Guide to Success in Today's Emerging Knowledge Society

# Open-Source Northeast

Electronic Edition

Volume 1, Issue 2
15th November 2007

Modern society is now defined as the 'Information Society', a society in which low-cost information and ICT are in general use, or as the 'Knowledge(-based) Society', to stress the fact that the most valuable asset is investment in intangible, human and social capital and that the key factors are knowledge and creativity... More Inside

- how you can organise an 'Open Access' workshop
- participate in locally organised GNU/Linux workshop
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# Open-Source Northeast

## Bridging the divide, e-Powering the people

Open-Source Northeast is a quarterly Information Technology magazine published by Prag Foundation aimed at the academicians, scholars, enterpreneures and businesses, which is also of interest to the public in general.

The magazine focuses on the benefits of Free and Open Source Software (FOSS) in building Information Communication Technology (ICT) capability for development and success in today's emerging Knowledge Society.

Access to knowledge in all its forms is possibly the single most important factor in determining the success or failure of civil society. While traditional media remain essential, new digital technologies hold potential for enhancing civic life that is still untapped in our region. It is essential, therefore, to promote ICT to help access to knowledge and information.

The immediate objectives of the magazine are to raise ICT awareness, promote digital inclusion and literacy, and help readers to acquire skills necessary to use ICT productively and efficiently at an affordable cost. The journal publishes articles, tutorials, career information and latest news on FOSS for personal computing as well as for institutions, offices and businesses.

The journal basically aims to provide the technological 'know how' essential for success in today's emerging Information/knowledge society.

The overall aim of Prag Foundation is to improve the opportunities for the community using the simple strategy: "invest in the people, stimulate creativity, confidence and self expression using knowledge and information as a medium". 'Open-Source Northeast' is an endeavour towards this.

We invite the readers to subscribe to the journals and also to persuade his/her institution to make an institutional subscription.

If you are interested to write in the magazine please do send your article for publication subjected to our editorial review. In addition, please keep regularly writing to us with your comments and suggestions.

Mail your comments, feedback and suggestions to conatct@pragfoundation.net which is very much appreciated.

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## Comments

We received many comments from all over the world from individuals who have an interest in the development of Northeast India. Read below a selection of comments and please keep sending us your views and suggestions to admin@pragfoundation.net.

"Congrats to you and all of your team for this noble venture. I have just downloaded the magazine and would go through it soon. I think this is the first venture of Open Source movement in NE. I am sure this would go a long way in promoting the knowledge enabled society in our remote North East. I m happy to say that I m an active member of Open Source phenomenon (as an user, not really as a developer). I am trying to inculcate the philosophy of Open Source to my students. At present I am using Scilab (instead of MATLAB) and Linux in my teaching and working on OpenSees and CAELinux. All the best." - sukumar_baishya@yahoo.co.in

"Very pleased to see that there is an open-source movement in Assam. Personally I'm an open-source fan and use Ubuntu at work and home as the primary desktop operating system apart from Debian and CentOS servers.

Government adoption of open source software should be strongly encouraged for the simple reason of saving money and resources that can be used for health care and other aspects of social development. This is true for all governments, not just those of developing countries.

It would be most beneficial for children to learn computers in their own language and I'd encourage your organization to consider helping out in the Assamese translation of Ubuntu at http://launchpad.net which is likely to flow upstream and downstream to other distributions.

There's an interesting article I came across just yesterday analyzing why Linux has not done as well as it should have considering it is a free product. I've pasted the article and the link to it below. The key to open source future, it would seem, is to enforce anti-piracy of closed source software." - biswajitbardalai@yahoo.com

"You have done well with the Open Source magazine." - mrinal.talukdar@gmail.com

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"Congratulations! Good coverage.

I'd only suggest you to be a little careful with the screenshots of multi-platform apps like OpenOffice.org. It's always a better idea to use screenshots of these apps running under a Linux distribution.

Keep up the good work!" - geeky_bodhi@yahoo.co.in

# Why India is Struggling with Localized Language Computing?

While IT is improving the quality of life in many developed nations, the use of technology is still out of reach for people in many other countries. Nowhere is this digital divide as big or visible than in India. Apart from access to a computer, unfamiliarity with the English language is one of the biggest factors contributing to this problem. In countries like India, where the majority of the population is English-illiterate, computing has to speak a language the locals understand. This is where user-interface localization steps in. - Mayank Sharma sheds light on this stuble block to India's IT revolution reaching the mass.

Most applications have an interactive component or UI which includes messages to the user and system commands. Localization means translating these messages and commands into the language of each country or region.

Developers can localize only programs which are internationalized, explains Dr. Nagarjuna G, Chairman FSF-India. Internationalized programs encode their messages and names of commands in a standard such as Unicode and follow a framework, so that the core program works completely independent of the natural language.

Localizing the UI enables non-English-speakers to access computers. Nagarjuna points out that India's English literacy rate is close to 65 percent, but most of these people cannot use the available computers because the UI isn't in their mother tongue. With localization, developers can offer computer environments for education, as well as tools that give local and useful information -- such as water resource maps -- without requiring knowledge of English.

A lack of excitement about localization

It doesn't take a rocket scientist to figure out the benefits of localization, and the enthusiasm around it from the various projects is quite evident. But you still don't see any major deployments, at least not in India.

The Indian government and several of the industry leaders initially did not take localization very seriously, despite the known positive implications of this task, says Nagarjuna. Government, he thinks, has not been advised by the right kind of people. Indian computing researchers, primarily from the Indian Intitute of Technology (IIT), and the Center for Development of Advanced Computing (CDAC), concentrated on high-tech problems like machine translation, speech recognition, and optical character recognition, since these are intellectually more challenging and can help them get their papers published in research journals.

There is no reason not to solve these interesting problems, but providing core support should be a priority. Nagarjuna says passing this on to the industry wouldn't help. Industry has, in the past, solved problems by imposing proprietary encoding standards to such an extent that even fonts of Indian scripts are encoded. Each software developer encoded fonts at will.

Nagarjuna said that non-standard font encoding -- an unethical practice -- is often used. As a result, a glyph (character shape) is positioned at a location on the glyph table by different vendors at different places. Also sometimes a glyph is broken into different shapes and placed at different places. The only problem here is the address where the glyph is placed is not standardized. This means only those applications that are produced by the vendors can use those fonts, and others can't. This is a vendor lock. And if this vendor is closed, or if the user intends to migrate to another platform/application, all the data the user created using the non-standard font is of no use. This industrial practice should be prevented by the government by law. ?We have never seen this happening for any English font; why should we let this happen for Indian language computing?" asked Nagarjuna.

CDAC also developed its own font-encoding schemes, such as ISFOC. The government failed to impose any control on this. The government's intentions may have been good, since it helped develop the standards, but it failed to impose them. Neither industry nor government required all application documents to be in a standard encoding format.

CDAC developed good usable standards like ISCII, but rather than free its standards in a similar way to the World Wide Web Consortium, CDAC acted like private industry, forgetting that it was running its business with public money. Since its programs are not free (as in freedom) they must compete with commercial software. If CDAC had acted differently, it could have achieved its objectives, and today CDAC's standards would be the Indian computing standards.

Nagarjuna suggests the government should form a consortium, like W3C, for Indian computing. Then from time to time propose solutions, develop standards for Indian languages, and invite all the stakeholders from industry as well as organizations like the FSF. This consortium can promote the use of Unicode or ISCII where the positions of the glyphs are fixed. Also government should pass and enforce a law saying: If due to some technical reason a company intends to use a non-standard method, it must publish the addresses of the glyphs and also provide an export filter in the application so that migration to open standards is possible.

CDAC recently ramped up localization efforts, possibly realizing their importance, Nagarjuna says. CDAC's team in Bangalore is localizing OpenOffice.org in Indian languages. Its Mumbai team is working on giving core support for Indian languages at the operating system level by experimenting with the X Window System.

### Where is localization applicable?

Computing involves a lot more than just the operating system. So where should the developers working on localizing the GUI start? Nagarjuna believes that applications used by everyone -- browsers, Web sites, email clients, office applications, and file managers -- should be considered first while localizing.

Sankarshan Mukhopadhyay, one of the founders of the Ankur Project, which supports the Bangla language on X, points out that localization can promote educational content in local languages.

The Indian Ministry of IT has been doing some work on localization under the Technology Development for Indian Languages banner. Localized education content on cheap localized Linux machines could promote the spread of IT in schools across the country in no time.

Nirav Mehta, founder of the Utkarsh project -- for supporting Gujarati -- takes the bar a bit further and higher. He wants to localize in all mass-market areas. For his native language, this could mean some software to learn Gujarati for non-resident Indians, a tool for farmers to communicate with the city markets, a tool for the electoral commission to allow searches on voter lists, or a news channel providing SMS alerts in Gujarati. The possibilities, he says, are endless.

### Ingredients for localizing computing

The extent and usefulness of localization for any developing country is immense. So, what does one need to squeeze the benefits out of this medium?

Jitendra Shah is a professor at Veermata Jijabai Technological Institute (VJTI) and project leader of IndicTrans, which supports various Indian languages. He defines the localization experience as "being able to communicate in one's language within a culturally familiar environment. As a sibling of internationalization, it is also a way to bring to India's people the winds of world experiences and world's opportunities, thereby giving the local talent a scope to express at the global platform."

For proper localization we need all the elements of a writing system (input method, editor, fonts, dictionaries, spell checkers, etc.). More importantly we need applications that give us the advantages of computer and communication. To get to many such resources on the Web, one has to use an operating system and applications that require basic English know-how, which a majority of the population in many countries doesn't have.

Mehta lists the following as necessary ingredients for a localized experience:

- Fonts
- Localized user interface -- i.e. locale, translations
- Localized theme of the operating system -- colors, icons, etc.
- Dictionaries and thesaurus
- Help and documentation in local language
- Keyboards in local language
- Ability to make printouts in local language
- A good collection of useful applications in the local language
- Localized support resources for local language computing -- hardware and software support, developers, etc.
- Continuous innovation and improvement!

The last bullet is an indication of the complexity of the process. Once the initial system is up and running, it requires constant checks and improvements. While this is true of any system, it is particularly complex in the case of localization, due to the complexities of language.

Building on this, Venkatesh Hariharan, co-founder of the IndLinux project, says that all of the foregoing comprises the first phase of localization. In the next stage, developers need to deploy the software and take feedback from end users. Based on this feedback, they might need to revamp their code, and perhaps even devise cultural user interfaces that are more appropriate to Indian users.

Remember, the current "files and folders" metaphor derives from the work of cognitive scientists who said that the interface of the computer must closely resemble that of the real world. For a western office the current metaphors may be appropriate, but a "desktop" means nothing to a farmer who has never owned a desk!

This phase will require a lot of time and money, and most importantly a sensitive approach to what rural users of IT want. City-based IT professionals will have to put their preconceived notions aside and go in with an open mind.

### Where to start?

Where to start is a complex question, and the answer depends on whom you ask. Mehta, whose primary focus is the Gujarati-speaking non-IT city population, believes a complete localized experience should empower individuals to carry on personal and business activities in their own language. It should be able to position computers as simple tools to get the job done. The targets should be ease of use and productivity. Users should be able to create and dispatch documents, work with data and calculations, communicate with peers and associates, gain

insight and knowledge about a field of interest, and satisfy their personal and business interests.

As a general progression, teams focus on getting the basic requirements taken care of and then move on to other things. Mehta and his project has the locale, fonts, keyboard layout, and core translations for GNOME 2.6 for Gujarati completed. OpenOffice 1.1 translations are complete too, and the team is building an install set. People have started asking for applications specific to their industries and needs -- accounts, stock market, education, and even software for opticians!

On the other hand, Shah is building localized solutions that cater to the general population. His current project involves enabling voter lists to be searchable in his native language, Marathi.

Sankarshan's Ankur team is working on a localized environment in Bengali, with the aim of assisting the delivery of education.

### Building on popular software

While all the groups might be localizing for a different kind of audience, there is one similarity. All these projects are localizing a couple of open source software projects in their respective languages. OpenOffice.org seems to be on the priority list of everyone, closely followed by Mozilla. GNOME seems to be the desktop of choice.

Mehta says the clear advantage of using open source software is in the strong code base and market share. "If we were to build our own Office suite in Gujarati, it would be next to impossible with the resources we have. OpenOffice.org is there, so why reinvent the wheel? And people who may already be using OpenOffice.org in English would find it easier to migrate to and support the same software in Gujarati."

