additional work. Other developers can more easily evaluate that developer's work (since the code is available for all to see), and the inexperienced developer gains experience by interacting with other developers. This isn't just speculation; one of Netscape's presenters at FOSDEM 2002 was originally a volunteer contributor to Netscape's Mozilla project; his contributions led Netscape to offer him a job (which he accepted).

Karen Shaeffer has written an interesting piece, [Prospering in the Open Source Software Era](#), which discusses what she views to be the effects of OSS/FS, for example, it has the disruptive effect of commoditizing what used to be proprietary property and it invites innovation (as compared to proprietary software which constrained creativity). She believes the big winners will be end users and the software developers, because "the value of software no longer resides in the code base - it resides in the developers who can quickly adapt and extend the existing open source code to enable businesses to realize their objectives concerned with emerging opportunities. This commoditization of source code represents a quantum step forward in business process efficiency - bringing the developers with the expertise into the business groups who have the innovative ideas."

Is OSS/FS compatible with Capitalism? Yes. Years ago some tried to label OSS/FS as "communitistic" or "socialistic" (i.e., anti-capitalist), but that rhetoric has failed. One article explaining why OSS/FS and capitalism are compatible is [How Does the Capitalist View Open Source?](#). This paper shows that OSS/FS is quite consistent with capitalism: it increases wealth without violating principles of property ownership or free will. See the earlier notes on economic viability.

Is OSS/FS a "destroyer of intellectual property"? No. You can use OSS/FS products (e.g., a word processor) to develop private and proprietary information, and you can keep the information as confidential and proprietary as you want. What you can't do is use someone else's material in a way forbidden by law... and this is true for all software, not just OSS/FS.

One interesting case is the "General Public License" (GPL), the most common OSS/FS license. Software covered by the GPL can be modified, but any release of that modified software must include an offer for the source code under the same GPL license. Basically, the GPL creates a consortium; anyone can use the program, but you can't make changes to the program or use its code in another program and make the results proprietary. Since the GPL is a legal document, it can be hard for some to understand.

Is having the ability to view and change source code really valuable/important for many people? Surprisingly, yes. It's certainly true that few people need direct access to source code; only developers or code reviewers need the ability to access and change code. But not having access to how your computer is controlled is still a significant problem. Bob Young of Red Hat uses the analogy of [having your car's hood welded shut](#) to explain why even non-technical users need access to the source code. Here is his explanation, in his own words:

Open source gives the user the benefit of control over the technology the user is investing in... The best analogy that illustrates this benefit is with the way we buy cars. Just ask the question, "Would you buy a car with the hood welded shut?" and we all answer an emphatic "No." So ask the follow-up question, "What do you know about modern internal-combustion engines?" and the answer for most of us is, "Not much."

We demand the ability to open the hood of our cars because it gives us, the consumer, control over the product we've bought and takes it away from the vendor. We can take the car back to the dealer; if he does a good job, doesn't overcharge us and adds the features we need, we may keep taking it back to that dealer. But if he overcharges us, won't fix the problem we are having or refuses to install that musical horn we always wanted — well, there are 10,000 other car-repair companies that would be happy to have our business.

About the Author

David A. Wheeler is an expert in computer security and has a long history of working with large and high-risk software systems. His books include [Software Inspection: An Industry Best Practice](#) (published by IEEE CS Press), [Ada 95: The Lovelace Tutorial](#) (published by Springer-Verlag), and [The Secure Programming for Linux and Unix HOWTO](#). Articles he's written include [More than a Gigabuck](#), [Estimating GNU/Linux's Size](#) and [The Most Important Software Innovations](#). Mr. Wheeler's web site is at <http://www.dwheeler.com/>; you may contact him at dwheeler@dwheeler.com.

Several foreign governments have considered mandating the use of open-source or free software.

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• In Spain, the Canary Islands Parliament recently approved a multipartisan, nonbinding resolution urging the use of free software by the government.

• In Asia, governments have acted by appropriations rather than legislation to limit the use and impact of proprietary software. In South Korea, public universities squeezed by the region's 1997 financial crunch found themselves unable to purchase software. In response, the Ministry of Information and Communication last year set up training programs for GNU Linux for systems administration.