Popular software is also tested over time, which means the chance of bugs halting the localization work are less.

Mozilla is a favorite application for localization teams, Mehta confirms, "simply because these are the core applications that a user would need. Evolution will start figuring in the radars of localization teams quite soon. KDE is already there, and many teams have made good progress on KDE already."

### Localization projects love LiveCDs

Ankur, Utkarsh, IndLinux, GNUBharaati, and other projects have all decided to release their localized systems on LiveCDs,

## Wanna get local?

Localization is a complicated process and an article in itself. But just to get you an idea of what it involves, I asked one of the lead developers of the Ankur project, Sayamindu Das Gupta (a.k.a. SDG), to show us the ropes. SDG outlined eight important steps:

Step 1: Decide the language you want to localize. As SDG points out, language is not equal to a script. For example, Bangla and Assamese are different languages, but both use the same script -- Bengali.

Step 2: Find the script for your language.

Step 3: Find out whether your script has been encoded by the Unicode standard.

Step 4: Find the two-letter ISO code for your language, and look up your country code.

Step 5: Find out whether the locale data for your region exists in the GNU libc. This is the C library used with the Linux kernel.

The data files are named in the format of <languagecode_countrycode>. For example, the file for Indian Bengali is named bn_IN, while Hindi is hi_IN. Look for your locale data in the latest glibc sources from the CVSWeb interface. If a locale data file is not available, search Google and try to find out if someone is working on it. If no one is working on it, write one yourself.

Step 6: After the locale data is ready and has been tested with the "localedef" command, find out whether a font for your script exists. Fonts have to be Unicode-compliant, and if your script has advanced or complex features such conjunct (juktakshar) formation or character reordering, you'll need an OpenType font.

Step 7: Figure out whether your script is supported by the text drawing and rendering systems of the Linux distribution you use. GNOME and GTK2 applications use the Pango library for rendering text. KDE uses the internal rendering engine of QT. Join QT- and Pango-related mailing lists and ask the developers if your script is supported..

Step 8: Start translating. This is a major task, but it is not very difficult. However, you have to be careful and maintain consistency; users won't like it if they see an element as "foo" at one place and as "bar" at another place. Translation mainly consists of trawling through PO files. An introduction to PO files is available at the Ankur Web site.

Once you have translated a set of PO files, decide what to do with them. You might contribute your translation to be incorporated into a distribution, or you could start your own localized distro!

primarily based on Knoppix or one of its derivatives. The projects have been pushing these LiveCDs as localization solutions to the government and the industry.

Shah says that in an otherwise hostile environment of proprietary software, with governments totally chained by bureaucratic red tape, with no overlap between visionaries and politicians, and with education in the hands of merchants whose interest is not primarily in education, free and open source localized software has to find a solution. A bootable CD provides a non-invasive alternative which can support a fail-safe roadmap for migration.

By contrast, Sankarshan believes that LiveCDs are dead. He believes that LiveCDs by their nature are meant to used as a technology demonstration platform. To take localization to the government, complete installable distros are the way to go. Unfortunately, the government doesn't see the benefits that a Live CD provides.

Mayank Sharma is a 21-year-old technology writer/developer from India. He does his bit to highlight and strengthen the localization efforts in India and is working on connecting FOSS with students and the education system.

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# Open-Source News

## by Amarjyoti Deka

### Parallel programming the Open Source Way

In July 2007 gnu releases its latest version of gcc 4.2.1 compiler. This release includes some of the bug fixes for the old releases as usual and an implementation of OpenMP, one of the most popular parallel programming standards. OpenMP though the name sounds like standard open source software it was not really open. The standard was devised in Silicon Graphics and many vendors including Intel and Microsoft were shipping it with their proprietary dev tools. GCC called it GOMP, acronym for Gnu OpenMP.

You do not really need a multi processor parallel computer to take advantage of OpenMP; instead a standard multicore processor (eg Intel Core 2 dual core processor) which is very common in today's desktop should be enough.

### How Open Your Employer is?

Do you think your employer is open to Open Source?

BluWiki hosts a list of IT Hardware employers with positive and negative criticism about how they stand ethically, environmentally, juridical, against competition, open standards, open source, etc. Currently it lists around 50 companies including IBM, Microsoft, 3Com, Nokia and many more. You want to know if you are listed – here is the link http://vendors.bluwiki.org/.

### NoOOXML

On September 2nd International Standard Organization (ISO) organized a poll among its member countries in a move to make Microsoft Office OpenXML (ECMA: 376 OOXML) as an ISO standard. It received much criticism as there is already a standard ISO26300 named OpenDocument Format (ODF) widely used by industry, government and citizens. This standard proposal was not created by bringing together the experience and expertise of all interested parties (such as the producers, sellers, buyers, users and regulators), but found to be backed by Microsoft alone. As per an unofficial release, 15 JCT1 countries have voted No (including India & China) to the proposal, whereas 17 JCT1 countries have voted for it. To approve a standard no more than one third of the JCT1 (ISO/IEC Joint Technical Committee 1) member countries can vote against it. It may be noted that OpenDocument was created from the existing XML-based file formats of Open Office.org and gained major media attention when the government of Massachusetts decided to standardize on the document format for all future correspondence. Microsoft lobbied to get their own Office XML format accepted as a standard, and eventually a compromise was reached where Microsoft Office would remain in use with OpenDocument (ODF) filters installed.

# Project Gutenberg

## *The oldest digital library ith over 22,000 items as of October 2007*

Project Gutenberg, abbreviated as PG, is a volunteer effort to digitize, archive and distribute cultural works. Founded in 1971 by Michael S. Hart, it is the oldest digital library.[1] Most of the items in its collection are the full texts of public domain books. The project tries to make these as free as possible, in long-lasting, open formats that can be used on almost any computer.

Project Gutenberg is affiliated with many projects that are independent organizations which share the same ideals, and have been given permission to use the Project Gutenberg trademark.

History

Project Gutenberg was started by Michael Hart in 1971. Hart, a student at the University of Illinois, obtained access to a Xerox Sigma V mainframe computer in the university's Materials Research Lab. Through friendly operators, he received an account with a virtually unlimited amount of computer time; its value at that time has since been variously estimated at $100,000 or $100,000,000.



Hart has said he wanted to "give back" this gift by doing something that could be considered to be of great value. His initial goal was to make the 10,000 most consulted books available to the public at little or no charge, and to do so by the end of the 20th century.

This particular computer was one of the 15 nodes on the computer network that would become the Internet. Hart believed that computers would one day be accessible to the general public and decided to make works of literature available in electronic form for free. He used a copy of the United States Declaration of Independence in his backpack, and this became the first Project Gutenberg e-text. He named the project after Johannes Gutenberg, the fifteenth century German printer who propelled the movable type printing press revolution.

By the mid-1990s, Hart was running Project Gutenberg from Illinois Benedictine College. More volunteers had joined the effort. All of the text was entered manually up until 1989 when image scanners and optical character recognition software improved and became more widely available, which made book scanning more feasible. Hart later came to an arrangement with Carnegie Mellon University, which agreed to administer Project Gutenberg's finances. As the volume of e-texts increased, volunteers began to take over the project's day-to-day operations that Hart had run.

Pietro Di Miceli, an Italian volunteer, developed and administered the first Project Gutenberg website and started the development of the Project online Catalog. In his ten years in this role (1994–2004), the Project web pages won a number of awards, often being featured in "best of the Web" listings, and contributing to the Project popularity.

Recent developments

In 2000, a non-profit corporation, the Project Gutenberg Literary Archive Foundation, Inc. was chartered in Mississippi to handle the project's legal needs. Donations to it are tax-deductible.

Long-time Project Gutenberg volunteer Gregory Newby became the foundation's first CEO.

Charles Franks also founded Distributed Proofreaders (DP) in 2000, which allowed the proofreading of scanned texts to be distributed among many volunteers over the Internet. This effort greatly increased the number and variety of texts being added to Project Gutenberg, as well as making it easier for new volunteers to start contributing. DP became officially affiliated with Project Gutenberg in 2002. As of 2007, the 10,000+ DP-contributed books comprised almost half of the nearly 22,000 books in Project Gutenberg.

Starting in 2004, an improved online catalog made Project Gutenberg content easier to browse, access and hyperlink. Project Gutenberg is now hosted by ibiblio at the University of North Carolina at Chapel Hill.

Scope of collection

Growth of Project Gutenberg publications from 1993 until 2007.

As of October 2007, Project Gutenberg claimed over 22,000 items in its collection, with an average of over fifty new e-books being added each week. These are primarily works of literature from the Western cultural tradition. In addition to literature such as novels, poetry, short stories and drama, Project Gutenberg also has cookbooks, reference works and issues of periodicals. The Project Gutenberg collection also has a few non-text items such as audio files and music notation files.

Most releases are in English, but there are also significant numbers in many other languages. As of July 2007, the non-English languages most represented are (in order): French (1,053 files), German (451), Finnish (396), Dutch (279) and Spanish (155).[1]




Whenever possible, Gutenberg releases are available in plain text, mainly using US-ASCII character encoding but frequently extended to ISO-8859-1. Besides being copyright-free, the requirement for a Latin-text version of the release has been a criterion of Michael Hart's since the founding of Project Gutenberg, as he believes is the format most likely to be readable in the extended future. The text is wrapped at 65-70 characters and paragraphs are separated by a double-line break. Although this makes the release available to anybody with a text-reader, a drawback of this format is the lack of markup and the resulting relatively bland appearance.

Other formats may be released as well when submitted by volunteers. The most common non-ASCII format is HTML, which allows markup and illustrations to be included. Some project members and users have requested more advanced formats, believing them to be much easier to read. But some formats that are not easily editable, such as PDF, are generally not considered to fit in with the goals of Project Gutenberg (although a few have been added to the collection). For years, there has been discussion of using some type of XML, although progress on that has been slow.[citation needed]

Project Gutenberg e-texts have been distributed on CD-ROM.

## Ideals

Michael Hart said in 2004, "The mission of Project Gutenberg is simple: 'To encourage the creation and distribution of ebooks.' His goal is, "to provide as many e-books in as many formats as possible for the entire world to read in as many languages as possible." Likewise, a project slogan is to "break down the bars of ignorance and illiteracy",[citation needed] because its volunteers aim to continue spreading public literacy and appreciation for the literary heritage just as public libraries began to do in the late 19th century.

Project Gutenberg is intentionally decentralized. For example, there is no selection policy dictating what texts to add. Instead, individual volunteers work on what they are interested in, or have available. The Project Gutenberg collection is intended to preserve items for the long term, so they cannot be lost by any one localized accident. In an effort to ensure this, the entire collection is backed-up regularly and mirrored on servers in many different locations.

## Copyright issues

Project Gutenberg is careful to verify the status of its ebooks according to U.S. copyright law. Material is added to the Project

Gutenberg archive only after it has received a copyright clearance, and records of these clearances are saved for future reference. Unlike some other digital library projects, Project Gutenberg does not claim new copyright on titles it publishes. Instead, it encourages their free reproduction and distribution.

Most books in the Project Gutenberg collection are distributed as public domain under U.S. copyright law. The licensing included with each ebook puts some restrictions on what can be done with the texts (such as distributing them in modified form, or for commercial purposes) as long as the Project Gutenberg trademark is used. If the header is stripped and the trademark not used, then the public domain texts can be reused without any restrictions.

There are also a few copyrighted texts that Project Gutenberg distributes with permission. These are subject to further restrictions as specified by the copyright holder.




### Criticism

Project Gutenberg has been criticized for lack of scholarly rigor in its e-texts: for example, there is usually inadequate information about the edition used and often omission of original prefaces. However, John Mark Ockerbloom of the University of Pennsylvania noted that PG is responsive about addressing errors once they are identified, and the texts now include specific source edition citations. In many cases the editions also are not the most current scholarly editions, for these later editions are not usually in the public domain.

While the works in Project Gutenberg represent a valuable sample of publications that span several centuries, there are some issues of concern for linguistic analysis. Some content may have been modified by the transcriber because of editorial changes or corrections (such as to correct for obvious proofsetter or printing errors). The spelling may also have been modified to conform with current practices. This can mean that the works may be problematic when searching for older grammatical usage. Finally the collected works can be weighted heavily toward certain authors (such as Charles Dickens), while others are barely represented.

In March 2004, a new initiative was begun by Michael Hart and John S. Guagliardo to provide low-cost intellectual properties. The initial name for this project was Project Gutenberg 2 (PG II), which created controversy among PG volunteers because of the re-use of the project's trademarked name for a commercial venture.

### Affiliated projects

All affiliated projects are independent organizations which share the same ideals, and have been given permission to use the Project Gutenberg trademark. They often have a particular national, or linguistic focus.

### List of Affiliated projects

• Project Gutenberg Australia hosts many texts which are public domain according to Australian copyright law, but still under copyright (or of uncertain status) in the United States, with a focus on Australian writers and books about Australia.

• Project Gutenberg Consortia Center is an affiliate specializing in collections of collections. These do not have the editorial oversight or consistent formatting of the main Project Gutenberg. Thematic collections, as well as numerous languages, are featured.

• PG-EU is a sister project which operates under the copyright law of the European Union. One of its aims is to include as many languages as possible into Project Gutenberg. It operates in Unicode to ensure that all alphabets can be represented easily and correctly.

• Project Gutenberg of the Philippines aims to "make as many books available to as many people as possible, with a special focus on the Philippines and Philippine languages".

• Project Gutenberg Europe is a project run by Project Rastko in Serbia. It aims at being a Project Gutenberg for all of Europe, and has started to post its first projects in 2005. It is running the Distributed Proofreaders software to quickly produce etexts.

• Project Gutenberg Luxembourg publishes mostly, but not exclusively, books that are written in Luxembourgish.

• Project Gutenberg Canada.

# ibiblio

## *It's Not Your Average Library*

The average municipal public library receives a few hundred visitors a week. ibiblio.org averages 12 million information requests per day, and the contributor-maintained collections are expanding daily. A free and vibrant exchange of ideas among a large community of contributors who share their knowledge across disciplines, ibiblio.org uses the open source model to encourage users to help shape the way information is managed and accessed in the 21st century.

ibiblio (formerly SunSITE and MetaLab) is a "collection of collections," and hosts a diverse range of publicly available information and open source software.

Ibiblio is one of the oldest WWW Internet websites and a large conservancy of freely available information, including software, music, literature, art, history, science, politics, and cultural studies. It is the third largest WWW site by size of hosted content[1] As an "Internet librarianship," ibiblio is a digital library and archive project. It is run jointly by the University of North Carolina at Chapel Hill and the Center for the Public Domain. It also offers streaming audio radio stations. In November 1994 it started the first internet radio stream by rebroadcasting WXYC, the UNC student-run radio station. It also takes credit for the first non-commercial IPv6 / Internet2 radio stream. Unless otherwise specified, all material on ibiblio is assumed to be in the public domain.

### History

In 1992, the University of North Carolina at Chapel Hill developed SunSITE, which was to be an archive and an information sharing project for the public. It was funded by grants from Sun Microsystems, and thus the name. The relationship with Sun came to an end (an amicable one, according to the ibiblio FAQ. The change in name was for a "vendor-neutral name that expressed what our project has evolved into over the years"[2]) and the name was changed to MetaLab. It collaborated with various sources, including academic institutions, corporate businesses, and information technology entrepreneurs. In September 2000, MetaLab began to collaborate with the Center for the Public Domain; the name was changed to ibiblio to reflect the goal of being "the public's library and digital archive."

### World impact

Although ibiblio has a strong local presence, it also has an international standing.[4]

| 2002 | 2006 |
|---|---|
| 800 Collections | 1600+ Collections |
| 3 million ftp+www/day | 15+ million ftp+www/day |
| 1 terabyte of data | 8 terabytes of data |
| 1 large server, 2 peripherals | 22 www/vhosts |
| 2 database servers | 5 database servers |
| 4 radio stations | 7 radio stations |
| 0 open-source projects | 2 open-source projects |

### Activities

- ibiblio is celebrating its 15th anniversary in 2007, in conjunction with Software Freedom Day.
- ibiblio is planning to conference in partnership with Wikimania, if Atlanta receives the bid for the event.

Home to one of the largest "collections of collections" on the Internet, ibiblio.org is a conservancy of freely available information, including software, music, literature, art, history, science, politics, and cultural studies. ibiblio.org is a collaboration of the School of Information and Library Science and the School of Journalism and Mass Communication at The University of North Carolina - Chapel Hill.

### It's Not Your Average Library

The evolving Internet has created new opportunities to share knowledge. Imagine being able to walk into your local library and view, on demand, and without charge, not only every imaginable written text, but also music and poetry archives, African American authors, American history, sports statistics, philosophy of religion, Italian literature, large text database projects, software archives, and more.

Then imagine, in addition to being able to view the collection, you have the opportunity to critique it, expand it, or to create and manage a new collection in your own area of interest. While such a feat is physically and fiscally beyond the scope of even the largest and most extraordinary physical library, ibiblio.org achieves just such breadth and depth on the Internet.

Users in China studying American poetry or folk music can access ibiblio.org and find a vast collection of poems or songs. They can listen to the artist perform, read the biography, download sheet music, reference secondary criticism, and

submit their own research papers to the collection. A veteran of World War II from anywhere in the world can access and contribute to the enthusiast-managed Pearl Harbor archives, joining the virtual dialogue on the topic.

The average municipal public library receives a few hundred visitors a week. ibiblio.org averages 12 million information requests per day, and the contributor-maintained collections are expanding daily. A free and vibrant exchange of ideas among a large community of contributors who share their knowledge across disciplines, ibiblio.org uses the open source model to encourage users to help shape the way information is managed and accessed in the 21st century.

Who and Why

ibiblio.org was formed as a collaboration between the University of North Carolina - Chapel Hill's MetaLab, formerly known as SunSITE, and the Center for the Public Domain in September of 2000. At UNC-Chapel Hill, ibiblio is supported by the School of Journalism and Mass Communication and the School of Information and Library Science. The collaboration has multiple components including, but not limited to, programs to:

• Expand and improve the distribution of open source software;

• Continue UNC's programs to develop an on-line library and archive;

• Host and foster projects that expand the concepts of transparency and openness into new areas;

• Create, expand, improve, publish, and distribute research on the open source communities;

• Expand and improve the creation of and distribution of open source software and documentation;

• Serve as a model for other open source projects.

Partners with ibiblio.org

Partners of ibiblio.org include VA Linux's SourceForge and IBM who supply the hardware on which ibiblio.org services are running. ibiblio.org runs using open source software where ever applicable and attempts to promote open source ideals within contexts other than software.

FAQ

Many questions about ibiblio.org are answered in their FAQ at www.ibiblio.org.

Contributing to ibiblio.org

If you are interested in becoming an ibiblio.org contributor:

1. Read the Collection Criteria to see if your interest will be served by working with us

2. Check out the services we offer contributors to see if we have what you need.

3. Hint: very few, if any, proprietary services will be provided, but many open source solutions are, can or will be offered on request.

4. Paste a note in the form here telling us:

• What your project will be

• What services you might wish to use

• How to contact you by phone (so we can work out any details and passwords)

• Anything else you think might be helpful

# Prag Foundation can help hosting an Open Access seminar

A great way for you to advocate open access is to organise an open access seminar at your institution. Use these events to raise awareness amongst researchers/scholars about the open access movement and its importance for fostering change in scholarly communication, the advantages of open access publishing and to encourage them to submit their research articles to open access journals. Topics covered would ideally include how open access publishing works, the benefits of open access publishing, the ways in which it improves on the current, traditional model of scientific publishing, and an overview of the various initiatives that currently exist in the open access movement.

Some of these initiatives are the Public Library of Science, SPARC and the Budapest Open Access Initiative, as well as the OAI metadata harvesting project.

## What format should this event take?

The event can take the form of a single speaker followed by discussion, however it is likely to be livelier if it is either

1. A program of talks (views and experiences of open access and its impact on the communication of research, etc), or

2. A panel discussion (a less structured format, fostering more interaction with panel and audience. Someone needs to chair or lead this discussion and draw it to a conclusion at the end)

In either case, it is advisable to factor in time for Q&A sessions after the talk. You might also like to include a demonstration of OA journals and archives websites.

## Who should talk at this event?

High-level faculty, enthusiasts and evangelists of open access and authors who have published articles in open access journals and those who serve on open access journal editorial boards if available locally. We will provide up to date reference material on the subject and slides (which can be modified if necessary) in advance for the speakers to prepare the talk.

## Who should attend an Open Access Seminar?

1. All those who are involved in research and who are looking to publish their work with a view to gaining high visibility and therefore a high chance of being cited by their peers.

2. Any information specialists including librarians who are required to cater to the need of the researchers and scholars for scholarly publications.

## What facilities are needed to host this event?

The event organizer/s should book a venue at the institution whose size should be dictated by the level of attendance expected. Audio visual equipments (include a laptop with appropriate presenting software and a slide projector) will be provided by us. Microphones for the speakers depending on the size of the audience may be required. A live Internet connection if available will add to the impact of the seminar.

[Prag Foundation]

# Open Content Alliance: 80 Libraries Going Open

As on October 22, 2007 the Internet Archive's Open Content Alliance grew to 80 contributing libraries. OCA have scanned over 100,000 books now available to everyone. There are a total of over 250,000.

The Open Content Alliance (OCA) represents the collaborative efforts of a group of cultural, technology, nonprofit, and governmental organizations from around the world that will help build a permanent archive of multilingual digitized text and multimedia content. The OCA was conceived by the Internet Archive and Yahoo! in early 2005 as a way to offer broad, public access to a rich panorama of world culture.

The OCA archive will contain globally sourced digital collections, including multimedia content, representing the creative output of humankind.

All content in the OCA archive will be available through the website. In addition, Yahoo! will index all content stored by the OCA to make it available to the broadest set of Internet users. Finally, the OCA supports efforts by others to create and offer tools such as finding aids, catalogs, and indexes that will enhance the usability of the materials in the archive.

The OCA archive will contain globally sourced digital collections, including multimedia content, representing the creative output of humankind.

## Contributor

Contributors to the OCA include individuals or institutions who donate collections, services, facilities, tools, or funding to the OCA.

To inquire about becoming a contributor, please email: oca at archive dot org.

Initial OCA contributors located outside the United States include the European Archive, the National Archives in the United Kingdom, and the University of Toronto. The OCA will continue to solicit the participation of organizations from around the world.

## Content in the OCA Archive

What collections will be in the OCA archive initially?

The OCA will seed the archive with collections from the following organizations:

— European Archive

— Internet Archive

— National Archives (UK)

— O'Reilly Media

— Prelinger Archives

— University of California

— University of Toronto

The OCA will encourage the greatest possible degree of access to and reuse of collections in the archive, while respecting the rights of content owners and contributors. Generally, textual material will be free to read, and in most cases, available for saving or printing using formats such as PDF. Contributors to the OCA will determine the appropriate level of access to their content.

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For example, the collection of American literature contributed by the Internet Archive, the University of California, and Yahoo! carries no restrictions and may be downloaded and reused for any purpose.

Additionally, the OCA welcomes all efforts to create and offer tools (including finding aids, catalogs, and indexes) that will enhance the usability of the materials in the archive.

## Metadata formats

Metadata for all content in the OCA will be freely exposed to the public through formats such as the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH) and RSS.

## Copyrighted Content

The OCA is committed to respecting the copyrights of content owners. All content providers who contribute to the OCA must agree with the founding principles of the OCA, contained in the OCA Call for Participation, which describes how their materials and associated metadata will be accessed and used. Further, all contributors of collections can specify use restrictions on material that they contribute.

The OCA is committed to working with all types of content providers to grow its archive. The OCA has been in discussions with major publishers and the organizations that represent them in order to explore legal, sustainable business models through

which more copyrighted content can be made widely available. O'Reilly Media is one commercial publisher that has already agreed to make certain content available to the OCA. The OCA looks forward to continued dialogue with publishers in order to explore and build solutions that benefit the entire community of Internet users.

More at http://www.opencontentalliance.org/

# Open-Source News

by Amarjyoti Deka

## One Laptop Per Child

A $100 laptop – with a tablet screen, video camera, microphone, a graphics tablet, game-pad controllers, and a memory-card slot ? Yes, this is the dream of One Laptop Per Child (laptop.org) to develop a very low-cost, high-potential, extremely rugged computer for the two billion educationally underserved children in poor countries. And the dream comes true OLPC unveiled their dream machine XO in October.

XO provides regular wireless Internet connectivity as well as mesh networking, and its system software takes up one-fifth of its 1 GB of flash memory storage. The majority of the laptop's programs can be shared on the mesh network it supports. The XO comes close to the initiative's original vision of a $100 laptop (it currently costs $200 ) and in November the computer will be offered for sale to the public in industrialized countries for two weeks through OLPC's "Get 1, Give 1" program. Under the program, a consumer pays $400, which covers the cost of one XO laptop--complete with tax deduction--for the consumer and one for a student in an impoverished country. One more reason to be happy - XO is built from free and open-source software.