• In China, the government has moved to install the open-source Linux operating system provided by Red Flag in an attempt to avoid reliance on U.S. companies, particularly Microsoft.

Source <http://News.Com.Com>

Open minds on open source

NASA programmers might raise a few eyebrows by converting their electronic posting system for business opportunities from an Oracle Corp. relational database to an open source counterpart, MySQL.

On Nov. 6, a team at NASA's Marshall Space Flight Center finished the transition of the NASA Acquisition Internet Service to MySQL with barely a hitch, said Dwight Clark, computer systems analyst and project leader for NAIS. NAIS sends e-mail notifications to users based on specified interests and enables users to query the Web site (nais.nasa.gov) for updated opportunities.

"We noticed an increase in [speed of performance] since the change and have not experienced any problems with the product, Clark said. "We kept waiting for the other shoe to fall from the time we started investigating MySQL, but it never did."

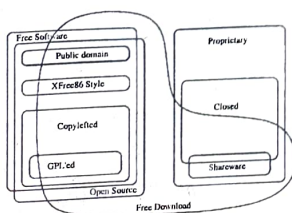
Open-source software is still an unconventional option for most federal agencies, but support is building for its use as many federal agencies enjoy the benefits of fast, low-cost systems such as Linux.

The President's Information Technology Advisory Committee recommended in September that the federal government encourage open-source software as an alternative for software development for high-end computing and allow open-source development efforts to compete on a "level playing field" with proprietary solutions in government procurements.

Faced with software they couldn't afford, Sudderth and his colleagues decided to switch to open source — and found MySQL (www.mysql.com) to be the most robust product available

Source : www.fcw.com

BY Paula Shaki Trimble (Paula@fcw.com)



This diagram by Chao-Kuei explains the different categories of software.

International Open Source-in-government conference looks for speakers

The sponsors of an international Open Source in government conference scheduled for October 17 and 18 in Washington, D.C., are calling for presentations from a wide variety of experts on Open Source software.

Organizers of *Open Source: A Case for e-Government* are hoping to draw speakers — and about 400 listeners — from the United States and many other countries, says Tony Stanco, senior policy analyst at The George Washington University, one of the sponsors of the conference. Other sponsors are the Information for Development Program at the World Bank, the United Nations Development Programme, Government Online International Network and the U.S. General Services Administration's Office of Inter-governmental Solutions.

Stanco says the focus is on getting more government agencies to use Open Source software, in both "developed and developing" nations.

Stanco says organizers are looking for speakers who have mature projects that governments may like to use and for anyone inside or outside of government with an interesting story to tell on how Open Source is being used in government. At least one person has been asked to speak after organizers saw him talking about Open Source and government on News Forge.

"The main goal is to get people (inside government and outside government) who are interested in getting Open Source into government all in the same room, so critical mass is produced to move forward," Stanco says. "It has recently dawned on people responsible for e-government that what they are proposing is going to cost billions of dollars and fundamentally requires interoperability."

Thursday August 01, 2002 - Source : newsforge.com -By Grant Gross -

OSS/FS & USA

The U.S. government has been using OSS and many have suggested more use. The (U.S.) President's Information Technology Advisory Committee (PITAC)'s report, the *Recommendations of the Panel on Open Source Software For High End Computing* (http://www.ccic.gov/ac/pitac_ltr_sep11.html), recommends that the U.S. "Federal government should encourage the development of open source software as an alternate path for software development for high end computing." See the separate discussion on

[MITRE's business case study of OSS](http://www.dwheller.com/oss_fs_why.html#mitre-business-case) (http://www.dwheller.com/oss_fs_why.html#mitre-business-case)

D O D (USA)

The paper *Open Source and These United States* by C. Justin Seifert summarizes that: The Department of Defense can realize significant gains by the formal adoption, support and use of open licensed systems. We can lower costs and improve the quality of our systems and the speed at which they are developed. Open Licensing can improve the morale and retention of Airmen and improve our ability to defend the nation. These benefits are accessible at any point in the acquisition cycle and even benefit deployed and operational systems. Open Licensing can reduce acquisition, development, maintenance and support costs and increased interoperability among our own systems and those of our Allies.