## Wikipedia in trouble?

The numbers of articles in Wikipedia has crossed 2 million marks in its English edition alone and the rate at which new articles are added to this popular open-source online encyclopedia is growing exponentially. Now Google simply propels almost all the searched key words to the available Wikipedia entries through their popularity driven algorithm. A new version of Firefox goes directly to Wikipedia.

Amidst its increased popularity, however, some of the Scholars have raised questions about correctness of the information in Wiki when their students started citing incorrect information from Wikipedia entries in the examination. In a recent article ,Prof. Neil L. Waters, Department of History at Middlebury College, VT , USA has pointed out an incident when almost half a dozen students had provided wrong information in a final examination about two topics – the Shimabara Rebellion of 1637-1638 and the Confucian thinker Ogyu Sorai from Wikipedia. To head off similar events in future, his department has adopted a policy wherein the department has decided not to accept Wikipedia as a valid citation. Since anyone can edit almost any page, there is always a possibility of incomplete information in place. “If the goal is more modest – to make Wikipedia more reliable than it is – then it seems to me that any change come at the expense of its open-source nature. Some sort of accountability for editors, as well as the originators of entries, would be a first step. ..” – said Prof Waters. A point to ponder, guys !

# Learning Linux from Scratch

From the days when installing a Linux distribution required a 300-page bible, to the days of Live CDs, the question "How do I learn Linux?" doesn't seem to have a ready answer. That's probably because the question itself is a little vague. If you want to learn how to use a Linux distribution, trying out one should help you. If as a network or system administrator you want to learn how to manage one, the SAG and NAG guides should get you started. But if you want to learn how a Linux distribution works, how it interacts with all the pieces of free software internally, then you need to lock yourself in a room for a weekend with a copy of Linux From Scratch (http://www.linuxfromscratch.org). Find out more from Mayank's interview with Gerard Beekmans, the LFS project initiator.

From the days when installing a Linux distribution required a 300-page bible, to the days of Live CDs, the question "How do I learn Linux?" doesn't seem to have a ready answer. That's probably because the question itself is a little vague. If you want to learn how to use a Linux distribution, trying out one should help you. If as a network or system administrator you want to learn how to manage one, the SAG and NAG guides should get you started. But if you want to learn how a Linux distribution works, how it interacts with all the pieces of free software internally, then you need to lock yourself in a room for a weekend with a copy of Linux From Scratch (http://www.linuxfromscratch.org). Find out more from Mayank's interview with Gerard Beekmans, the LFS project initiator.

Linux From Scratch or LFS as its popularly known, is actually a book, which takes you through the, pain staking and time consuming but very informative, process of putting together your own Linux distribution. The book which can be read online, or downloaded, or bought as printed book, has 9 chapters divided into 3 sections. The first chapter is an overview of the process. The second part of the book, takes you through the process of preparing a partition for the new system, getting all the required packages and creating a temporary system to work with. The third part helps to install several basic programs and setup scripts and files to get the system to boot and work.

Once through with this process, you'll end up with a system that's very secure, very flexible and also very compact. Some have managed to build an embedded system with LFS that's capable to run the Apache web server and takes less than 8 MB of disk space.

But the process doesn't stop here. As per the LFS FAQ (http://www.linuxfromscratch.org/faq/), "LFS is not intended to create your system as you want it. It's intended to be just enough to allow you to build your system as you want it. It's not an end, it's a beginning. When you're done with LFS, you've just started building your system." This is where Beyond Linux From Scratch or BLFS (http://www.linuxfromscratch.org/blfs/index.html) comes into picture.

BLFS is a much bigger manual of 43 chapters divided into 12 sections. They cover everything from installing system libraries to programming utilities, from network libraries to server applications, from simple and light-weight window managers like Fluxbox and Metacity to complex but popular ones such as KDE and GNOME. Choose what you'd want in your system and follow the instructions.

While traditionally LFS has required an existing Linux distribution to borrow several necessary files and libraries from, the project also has a Live CD (http://www.linuxfromscratch.org/livecd/index.html) that includes all the required files and the LFS manual as well.

The project has come a long way since its first release in 1999. It has several developers and users and various sub-projects. In an email interview I ask Gerard Beekmans, the guy who couldn't learn enough, how his little "note keeping" project has grown over the years.

Mayank Sharma: Could you please share a little about yourself? What do you do when not working on LFS? How you got started with computers?

Gerard Beekmans: I would have been around five or six years old. One evening I saw an ad on TV for some kind of computer system (might have been the Commodore 64 system that was popular at the time). I decided that I wanted to become a computer programmer.

What I do nowadays when I don't work on LFS? As far as work is concerned I'm the network admin for an ISP here in the area. I also do a fair bit of programming in Perl for another company (yes, twenty years after I saw that TV commercial I'm still a programmer).

When I don't work, I spend most my time climbing mountains and flying air planes.

MS: What prompted you to write Linux From Scratch?

GB: I started working with Linux about eight years ago. I was living in The Netherlands at the time (where I was born and

raised). After trying out a few distributions I couldn't settle on any one pre-packed system to fit my needs. I also didn't get the feeling I was learning everything I could learn about how Linux works, especially behind the scenes.

That's how the LFS project started. I was putting together a Linux system from scratch as an attempt to figure out how things worked. I wrote down the steps I took to get such a system up and running, thinking that there are probably other people out there who would be interested in it.

A few months into this project my immigration plans were finalized and I moved to Canada. I wasn't legally allowed to work for the first year, so I spent all my time on developing the LFS project.

MS: Computer Science students would definitely benefit from reading and trying out LFS. Who else do you think would benefit from the project?

GB: Anybody who wants to learn more about Linux, and at that, the behind the scenes things. In setting up an LFS system you need to become knowledgeable in just about every area of your system, which packages are required, which programs depend on what other programs. How to make it all fit together into a working system.

MS: LFS has been around forever. How has it grown over the years? It can now be extended with BLFS, hardened with HLFS, etc. Could you briefly run over the various sub-projects and how they came about?

GB: LFS has grown quite a bit. It started out as a HOWTO on what is no known as The Linux Documentation Project (TDLP). It quickly outgrew the HOWTO size and became a real book. In recent years we have published two of the editions as a real printed book.

Various sub-projects have sprung up over time:

BLFS - Beyond LFS. LFS provides the base of a system, but it's not ready for general use quite yet. You'll want to add more to your system, software you'll be using for every day work (desktop managers, email programs, web browsing programs, multimedia, and more).

ALFS - Automated LFS. There are a few different ways of automating the LFS builds. This is especially helpful for those who build LFS systems all the time.

HLFS - Hardened LFS - security enhanced. Plain LFS isn't always the most secure. HLFS takes the LFS base, applies the necessary patches and techniques in order to build a more secure version of the base system.

CLFS - Cross-LFS - multi-platform build system. Basic LFS assumes you build and run the Linux system on the same machine.CLFS provides the mechanism to build LFS on one machine and run it on a different one (i.e.: build on a Pentium, run on an Alpha).

MS: What's a Live CD doing in a project that teaches people how to roll their own system?

GB: The basic technique assumes you already have Linux installed on a computer and you use an unused partition to install LFS onto.

The Live CD is a fully functional LFS system with many bells and whistles. It can function as your base system, allowing you to use a completely unused hard drive to install LFS onto, without the need to first install a regular distribution onto it.

It also makes for a great rescue CD.

MS: Can a system cooked up with LFS be used as a regular desktop? Could I "install" this system onto another box?

GB: You could. Of course, LFS brings with it a bit of a time burden in that you need to manually upgrade to new versions of software. I run LFS on my own desktop and server machines. It works well, if you can dedicate the time to maintaining it.

MS: Since an LFS system technically isn't rpm or deb based, can packages be only installed from source?

GB: Generally, that is the case, yes. You could install rpm and dpkg programs and install RPM and DEB files. However, those packages are made especially for those distributions. Likely they won't function on other systems due to incompatible library versions for example.

However, I've been known to cut corners and grab a DEB file and use the pre-compiled programs inside of it.

MS: Is LFS really platform agnostic? Will it work similarly in both 32-bit and 64-bit environments?

GB: 64-bit requires a few changes here and there, but they are already documented. A lot of people are using 64-bit platforms and the LFS system is compiled as 64-bit to take advantage of it. There have been some hurdles, but most of them are on their way of becoming history.

MS: Thank you for your time Gerard.

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# Looking for Linux Tech-Support?

When I first ran my Linux distribution almost a decade ago, there weren't many places I could turn to for help. Whatever mailing list you tuned into, everybody seemed to be concerned with improving the Linux kernel or some other gibberish task. If ever, my newbie queries always returned back with a single word -- RTFM (http://en.wikipedia.org/wiki/RTFM). That's until Jeremy Garcia fresh into his first full-time Linux job, decided to give something back to the community. His website, LinuxQuestions.org, soon became the one-stop source for all Linux-related user queries.

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In his interview with Packt Columnist Mayank Sharma, the site's founder, Jeremy Garcia, discusses how LinuxQuestions.org has out grown its forum board-only image and spawned a hardware compatibility list, a wiki, a social bookmarking site, and a podcast.

In all these years I am yet to come across a single Linux user that hasn't, at one point or the other, benefited from LinuxQuestions. For the statistically inclined, LinuxQuestions's two hundred thousand registered members had posted over 2 million posts as per stats available in December last year!

Mayank Sharma: You must have been asked this a thousand times, but for our readers could you recap on the origins of LinuxQuestions.org?

Jeremy Garcia: I had been using Linux for a while and had just gotten my first full time Linux job. I wanted to give something back to a community that I felt had given me quite a bit. A short time later, LQ came to be. That was about 6 1/2 years ago and the growth of the site continues to amaze me.

MS: How has LQ evolved over the years to incorporate a wiki, podcast, radio, ISO downloads, and such?

JG: In addition to being an Open Source enthusiast I'm also a bit of a web enthusiast I guess, so I tend to keep up with the latest technologies. Where it makes sense I like to incorporate them into LQ. For instance our first podcast was in November of 2004. We also keep a close eye on the community and add new sites/features where we perceive a need. We try not to duplicate effort whenever possible, so we try to be very cognizant of what others are doing.

MS: Why do you think people still turn to forums for help in this age of IRC (Internet Relay Chat) and mailing lists?

JG: I'd say mailing lists and IRC (http://en.wikipedia.org/wiki/IRC) likely appeal to a different kind of user in general than web-based forums. I think there is clearly a desire for all of them and in the end the three are probably more complimentary then competitive.

MS: With all the good documentation floating around, do you think it's a good idea to RTFM a lazy newbie?

JG: We never RTFM at LQ. We're here to help, and pointing new users in the right direction and educating them on how to help themselves is a big part of that.

MS: Have you actually worked on the forum software that drives the website? I am asking because I am sure most of the queries that people have would have already been answered in an earlier thread. For example, do you have a better search?

JG: We constantly add new features based on member feedback and continually tweak things from a performance perspective. I think we were one of the first major forums to incorporate tagging for instance, which gives members an additional way to classify and find information. The main site search is currently based on MySQL FULLTEXT (http://dev.mysql.com/doc/refman/5.0/en/fulltext-search.html), but we are also investigating alternatives. A good search is a critical piece to a site with as much information as LQ.

MS: You've just launched TreoQuestions.org. Several other everyday devices like mobile phones are now running on Linux. When do you expect people will start pushing you for a dedicated forum for these?

JG: Rumors that Palm would be releasing a Linux-based Treo was actually the impetus for starting TQO. If other major Linux-based phones are released it's certainly possible that we'll work them in somehow.

MS: Of all the forums on LQ, the one on distributions seem to

have the most sub-forums. How do you ensure people get the correct answers to their queries? Is someone from the distro involved in any way?

JG: There are currently about 55 forums in total. Each distribution forum you see at LQ has official participation from that distribution. We welcome all distros to participate and any distro that currently doesn't have a forum at LQ but is interested in having one should feel free to contact me. As for making sure questions are answered, while there is of course no guarantee that you'll receive an answer we do try our best.

We make 0 reply threads very easy to find (we even have a 0 reply RSS feed) and many members make it a point to seek out questions that haven't been answered. We also have some heuristics in place to ensure unanswered threads are seen by as many people as possible.

MS: Apart from new users asking questions and experienced users offering help, any particular areas where you could use a hand?

JG: We're always looking for people to participate and can use help in a variety of places. For example, the LQ Wiki (http://wiki.linuxquestions.org/) is a great place for people to jump in and start contributing. We're also looking for contributors to our new Articles and Editorials section.

MS: Like I said earlier, LQ has grown to include a wiki, a radio show, etc. What can we look forward to next?

JG: We'll keep a close eye both on our community and the web in general and make additions as we see opportunities. We recently added social networking and social bookmarking aspects to the site and each member now has their own LQ Blog.

We hope to improve both the HCL (a Linux Hardware Compatibility List) and the search in the short term and also have some exciting new features to existing sections on the horizon, but what's beyond that I can't really say.

In the end, our members are what make the site what it is, so we'll continue to do whatever we can to serve their needs. Without them, after all, LQ would be nothing.

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Mayank Sharma is a freelance writer from New Delhi, India. He is blown away by the power of Free and Open Source Software and its usefulness to developing nations. Check out his blog at http://www.geekybodhi.net/.

## Open-Source News

by Amarjyoti Deka

### Every 4of5 Super Computer uses GNU Linux

According to a recent survey by Top500.org, more than 77% of all Super Computers are running on GNU Linux. In its bi-annual report Top500.org has mentioned that GNU/Linux dominating the list heavily, with 77.8% market share, as opposed to 12.0% for general UNIX variants, 0.8% for BSD, 0.6% for Mac Os, and Windows trailing at 0.4%. .Top500.org claims that its list is generated 'with the help of high-performance computer experts, computational scientists, manufacturers, and the Internet community in general who responded to a questionnaire we sent out'. Please note that PARAM - Padma, the terascale supercomputing system developed in India, uses IBM AIX version 5.1L, which is a variant of UNIX.

# Fair Use of Copyrighted Materials

Someone owns just about everything. Fair use lets you use their things. But not as much as you'd like to. Sometimes you have to ask for permission. Sometimes you are the owner - think about that!

Whether you are an author, a professor, or a student, many occasions will arise when you want to use the copyrighted works of others. This page discusses the main issues to consider when using copyrighted material, including how to determine whether a work is copyrighted, understanding fair use, and deciding whether you will need to ask permission for a particular use.

## How do I know if the work I want to use is copyrighted?



Copyright protection arises automatically the moment an original work is "fixed in a tangible medium of expression," in other words, the moment that text is written down or typed, or the moment a song is recorded.

A work does not need to be registered, published, or have a copyright notice on it to be protected by copyright. For works created in the U.S., copyright lasts from the moment a work is created until 70 years after the death of the author, except for works produced by a company/employer in which case the copyright lasts 95 years from the date of publication. Because copyright protection happens so easily, and lasts so long, you should assume that any work you want to use is copyrighted, unless it is very old or produced by the U.S. government.

Copyright has expired for works published in the United States before 1923, which means they are in the public domain. You are free to use or reproduce works in the public domain however you want. In addition, some works published between 1923 and 1963 may also be in the public domain, but this can only be determined on a case-by-case basis. All works created after 1963 are under copyright, except for work produced by the U.S. government, and state constitutions and laws. If you are trying to determine whether a work published during that time period is still under copyright, the Stanford Copyright Renewal Database is a good place to start.

## What is fair use?

Fair use allows limited use of copyrighted material without permission from the copyright holder for purposes such as criticism, parody, news reporting, research and scholarship, and teaching. There are four factors to consider when determining whether your use is a fair one. You must consider all the factors below, even though all the factors do not have to be in favor of a use to make it a fair one.

The four fair use factors are as follows:

1. The purpose and character of the use, including whether the use is of a commercial nature or is for nonprofit educational purposes;

2. The nature of the copyrighted work, such as whether the work is fiction or non-fiction, published or unpublished;

3. The amount of the work used in relation to the copyrighted work as a whole, such as using a poem in its entirety, or using one chapter from a long book;

4. The effect of the use upon the potential market for the copyrighted work.

For assistance in analyzing these factors for individual cases, see IUPUI's Fair Use Checklist (http://www.copyright.iupui.edu/checklistintro.htm).

Just because your use is for non-profit educational purposes does not automatically give you permission to copy and distribute other people's work. While many educational uses may be fair, you will probably need to evaluate your use each time you are reproducing copyrighted material — to show in your class, to hand out copies, to include in your writing, or to

post on CTools.

How do I know if I am allowed to use a work in my classroom?

The rules governing use of materials in a face to face classroom are broader than fair use, and those rules give you more leeway as far as what you are allowed to copy, display, and distribute in your classes. You may display or perform a work in your class without obtaining permission or doing a fair use evaluation when your use meets all three of these criteria:

The use is

• for instructional purposes

• in face-to-face teaching

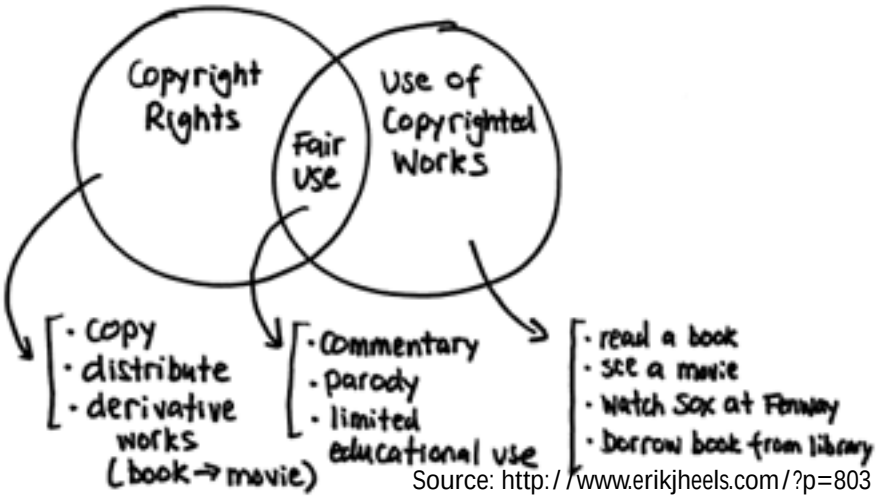
• at a nonprofit educational institution.

Uses you are allowed to make include

• showing all or part of a movie or television show

• including pictures, images, graphs, and charts in your lecture slides

• playing music




Source: http://www.erikjheels.com/?p=803

How do I know if I am allowed to post a work to CTools?

Because there are no exact rules governing fair use, you have to use your best judgment when deciding whether to post materials to CTools without permission. There is no specific number of chapters, paragraphs, or lines that is certainly fair (or unfair), nor are there specific percentages. Copying a single chapter from a book may be fine, while copying the entire book usually is not. Consider the four factors mentioned above, and try to determine honestly whether your use seems reasonable. You can check your judgment by answering this question: "If someone used this much of my work would I think it was fair, or would I want to be asked for permission?"

One option is to make the material available to your students through library reserves. If you choose to use electronic reserves, you can link to those resources from the CTools site.

Also remember that you should always use the password-protection features of CTools and limit site access to participants in your class only.

If the material is already freely available elsewhere on the web, or through library electronic resources, you can also use CTools to direct your students to a link. It is always legal to link to copyrighted material hosted elsewhere.

How do I know if I am allowed to include a work in my writing?

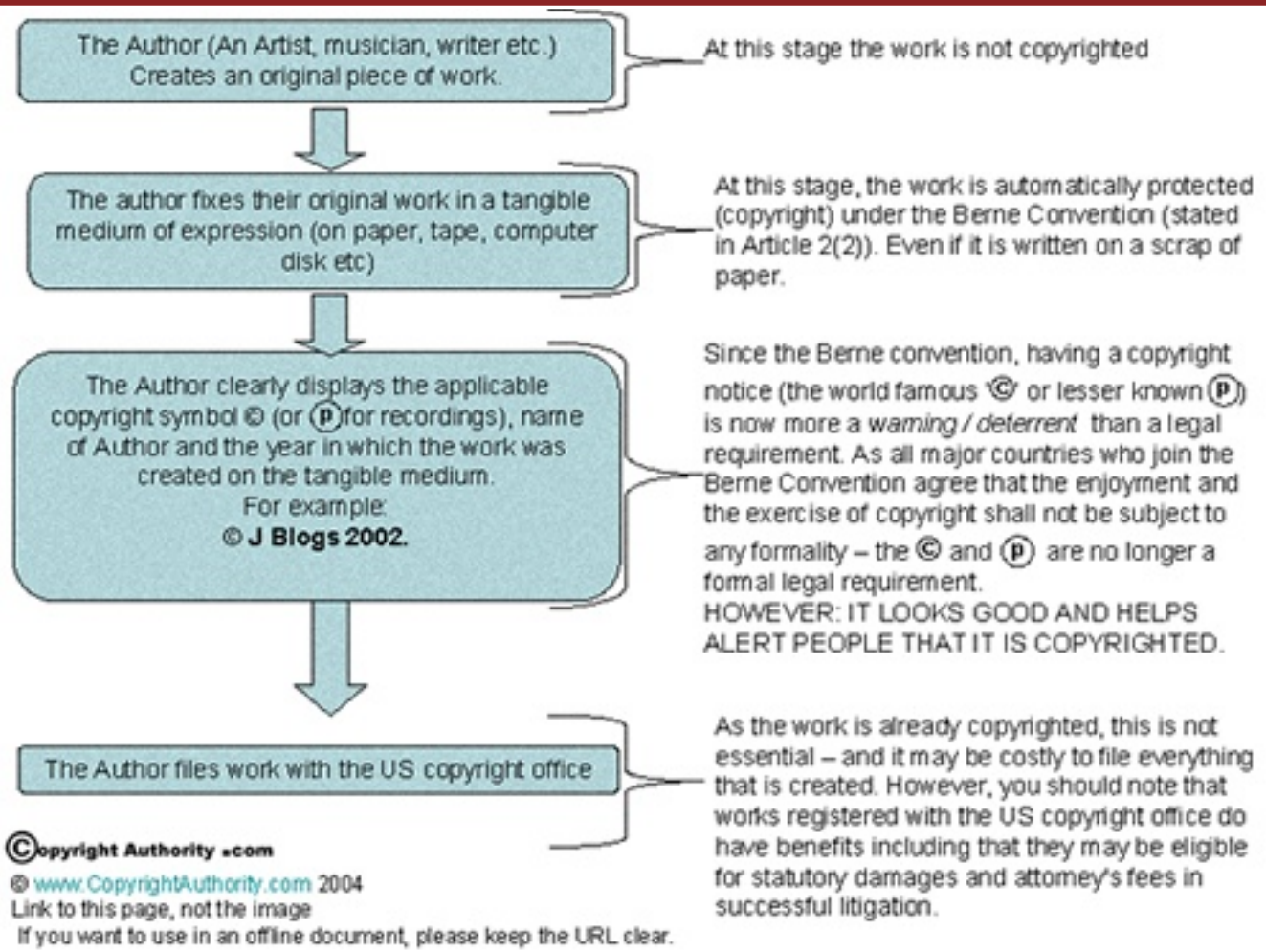
One goal of fair use is to allow the inclusion of quotations and excerpts in scholarly works without seeking permission. Some people believe that there are hard and fast numbers to determine how much of a work you may legally use – no more than X lines of a song, or no more than Y words of a text – but that is not the case. Every use is different, and must be considered individually.

Writing for publication If you are writing a book or article for publication, your publisher may want you to get permission for the use of all copyrighted material, even uses that you may think are fair. Because every publisher has its own policy on what it considers to be legally safe, it would be impractical for you to try to clear rights before you receive an offer for publication. However, you should be aware that you may be responsible for clearing permissions for publication and that there may be a cost associated with acquiring those rights.

Writing for personal or classroom use If you are writing a paper for a class and you have no intention of publishing it, you have much broader leeway as far as what you can use. Remember, however, that fair use is a concept in copyright law, and that it does not alter your academic obligation to provide proper citation for works that you use. Copyright infringement and plagiarism are two different things - see the English Department Note (http://www.lsa.umich.edu/english/undergraduate/plagNote.asp) on Plagiarism if you have any questions about plagiarism.

How do I know if I am allowed to use a work in my conference presentation?

The same fair use provisions that protect the use of quotations and excerpts in scholarly writing also protect those uses in




scholarly presentations. You may be able to include copyrighted text, images, or videos in your presentation slides.