For Details Visit : <http://skyscraper.fortunecity.com/mondo/841/documents/99-184.html>

What Is Software Productivity?

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Not necessarily. Today the advanced nations have fewer farmers than in 1900, but we do not think this is bad for society, because the few deliver more food to the consumers than the many used to do. We call this improved productivity. Free software would require far fewer programmers to satisfy the demand, because of increased software productivity at all levels:

- Wider use of each program that is developed.
- The ability to adapt existing programs for customization instead of starting from scratch.
- Better education of programmers.
- The elimination of duplicate development effort.

Those who object to cooperation because it would result in the employment of fewer programmers, are actually objecting to increased productivity. Yet these people usually accept the widely-held belief that the software industry needs increased productivity. How is this?

"Software productivity" can mean two different things: the overall productivity of all software development, or the productivity of individual projects. Overall productivity is what society would like to improve, and the most straightforward way to do this is to eliminate the artificial obstacles to cooperation which reduce it. But researchers who study the field of "software productivity" focus only on the second, limited, sense of the term, where improvement requires difficult technological advances.

Source : <http://www.gnu.org>

Next Issue

OSS & Business Model
Open GIS
Open BioInformatics
OSS & Employment

Total Cost of Ownership (TCO)

Total cost of ownership (TCO) is an important measure; it doesn't matter if a product starts out cheaply if it costs you more down the line. However, TCO is extremely sensitive to the set of assumptions you make.

1. SS/FS costs less to initially acquire.
2. Upgrade costs are typically far less.
3. OSS/FS does not impose license management costs and avoids nearly all litigation risks.
4. OSS/FS can often use older hardware more efficiently than proprietary systems, yielding smaller hardware costs and sometimes eliminating the need for new hardware.
5. When used as an application server based system, the total costs for hardware drop by orders of magnitude.
6. As the number of systems and hardware performance increases, this difference in initial and upgrade costs becomes even more substantial.
7. There are many other factors; their effect varies on what you're trying to do.
8. Cybersource's 2002 study found TCO savings of 24% to 34% when using OSS/FS instead of Microsoft's proprietary approach.
9. An Italian study in 2002 found GNU/Linux to have a TCO 34.84% less than Windows.
10. Many organizations have reported significant savings when using OSS/FS.

	Microsoft Windows 2000	Red Hat Linux
Operating System	\$1510 (25 client)	\$29 (standard), \$76 deluxe, \$156 professional (all unlimited)
Email Server	\$1300 (10 client)	included (unlimited)
RDBMS Server	\$2100 (10 CALs)	included (unlimited)
C++ Development	\$500	included

For another in-depth analysis comparing the initial costs GNU/Linux with Windows, see *Linux vs. Windows: The Bottom Line* (http://www.cyber.com.au/cyber/about/linux_vs_windows_pricing_comparison.pdf) by Cybersource Pty Ltd (<http://www.cyber.com.au>) Here's a summary of their analysis (in 2001 U.S. dollars):

	Microsoft Solution	OSS/FS (GNU/Linux) Solution	Savings by using GNU/Linux
Company A (50 users)	\$69,987	\$80	\$69,907
Company B (100 users)	\$136,734	\$80	\$136,654
Company C (250 users)	\$282,974	\$80	\$282,894

Similarly take another example for Suse Linux. A study conducted recently by SGERs on SUSE Linux reveals the following. The prices mentioned are in Indian Rupees.

A suse 8.0 Box pack gives you a desktop, Mail Server, Web Server, Enterprise Class RDBMS Server, DNS, DHCP, Application Development, Office tools, PDF - - just at 3500/- where as Similar Thing with Microsoft you need OS + Client Access Licenses (would cost 1 Lakh Plus) + Exchange Server + Access Licenses (costing 2-3 Lakhs) + SQL Server and access license (costing 3 Lakhs), Office Product (cost 22000 per stn), Application Develop VB etc (Cost 1 Lakh) + PDF Adobe (15000) + Desktop OS Licenses total cost approx 10 Lakh plus for 10 odd clients.