However, if the conference organizers plan to use your presentation after it is over – for example, if video of your presentation is posted on the conference website, or if the slides are made freely available for download – your ability to include copyrighted work may be more limited. You can generally show more than you can share, and you should clarify these issues in advance so that you have time to clear rights for the copyrighted material in your presentation, create a second version for distribution that does not include the copyrighted material, or choose alternative material that you are free to use.

### What if I got the work from a website?

Works residing on a site that makes no mention of copyright should be presumed to be copyrighted; just because something is freely available on a website does not mean it is in the public domain. If a work is published online with a statement that it is in the public domain, you will have to judge whether or not these claims are trustworthy, keeping in mind that such claims will not protect you should a copyright holder object to your use.

You may encounter works online for which the author or creator specifically grants rights to use them, such as those released under a Creative Commons license (http://creativecommons.org/). A Creative Commons license allows you to make certain uses of a work without asking for permission, provided you follow the terms set by the creator.

### What if I created the work?

Unless you created the work as part of your job as an employee or under contract as a work for hire, you are the author and the initial copyright holder. However, if you have transferred your copyright to someone else, such as a journal publisher, you are no longer the copyright holder and may not have any privileges to use the work. If you are not sure, you should consult your publishing agreement to see if you have retained any rights.

If you have not retained rights to use your work, then you must treat it like any other copyrighted work — decide whether the use you want to make is a fair use, and if it isn't, then ask for permission.

### What if a student created the work?

Students hold the copyright to the academic works they create,

such as their papers, projects, theses, and dissertations. There are also privacy concerns related to the use of student work. If you wish to use student work, ask for permission.

What can I do if the use I want to make is not a fair use?

If you have determined that the use you want to make is not a fair use, you must ask for permission from the copyright holder. See the section on requesting permission (http://www.copyright.umich.edu/permission.html) to use copyrighted material for more information and sample request letters.

Source: http://www.copyright.umich.edu/using_copyrighted_material.html

This page was adapted from Peggy Hoon's Using Copyrighted Works in Your Teaching FAQ: Questions Faculty and Teaching Assistants Need to Ask Themselves Frequently available at http://www.knowyourcopyrights.org/resourcesfac/faq/, which was released under a Creative Commons Attribution-Non-Commercial 2.5 license.

## Evaluating Information found on the Internet

The WWW offers information and data from all over the world. Because so much information is available, and because that information can appear to be fairly anonymous, it is necessary to develop skills to evaluate what you find. When you use a research or academic library, the books, journals and other resources have already been evaluated by scholars, publishers and librarians. When you are using the Internet, none of this applies. Because anyone can write a Web page, documents of the widest range of quality, written by authors of the widest range of authority, are available on an even playing field. Excellent resources reside along side the most dubious. This document discusses the criteria by which scholars in most fields evaluate print information, and shows how the same criteria can be used to assess information found on the Internet.

What to consider:

Authorship | Publishing body | Point of view or bias | Referral to other sources | Verifiability | Currency

Authorship is perhaps the major criterion used in evaluating information. Who wrote this? When we look for information with some type of critical value, we want to know the basis of the authority with which the author speaks.

The publishing body also helps evaluate any kind of document you may be reading. In the print universe, this generally means that the author's manuscript has undergone screening in order to verify that it meets the standards or aims of the organization that serves as publisher.

Point of view or bias reminds us that information is rarely neutral. Because data is used in selective ways to form information, it generally represents a point of view. Every writer wants to prove his point, and will use the data and information that assists him in doing so.

Referral to and/or knowledge of the literature refers to the context in which the author situates his or her work. This reveals what the author knows about his or her discipline and its practices. This allows you to evaluate the author's scholarship or knowledge of trends in the area under discussion.

Accuracy or verifiability of details is an important part of the evaluation process, especially when you are reading the work of an unfamiliar author presented by an unfamiliar organization, or presented in a non-traditional way.

Currency refers to the timeliness of information. In printed documents, the date of publication is the first indicator of currency.

If you found information using one of the search engines available on the Internet, such as AltaVista or InfoSeek, a directory of the Internet such as Yahoo, or any of the services that rate World Wide Web pages, you need to know:

1. How the search engine decides the order in which it returns information requested. Some Internet search engines "sell" top space to advertisers. 2. That Internet search engines aren't like the databases found in libraries. Library databases include subject headings, abstracts, and other evaluative information created by information professionals to make searching more accurate. 3. How that search engine looks for information, and how often their information is updated.

All information, whether in print or by byte, needs to be evaluated by readers for authority, appropriateness, and other personal criteria for value. Never use information that you cannot verify. Look for other sources that can authenticate or corroborate what you find. Learn to be skeptical and then learn to trust your instincts.

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Read in details at http://www.library.jhu.edu/researchhelp/general/evaluating/index.html

# Software Freedom, underpinning your human rights

By Pia Waugh, President of SFI - 2007

In a time when our lives are increasingly dependent on technologies, it is important we take the time to consider the impact of technology on our lives, and the importance of ensuring technology isn't used to limit us, but rather to take us further along a path of opportunity, innovation and freedom for all people.

The United Nations Universal Declaration of Human Rights [1] is a set of basic human rights that most people would agree would be a bare minimum. Not often are our basic rights thought of in the context of technology, but as more and more our lives are dependent on technology, it is a rapidly growing concern. Technologies that matter to our freedom are used in our voting systems, our leisure, our work, education, art and our communication. What does this mean to you? It means that the basic human freedoms you take for granted are only as free as the technologies you use.




Transparent and sustainable technologies are vital to ensuring we can protect our freedoms. Think about e-Government systems such as electronic voting. When the systems running our voting is proprietary or closed, it means that we can't be sure what the software actually does, so how can we trust the results? The issues with the Diebold [2] voting systems in the US is testament [3] to the need for transparent systems that are trustworthy. Think about other software you use everyday that is proprietary and apply the fact that you can't be sure what it is actually doing! Does your email system send copies of your mail to a third party? Is your web browser, logging and automatically sending your browse history to someone? The most interesting case recently was when Sony purposely added spyware [4] to their music CDs that silently and automatically installed itself onto Microsoft Windows systems to search for piracy breaches. This behaviour has spawned a whole new wave of viruses and is a gross breach of privacy.

So what do I mean by transparent? Well some software gives you access to the source code, such as Free and Open Source Software (FOSS) which ensures that you can know (or get checked) what exactly a piece of software will do. It avoids nasty surprises, spyware, result rigging and all kinds of issues that we can't be absolutely sure to avoid in closed software. Proprietary software keeps the source code locked away from public scrutiny which means that there is no way to know exactly what the software actually does, and no way to trust it to safeguard your human rights. Transparent technologies are about ensuring you can trust the results and operation of your technology.

Sustainable technologies are also important, and the best example of the issue is proprietary data formats. Why should the generations of today not have access to the love letters, essays and poems of their youth? With many applications using proprietary data formats, we can't access the information in other programs or even future versions of the same program. When data is stored in data formats based on open standards [5], there is the ability for people everywhere to easily use and implement the standard and have your data accessible by more applications well into the future. Sustainable technologies are about ensuring access to knowledge forever.

As more and more of the worlds population starts using technology, getting online, and developing the next major life changing event of the future (such as the internet was for many of us), ensuring open, transparent and sustainable approaches are considered best practice is important. Important to a future where technology empowers everyone equally, where knowledge is forever, and where our basic human freedoms are strengthened by technology, not hampered.

Software Freedom Day is a global celebration and education of why transparent and sustainable technologies are now more important than ever. With over 200 teams in 60 countries participating, it is a fantastic event to get your schools and communities involved in. Go along to your local event or start your own event and meet a wide range of people, all working together to help ensure our freedoms are maintained by the technologies of tomorrow.

References:


[1] http://www.un.org/Overview/rights.html
[2] http://safevoting.org/videos/diebold_med.mov
[3] http://www.bradblog.com/?p=2433
[4] http://news.bbc.co.uk/2/hi/technology/4400148.stm
[5] http://www.openstandards.net/viewOSnet3C.jsp?showModuleName=about


# Open-Source News

## by Amarjyoti Deka

### Java with OpenOffice

Java is mainly required to use the new embedded Java technology based HSQLDB database engine, or to make use of accessibility and assistive technologies. And very recently Sun has started promoting OpenOffice.org through their site. Few of FOSS community raised concerned about a trend toward OOo becoming more proprietary and exclusive due to the increased dependency on Java and a possible results in independent developers losing interest in working on OOo as back as OOo 2.0. "..When it comes to the Java platform, there are plenty of pros, and there are a few cons, and they can be freely admitted by the people involved in the discussion. There is no sense in which the use of Java in the code there is trying to some way tie the code back to Sun. After all, Java itself is controlled by a democratic community. The specifications are set by individual experts and by corporations that belong to the Java community process. There is no conspiracy, folks. There is just the honest use of an appropriate technology..." asserts Simon Phipp, Sun Microsystems evangelist on Open Source. Sun is increasingly pushy promoting World's most popular and most portable office suite. FYI OpenOffice.org is based on StarOffice, an office suite developed by StarDivision and acquired by Sun Microsystems in August 1999.

### Microsoft Threatens Open Source once again

At a small meeting of Web 2.0 developers and partners on Oct. 1 at Microsoft's London office, Microsoft CEO Steve Ballmer once more attacked Linux and open source for violating Microsoft's patents.

Ballmer started with a neutral position in a response to questions on MS vs. Open Source "There will be other models for software. No one model will inherit the earth. We believe in the commercial software model," he said. But he could not help pounding on open source and Red Hat. "The only other thing I would say that is probably germane is we spend a lot of money ... on R & D," he said. "We've spent a lot of money licensing patents, when people come to us and say, 'Hey, this commercial piece of software violates our patent, our intellectual property, we'll either get a court judgment or we'll pay a big check.' And we are going to settle the matter. I think it is important that the open-source products also have an obligation to participate in the same way in the intellectual property regime."

## Linux Distributions - Facts and Figures (last Update: 21 November 07)

The figures in the third column of the table represent the average number of hits per day for last 3 months.

| | | |
|---|---|---|
| 1 | PCLinuxOS | 3267 |
| 2 | Ubuntu | 2528 |
| 3 | openSUSE | 1724 |
| 4 | Fedora | 1411 |
| 5 | Mint | 1184 |
| 6 | Sabayon | 1164 |
| 7 | Mandriva | 972 |
| 8 | Debian | 807 |
| 9 | MEPIS | 726 |
| 10 | Damn Small | 698 |
| 11 | Puppy | 482 |
| 12 | CentOS | 468 |
| 13 | Slackware | 466 |
| 14 | Kubuntu | 456 |
| 15 | Zenwalk | 454 |
| 16 | Gentoo | 418 |
| 17 | Arch | 413 |
| 18 | FreeBSD | 411 |
| 19 | Ubuntu Studio | 394 |
| 20 | KNOPPIX | 372 |

Source: http://distrowatch.com/



# In Focus: Fedora

http://fedoraproject.org/get-fedora

The Fedora Project is an openly-developed project designed by Red Hat, open for general participation, led by a meritocracy, following a set of project objectives. The goal of The Fedora Project is to work with the Linux community to build a complete, general purpose operating system exclusively from open source software. Development will be done in a public forum. The project will produce time-based releases of Fedora about 2-3 times a year, with a public release schedule. The Red Hat engineering team will continue to participate in building Fedora and will invite and encourage more outside participation than in past releases. By using this more open process, we hope to provide an operating system more in line with the ideals of free software and more appealing to the open source community.

## Welcome to Fedora 8

Fedora is a general purpose free operating environment based on Linux that offers the best combination of robust and latest software that exists in the free software world.

You can find a tour filled with pictures and videos of this exciting new release at http://fedoraproject.org/wiki/Tours/Fedora8.

## New in Fedora

This release includes significant new versions of many key components and technologies. The following sections provide a brief overview of major changes from the last release of Fedora.

## Spins

Fedora includes several different spins, which are variations of Fedora built from a specific set of software packages. Each spin has a combination of software to meet the requirements of a specific kind of end user. In addition to a very small boot.iso image for network installation, users have the following spin choices:

• A regular Fedora image for desktops, workstations, and server users. This spin provides a good upgrade path and similar environment for users of previous releases of Fedora.

• One of four Live images that can be run from a disc or USB flash device, and can be installed to hard disk as desired. See the "Live" section for more information about the Live images.

More custom spins are available at http://spins.fedoraproject.org. Remember that these Live images can be used on USB media via the livecd-iso-to-disk

utility available in the livecd-tools package.