An Open Source Software & Free Software Society Formed

Sir George Everest Research Society has been formed with sole aim to help educational institutions and organization to adopt new information technologies in the most cost effective manner and virtually free of cost to add value to their way of working. For making available various free electronic books, software, consulting and solutions to all its members. The solutions suggested would help members to implement low cost/ free solutions for their organizations and increase working efficiency.

Electronic Books

The way E-Mail replaced the traditional letter writing (or snail mail) for obvious advantages, similarly the standard paperback books are also quickly being replaced by Electronic Books. These electronic books come in various formats along with ebook readers which have enhanced features like text to speech engine, dictionary reference and clear fonts. Many electronic books are sold where as many of them are available for free. The society can make available the following class of electronic books and tools (or references) free to its members :-

- | | |
|------------------------|----------------------|
| (a) Fiction. | (g) Audio books. |
| (b) Old Classics. | (h) Religious books. |
| (c) Children Books. | (i) Envoirement. |
| (d) Educational books. | (j) Dictionaries. |
| (e) Computer related. | (k) misc. |
| (f) Cookery. | |

Educational Tools

Again information technology has not left the educational methods untouched. There are several educational tools available today that enhance both teaching and learning experience. Many of such tools are free of cost and society will make and endeavor to create awareness among member educational community about these tools and will make such tools available free of cost. Some of the educational tools fall under the following categories :-

- | | |
|---|--|
| (a) Simulators. | (g) Mathematics, Physics and chemistry learning tools. |
| (b) Phonetics. | (h) Unit Converters. |
| (c) Typing Tutors for Kids. | (i) Dictionaries. |
| (d) Worksheet Creators. | (j) Computer tutors. |
| (e) Vocabulary and language learning tools. | (k) Misc. |
| (f) Painting worksheets and tools. | |

The society will also guide members regarding certain good commercial software if they so desire

Operating System

Operating System (OS) is one thing that is always taken for granted – to give you continuous, unhindered availability, high performance, reliability and security. However this may not be a right assumption and it is more unfortunate especially when you pay for it and try to upgrade it every two/ three years for unverified promise/ claim of better performance and features. Linux, which is close to time tested Unix, is an open source and free OS, which is very reliable with quite good GUI. Also there is no dearth of applications that can be run on Linux environment. Today there is worldwide rapid development on Linux and associated applications. Moreover it is suited both for desktop and server class machines. Linux today also supports multiple CPUs and high availability clusters. Thus Linux no doubt is the best choice for an OS today.

Office Suite

Office suite like MS Office, Word Perfect and Lotus SmartSuite are very popular and one of these (in Indian context mostly MS Office) is the basic software every computer user installs. An office suite that includes word processor, worksheet, presentation tool etc on an average costs around Rs15000/- per user license even if you use one hundredth of the complete feature rich software.

Star office of Sun Microsystems (which in slightly different form is also available from openoffice organization), is a cross platform office suite that is quite feature rich and can even open files in other popular formats as well. The same goes for OpenOffice. The best part is that it is totally free.

Where it all started

The cradle of the new wave of laws mandating free software appears to be Brazil, where four cities—Amparo, Solonopole, Ribeirao Pires and Recife—have passed laws giving preference to or requiring the use of "software libre." Other municipalities, states and the national government have mulled similar legislation.

Brazil has proved fertile ground for open-source laws, and free software advocates say that other developing nations will likely follow its lead.

"This is a political and ethical issue, just like freedom of the press or freedom of association," said Richard Stallman, founder and president of the Free Software Foundation, who this year addressed the Brazilian Congress on the subject. "It makes sense, especially for countries like Brazil that are not rich, to encourage the country to switch from proprietary software to free software."

"In addition to giving people freedoms, software has a secondary benefit because people can use this freedom to save a lot of money now draining away to a few rich foreigners."

A Scientist Prepared GNU Linux Utilities (FREE) for Education

Mr. Ajith Kumar B.P., Scientist, Nuclear Science Centre, New Delhi, prepared a CD mainly by keeping the student community in mind, but there there is enough material of common interest. It starts with the basics, installation, programming and there are sections containing programs for doing detailed studies in the field of science and engineering. A large amount of documentation is provided on various topics. The material on this CD is organized into different sections and you can access them by clicking on the buttons on the left side of this page. Major part of the material on this CD is covered by licenses that allows free distribution, the most notable is GNU General Public License. Few items from the web without explicit copying notices are included as such with full acknowledgment. He dedicated this work to the loving memory of Late Prof. S.C.K.Nair. You can get this Free CD from Sir George Everest Research Society, Dehra Dun

Web Browser and E-Mail Client

Especially when one is looking at different OS for use a basic requirement is a web browser and E-Mail client that can be used with no difficulty. Free cross platform and open source products are available in this range that are feature rich and easy to use.

PDF Creators

A de-facto standard for electronic documents is PDF which is compact as well as good for electronic reading and transfers. Though the software to read a PDF document is free from Adobe (Adobe Acrobat reader) but the software to create a PDF document (Adobe Acrobat) costs (list Price) approximately Rs 15000/-. Even in this bracket free products are available which can allow you to create PDF documents of your own.

RDBMS

RDBMS engine is becoming an essential part of every enterprise today. Information Technology basically revolves around not only about transfer of information but also safe upkeep as well as creation, updation, extraction and growth of relevant data/information. One of the most popular RDBMS today is Oracle 9i. RDBMS licensing policies are such that it makes it very difficult for a small enterprise to afford an RDBMS. For example a single CPU. Installation of Oracle 9i Enterprise edition may cost you approximately 20 lakhs and for 10 user licences approximately 4 lakhs. There is no doubt that Oracle is highly feature rich and stable RDBMS but many of its features for a smaller enterprise are not so important.

There are excellent well-proven, free and open source RDBMS solutions available today that can handle databases as big as several Terabytes and some of them are deployed for running ERP solutions. The society can give you suggestions in this regard.

GIS Information and Gazetteer

GIS information in terms of Latitude and longitude for approximately 37000 Indian Locations can be made available in worksheet (EXCEL) format. In case requested similar information for other countries can be made available for nominal service fee. Also website references can be made available for more information. Please Note that research work is going on GRASS and Open Source GIS.

Information Security Consulting

Information security is one of the most relevant concern in the current information enabled businesses and societies we are heading towards. Though it is an enormous task to secure an enterprise/ organization based upon perceived risks and security policy, limited consulting in this field is available alongwith some free products that cover some of the areas of information security. The free products cover the following range :-

- | | |
|------------------------|---------------------------------|
| (a) Desktop Firewalls. | (c) Anti Virus. |
| (b) Firewall Server. | (d) Intrusion Detection System. |

It is important to understand that information security is much beyond firewall, which addresses a very limited aspect of security. The limited consulting would help you in taking right decisions and not have false sense of security. Consulting on your specific information security needs is also available at nominal cost.

Sir George Everest Research Society is a non profit, volunteer run organization focused on supporting & implementing Open Source Software & Free Software. The Society is run by volunteers, members & full time Researchers & Administrators. The work of the society is to do Research on Open Source Software & Free Software as per the requirement of the members to adopt the latest information technology. It distributes the Software and Implement them for the members. Not only this, society provide training & technical support for the products implemented by the society.

The Society will operate from its Head Quarters at Dehra Dun and will cover Northern Part of India. For this it will soon be starting its branches in Delhi, Chandigarh, Simla and Lucknow.

For any information Contact at : Sir George Everest Research Society, 3 Cross Road, Dharsan Lal Chwok, Dehra Dun -248001

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Mandrake Linux Win Awards

Of B.com — Open Choice Awards 2002. The "Open for Business" website announced the results of their "Open Choice Awards 2002": - Mandrake 8.2 wins for "best distribution" - MandrakeClub is a runner-up in the "best services" category. Mandrake holds top ranking in Desktop Linux poll. Desktop Linux.com announced the results of their Desktop Linux distribution "quick poll". The survey asks readers to provide information about which distribution(s) they use (or plan to use) for desktop purposes — and Mandrake comes out on top again!

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