## Features

• This release features GNOME 2.20. GNOME now includes mail notification in the Evolution mail client, the ability to fill in PDF forms in the Evince document viewer, improved file management, a revamped Appearance control panel applet, a revised help system, and many other enhancements.

• Online Desktop provides a desktop experience designed around online services. A preview of Online Desktop is provided via BigBoard, which is a optional sidebar in GNOME.

• KDE 3.5.8 is available in the KDE Live image as well as the regular DVD. The KDE 4 (Beta) Development Environment is available in the repository.

• Xfce 4.4.1 is available as part of this release.

• NetworkManager 0.7 provides improved wireless network management support. It includes support for multiple devices and provides the capability of system-wide configuration, among many other enhancements.

• PulseAudio is now installed and enabled by default. PulseAudio is an advanced sound server compatible with nearly all existing Linux sound systems. PulseAudio allows for hot-switching audio outputs, individual volume controls for each audio stream, networked audio, and more.

• CodecBuddy is now included, and promotes free, superior quality, open formats to end users trying to play multimedia content under patent encumbered or proprietary formats.

• Compiz Fusion, the compositing window manager that re-merges Compiz and Beryl, is installed by default. To enable Compiz Fusion in GNOME, use the System → Preferences → Desktop Effects tool. Ongoing, long term Xorg work continues to enable Compiz by default.

• The completely free and open source Java environment called IcedTea is installed by default. IcedTea is derived from OpenJDK, includes a browser plugin based on GCJ, and is available for both x86 and x86_64 architectures. GCJ is still the default on PPC architecture.

• OpenOffice.org 2.3, with many new features, is available as part of Fedora 8.

• Bluetooth devices and tools now have better graphical and system integration.

• Laptop users benefit from the "quirks" feature in HAL, including better suspend/resume and multimedia keyboard support.

• There is now improved power management thanks to both a tickless kernel in x86 and x86_64 architectures, and a reduction in unnecessary processor wakeups via powertop.

• This release of Fedora has a new look and feel, called Infinity, from the Fedora Art team.

• Nodoka, a fresh new GNOME theme created specially for Fedora, is available in this release.

• A new online browser home page, http://start.fedoraproject.org, appears in this release.

• Fedora continues to improve its many proactive security features, and FORTIFY_SOURCE has now been enhanced to cover C++ in addition to C, which prevents many security exploits.

• A brand new graphical firewall configuration tool, system-config-firewall, replaces system-config-securitylevel.

• This release offers Kiosk functionality via SELinux, among many new enhancements and security policy changes.

• The glibc package in Fedora 8 now has support for passwords using SHA256 and SHA512 hashing. Before only DES and MD5 were available. The tools to create passwords have not been extended yet, but if such passwords are created in others ways, glibc will recognize and honor them.

• Secure remote management capability is now provided for Xen, KVM, and QEMU in Fedora 8 virtualization.

• Eclipse 3.3 (Europa), a new release of the acclaimed development platform, is available as part of this release.

• In this release, the performance of yum, Pirut, and Pup have been significantly improved.

• The Add/Remove Programs tool, pirut, introduces a new graphical interface for managing software repositories. Use Edit → Repositories to enable/disable any of the installed software repositories.

• Live installations are faster and require a smaller root filesystem. The file system layout has also changed somewhat. System files for the Live images are now under LiveOS/, and a new README file has been provided as a short introduction to the live image.

• Transifex provides a web-based translation interface to allow users to contribute translation work for Fedora hosted projects as well as being able to provide translations to upstream directly to any upstream project.

• Integration of unique build IDs into Fedora's software building infrastructure now provides enhanced debugging capabilities and core dumps.

• Fedora now offers easier rebranding of Fedora derivatives via a generic-logos software package. Changes in Fedora's mirror structure also make creation of derivatives easier.

• The pam_console module usage has been removed in favor of access control via HAL, which modernizes the desktop.

• Fedora 8 features a 2.6.23 based kernel.

## Road Map

The proposed plans for the next release of Fedora are available at http://fedoraproject.org/wiki/RoadMap.

## Fedora 8 Review

A new release of Redhat-sponsored Fedora is always in the headlines of the Linux world as it is one of those distributions that push Linux forward by introducing exciting new features. Fedora has always been something like a test platform for Redhat's commercial product, the Enterprise Desktop/Server, however recently we have seen some changes suggesting that Fedora has decided to mature and try to become a good alternative for the average Linux desktop user. I have used Fedora 7 for about 4 months myself until I moved over to Arch Linux so in this review I will try to point out what has been improved other the older versions.




### Installation

To install Fedora 8 I decided to download the Gnome liveCD that includes a hard disk installer. The full DVD uses Redhat's Anaconda installer so expect excellent hardware detection and easy installation. The liveCD install was pretty easy as well, it just offers you some basic options, partition options and root password and then copies the image to the hard disk. It took about 10 minutes to install in my system. After installation and during the first boot you will meet yet another wizard in order to set some more settings like network, firewall, SELinux and finally add a normal user. Complete that and you are right at your new Fedora 8 desktop.

### First impression / Looks

The first think I noticed after booting Fedora for the first time is the amazing new look. Fedora is one of the distros that didn't care about looks originally but with the two last releases they have done a great job. Both the boot image and the login screen and very polished. After you login you can see the new default wallpaper (which is much better than the one in Fedora 7 in my opinion) which actually consists of many different colored images that swap depending on the time of the day. A pretty good idea don't you think? The new Gnome theme called Nodoka is also very polished as they have kept all nice looking features from Fedora 7 and improved the rest, for example the Metacity theme. Compiz Fusion is also installed by and can be easily enabled in systems that support it out of the box. For the rest you still need to do some work as I'll explain below. To sum it up, I feel that Fedora 8 is an aesthetically pleasing distribution, looking very professional and polished at least in the Gnome desktop (I haven't tried KDE but from the screenshots I could say it looks quite good too).

### Configuration

Fedora 8 is the first distribution that not only worked fine with my Geforce 8800GTS but found and configured my new widescreen monitor using the right resolution of 1680x1050. However it uses the open source nv driver, so I had to install the closed source nvidia driver in order to use Compiz. Unfortunately even though Fedora has a graphical tool for configuring the X server and includes the simple tool first shown in Ubuntu to enable Desktop effects (Compiz) neither of those inform you that you need restricted drivers in order to fully use your hardware. The solution is pretty simple, you have to add the Livna repository and install the nvidia-kmod package that will provide you with both the nVidia driver and a nice little tool in order to enable AIGLX compositing. However even though the solution is simple I think that Fedora should use something like Ubuntu's Restricted Drivers tools in order to inform the user what they need to install in order to use hardware which is not supported by open source drivers.

Fedora does not include any kind of control panel but has

some utilities to control settings like the firewall, SELinux, users and groups, system services and more. The system uses 2.6.23 Linux kernel and Gnome 2.20.1. Preinstalled you will find the usual pack of applications that come with the Gnome desktop, for example Mozilla Firefox, Evolution, Pidgin, Totem and Tomboy notes. Strangely enough the liveCD does not come with OpenOffice 2.3 but with Abiword and Gnumeric instead, probably due to limited space. Great for me as I usually remove OpenOffice and install those two anyway! Another pleasant surprise has the inclusion of Transmission by default. Transmission is a lightweight GTK-based BitTorrent client, one of the best out there and much better than the Gnome Bittorrent client that is offered in other Gnome distros like Ubuntu. I also found a cool blog utility installed that lets you post to your blog from your desktop (it supports most well known sites) as well as a "Phone manager" that seems to deal with mobile phones which however I couldn't test as I use an old Nokia 2600 as it is the only one that won't die after kicking it around or throwing it off you pocket for fun. :)



One interesting new feature in Fedora 8 is the fact that PulseAudio is now installed and enabled by default. In the release notes you can learn that "PulseAudio allows for hot-switching audio outputs, individual volume controls for each audio stream, networked audio, and more". In simple words? No more fighting between your applications for which gets to use your sound card, plug your USB headsets and play (not pray). This is probably something all major Linux distros will use sooner or later and it is nice to see it in Fedora. I was also pleased to see that ntfs-3g was pre-installed, allowing read/write access to my external hard disk which uses that file system.

## Multimedia / Package management

Fedora uses .rpm format and the yum package manager. Although many people dislike RPM based distros (especially those that had to use them in the old times and got through the dependencies hell) things have improved. Package management in Fedora is solid and especially in Fedora 8 *fast*. Speed has improved a lot since the last version something that becomes very obvious to old Fedora users. Generally the package management is working really well as well as the graphical tool and the update manager, so there was nothing that left me unsatisfied.

In the other hand multimedia support is lacking badly. Fedora has included a new tool they call "CodecBuddy" that is supposed to take care of codec installation. Fantastic. But does it work? Well it turns out it doesn't work. First I tried to play an mp3 file, so easily enough the codec program told me I needed extra plugins and asked me to install Fluendo mp3 plugin which I did. So far so good. Next came an .avi file with XviD codec. Codec buddy came up again and told that to see that movie I had to get "MPEG Playback Bundle". This could be nice if that bundle didn't *cost* $16! You beg I pardon? Well as it turns out that "CodecBuddy" thingie is a program made by Fluendo and its main purpose is making Fluendo money. I can't understand why it points me to buy something when I am trying to play a file encoded with the open source "Xvid" codec. Next I tried playing a .wmv file. Well it turns out you can't play .wmv files in Linux as CodecBuddy failed to find something I can get in order to playback my movie.

Don't get me wrong I understand the reasons and the philosophy behind the fact that many distributions do not include these codecs. I am the last that would ask to include them by default. But Fedora has created a little beast here. Instead of some nice wiki page with instructions they included an application that doesn't work and when it does it insists that the user needs to pay in order to play his files. Sure open source formats are superior and users should be educated in order to use them, but many files out there use restricted formats and we should try to make it easy for them to play them under Linux. "CodecBuddy" is a complete disaster that should have not been included in Fedora 8. The developers should look at openSUSE 10.3 and Ubuntu to see how codec installation should be implemented.

As for the solution to that mess? Just do it the old ways. Ignore CodecBuddy and open up the package manager to download and install the necessary packages from Livna repository. In the other hand Flash can be installed just by visiting Abode's site as they offer the option to add a yum repository and the follow the instructions there. However there is not a way to inform user to do that as when Firefox finds Flash in a page he opens the plugin wizard, downloads the plugin and... fails.

## Conclusion

## Distrowatch

There is no doubt Fedora 8 is an excellent distribution. Redhat is a major contributor to Linux and you can see that in Fedora which includes many exciting new features. Fedora 8 is very stable, the package management is one of the best out there, security is tight as always and finally the presentation have improved to make one of the best looking Gnome distributions I have seen. However in the eyes of the average desktop user Fedora fails miserably. He will have to go hunting for third party repositories to get nVidia or Ati drivers installed and then get confused by the new codec tool. He will even have to go searching the web to find out why Flash fails when trying to install it in Firefox.

I consider myself an advanced Linux user that know his way around. Is Fedora right for me? I love it. Would I suggest it to a new Linux user or your average Joe? No way. Thats not necessarily a bad thing but I have decided that I would write these reviews from they eyes of a simple Linux user, one that likes free software and want to stop using Windows. Fedora 8 is great, not for the masses though.

Source: http://www.dvd-guides.com/content/view/224/104/


OpenDisc is a collection of high quality free and open source software for all Microsoft Windows users.

OpenDisc
high quality open source software

The programs cover a wide range of tasks such as word processing, presentations, email, web browsing, web design, image editing, anti virus, instant messaging and games. We include only the highest quality programs, which have been screened and tested for security, stability and overall quality.

Feel free to copy and distribute OpenDisc to your friends, family, workplace and school. For updates visit www.theopendisc.com

Version 07.10 includes:

Design · Blender · GIMP · Inkscape · Nvu · Scribus · Tux Paint · Games · Battle for Wesnoth · Enigma · Neverball · Sokoban YASC · Internet · Azureus · FileZilla · Firefox · HTTrack · Pidgin · RSSOwl · SeaMonkey · Thunderbird · TightVNC · WinSCP · Multimedia · Audacity · Celestia · Really Slick Screensavers · Stellarium · Productivity · MoinMoin · Notepad2 · OpenOffice · PDFCreator · Utilities · 7zip · Abakt · ClamWin · GTK+ · HealthMonitor · Workrave


Read more about OpenDisc in page no. 39

# Linux Skill Certification

A widely-recognized Linux certification ensures that IT professionals have a means of demonstrating their Linux skills to potential employers while assuring customers that they are receiving knowledgeable support. There are a number of benefits to obtaining a Linux certification for both yourself, in advancing your professional career, and to your employer.

LPI is an independent, non-profit corporation focusing solely on setting certification standards. LPI is completely vendor independent and distribution neutral and tests have been developed specifically to test competence with all versions of Linux. Red Hat and Novell have their own certification program which focuses exclusively on their distribution, Red Hat and SUSE Linux, respectively.

## HOW DO I PREPARE FOR LPI EXAMS?

LPI specifies only the standards for certification and does not specify at all how you prepare for certification. You can simply look at the objectives and study on your own, read books or take training classes.

In early 2002 LPI initiated the LPI Approved Training Materials (LPI ATM) program. The intent of this program is to offer an open, objective method through which courseware can be checked for completeness of their coverage of the objectives in the LPIC program. Courseware that has achieved approval through the LPI ATM program can be used with confidence that it is properly covering the contents of the LPI exams.

## PROCEDURE FOR TAKING EXAMS

LPI exams are designed to be taken in almost every country in the world, in a manner that fits your schedule. Just follow the five steps listed in this article.

### Step 1: Register

Regardless of how or where you take your LPI exams, you must register online to receive an LPI identification number first. You must provide your LPI ID to the test centres when registering for an exam. Registration is free of charge and is completed here at the LPI web site.

### Step 2: Choose Your Program

LPI is developing multiple certification programs at multiple levels. It is important to choose the right program in which you want to be certified. There are currently 2 exams for the first level (LPIC1) and 2 exams for the second (LPIC2).

### Step 3: Understand LPI Policies

It is important that anyone planning to take LPI exams is aware of our policies on issues such as exam re-takes and expiry. Please read and understand these policies before taking LPI exams at the LPI web site.

### Step 4: Schedule to Take an Exam

LPI exams are delivered through a number of different methods; choose one that's most convenient:

1. LPI exams are delivered through VUE (www.pearsonvue.com) and Thomson Prometric (www.prometric.com). Visit their web pages to find a testing centre near you.
2. LPI holds exam labs at major Linux and IT trades shows and conferences around the world where a number of paper exams are made available for candidates.

### Step 5: Take the Exam!

If you're taking a computer-delivered exam, you will receive your exam results immediately upon completion. Within one or two days your results will appear on this site in the member area. Please make sure the test vendor has the correct LPI ID on file or we will not see your results on this site. If taking a paper exam you should receive results in about two weeks.

### Exam Costs

Depending on where you take LPI exams, the cost will usually be the equivalent of $150 US dollars. However, please check with your local affiliate for regional prices.

### Exam Scoring

For information about interpreting your scores, please see our entry on the subject. If you have additional questions, please email info@lpi.org.

### Receiving Your Certification

Once you have passed all the required exams to achieve a certification, you will be automatically notified by email, at the email address you provided when you obtained your LPI identification number. Within four to eight weeks of receiving this email, you should receive, by post, your paper certificate and plastic LPI wallet card.

Contact us if you need help; we have limited fund to help for LPIC2. See page 45 for recommended book.

# PC Component Watch

## by Sanjay Dutta

In our previous article 'Essential Components of a Desktop Computer' in the inaugural edition of this magazine I tried to give a brief overview of the components of a PC and the prevailing market prices for typical products. In the world of computers, new technologies, new hardware and new software come and go at a rapid pace. This results in a fast changing market scenario. A good example is the case of computer's main memory (RAM). In my last article I said that DDR was the commonly used RAM. However these days DDR2 has become the standard memory type and DDR is on its way to obsolescence.

In this article I will try to give you some information about the computer market as of now.

### The CPU

There are so many CPU types to choose from that it sometimes becomes very confusing. In the high end Intel has surged ahead of AMD through their Core2 Duo and Core2 Quad lines of processors. In the low budget segment the choice is between AMD Sempron and Intel Celeron. Their prices have hit rock bottom and a Sempron can be had for as little as Rs. 1600. The prices of dual core CPUs have fallen to such a level that someone with a lower middle budget must go for one. I recommend either Athlon 64 X2 4200+ for about Rs. 3,500 or Pentium Dual Core E2140 for about a thousand rupees more. Athlon 64 (single core), Pentium 4 and Pentium D CPUs are still available in the market but stay away from them. They are already obsolete. For a buyer in the upper middle budget I will recommend Core2 Duo 4400 or Athlon X2 5200+. For those without any budget constraint Intel Core2 Quad 6750, priced at about Rs. 12,000 is the ideal one which is also the fastest available. According to a very recent news AMD also has marketed a quad core processor called Phenom which performs at par with Intel Core2 Quad.

The first thing about the choice of motherboard is, stay away from those running on old DDR memory. So the first thing to consider is, does the motherboard support DDR2? For the AMD CPUs there are two choices of chipsets, NVidia NForce based or AMD based. Both the chipsets are good but for reliability and good performance you have to choose a motherboard maker of good repute. Asus, Gigabyte and MSI are the top three brands in the market. In case of Intel the chipsets are named like 945G, 975P, P35, etc. where G stands for the ones with graphics integrated. If you are on a budget choose an Intel original motherboard and if you want the best then go for the Asus P35 model. DDR2 based Motherboard prices start at about Rs. 3,000.

As I already told you, the newer chipsets are designed to use DDR2. DDR3 has already arrived but it will take time for this memory to be the industry standard. How much RAM do you need? Today a bare minimum requirement has risen to 512 Megabytes to use the PC comfortably with the latest operating systems you will need 1 Gigabyte or more. DDR2 memory runs at various stock speeds, e.g. 533 MHz, 667 MHz, 800 MHz etc. The low and lower middle budget buyers can stick to the 667 MHz variety. The higher middle and high budget buyers can go for faster ones. Kingston, Transcend etc. are the commonly available brands of RAM.

For storage requirement of a PC the Hard Disk Drive (HDD) must be of reasonable capacity. Today, the minimum size of a HDD you should go for should be 160 Gigabytes. Seagate is still the largest selling brand of Hard Disks in India. Old ATA type hard disks are hard to find today and you should also not bother about them. Go for a fast SATA (serial ATA) hard disk of at least 7200 rpm. Those keeping lots of music and videos in their computers should buy a hard disk of at least 300 GB capacity. Plain old CD or DVD Drives are not recommended because the price of DVD writers has fallen to very low levels. The DVD writer should support all DVD standards, like DVD+R, DVD–R, DVD-DL etc. You can buy one for about Rs. 1,500. DVD will very soon be replaced by Blue Ray or HD-DVD. They are still very expensive, so wait till their prices fall to affordable levels. For transporting data, Pen Drive is the preferred medium. For about Rs. 800 a 2 GB pen drive can be bought.

About SMPS, keyboard and mouse what I had wretten before still applies. You can raise the minimum wattage required in the SMPS to 400 watts.

In case of the Monitor, the 17 inch CRT is available for as low as Rs. 4,000 plus a few. These are recommended for the low budget buyers. For the middle budget buyers an LCD monitor of 17 inch diagonal size, priced at about Rs. 8,500, is recommended. If you are on middle budget then go for 17 inch wide if you use the PC more for entertainment purposes like playing games and watching videos. If you do a lot of word-processing or internet surfing, then go for 17 inch normal. For the higher budget buyer a 19 inch wide is recommended which can be had for about Rs. 11,000.

## Different configurations for different needs

The following is the revised list of some of the components for various budgets:

| Budget | CPU | RAM | HDD | CD/DVD | Monitor | Others |
|---|---|---|---|---|---|---|
| Low | Celeron or Sempron | 512 MB DDR2 | 160 GB | DVD W | 17" CRT | UPS, Printer |
| Lower Medium | Athlon64 X2 or Pentium Dual Core | 1 GB DDR2 | 160 GB | DVD W | 17" LCD | -do- |
| Upper Medium | AthlonX2 or Core2 Duo | 2 GB DDR2 | 200 GB | DVD W | 17" LCD | Add-on Sound and Video |
| High | Core2 Quad or Phenom | 2 GB DDR3 | 300 GB | Blue Ray/HD-DVD | 19" LCD | -do- |

## Ultimate Linux Box 2007
### by Nicholas Petreley

Motherboard
ASUS Striker Extreme LGA 775 NVIDIA nForce 680i SLI ATX
6 x 3.0Gb/s SATA (internal)
2 x 3.0Gb/s SATA (external)
1333/1066/800MHz front side bus
DDR2 800
Maximum 8GB memory, dual-channel
Three PCI Express slots, two of them for SLI
Dual 10/100/1000Mbps LAN
SupremeFX audio
Onboard switches (CMOS clear, Power, Reset)

CPU
Intel Core 2 Quad Q6600 Kentsfield 2.4GHz
Model BX80562Q6600
Socket: LGA 775
FSB: 1,066MHz

L1 Cache: 64KB+64KB
L2 Cache: 2 x 4MB
MMX, SSE, SSE2, SSE3, SSE4, EM64T

Memory
Patriot eXtreme Performance 4GB (2 x 2GB modules) 240-pin DDR2 SDRAM
Timing 5-5-5-12

RAID
3ware 9650SE-4LPML PCI Express 4 SATA II controller card
RAID: 0, 1, 5, 10, Single, JBOD
3ware
RDC-SATA Internal RAID Drive Cage
Three cooling fans
Four drives
Requires three 5.25" drive form-factor slots

Disk Drives
Western Digital WD3200AAKS 320GB 3.0Gbps drives x 4
NEC Black 16X DVD+R Burner

Display Card
PNY VCG8800UXPB GeForce 8800Ultra
Memory: 768MB 384-bit GDDR3
PCI Express x16

Power Supply
Thermaltake W0106RU 700-Watt power supply
Modular cables
SLI certified

Case
Cooler Master Stacker 830 ATX Full Tower
Nine 5.25" drive bays
Four 3.5" drive bays
Front ports: USB, audio, IEEE 1394
Front 120mm fan
Rear 120mm fan
Up to four 120mm fans in side panel

Monitor
Acer AL2416WBsd 24" 5ms DVI Widescreen LCD
Brightness: 400 cd/m2
Contrast: 1000:1

Colors: 16.7 million
Pitch: 0.27mm
Recommend resolution: 1920x1200

Viewing angle: 160 degrees horiz and vert

Keyboard
Microsoft Natural 4000 Black Wired Keyboard

Mouse
Logitech G5 Laser Mouse
Wired connection
User-chosen weights
On-mouse adjustable sensitivity

Speakers
Creative I-TRIGUE L3800 48 Watts 2.1 Speakers
Frequency response: 30Hz ~ 20kHz
Signal noise ratio: 80dB

Source: Linux Journal, Issue 161, September 2007 available at http://www.linuxjournal.com/print/9788




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email: contact@pragfoundation.net

Our Current Services in collaboration with Alliance for Community Capacity Building in Northeast India (a charity registered in England):

1. Training and seminars on information access and open access movement particularly suitable for scholars and acedemicians in all subject areas.

2. Conduct regular workshops on Free and Open Source Software (FOSS) applications e.g., introduction to OpenOffice.org, graphics, multimedia, games and educational applications aimed at general users.

3. Conduct regular workshops on GNU/Linux covering introduction to GNU/Linux, configuration, program installation, update and using the tools, cross-installation of several GNU/Linux distribution like Ubuntu, Fedora and SuSE, comparison of Linux and Windows, localization, and career opportunity. We provide Self-learning material and support to IT trainees who wish to study towards Linux Professional Institute (LPI) certification. We provide LPI approved learning material from internationally acrediated agencies for self-learning using facilities we provide.

4. Build and host websites for non-profit organisations including teaching institutions at not for profit basis. We host or provide consultancy on 'Open Access' journal and archive sites for higher education instituitions using free software at a nominal cost.

5. Distribute both Window and Linux based popular Free and Open Source Software (FOSS) such as OpenOffice.org, a complete office suite alternative to MS Office, GIMP, a graphic programme alternative to Adobe, and other educational software. In addition, latest versions of popular Linux distribution are also be available.

6. We build low cost Linux system (with optimal hardware configuration) preinstalled with quality free and open source office and productivity software to suit home and office computing need and your budget. Students, teachers and enterpreneures on tight budget can avail this service if want to bypass the middlemen. You pay only the hardware component cost plus a small service fee.

We can conduct workshops and seminars at your institution which can be tailor made to suit novice to relatively experienced users. We make provisions for necessary audio visual equipemnets and laptops, so you need only to enrole the participants, arrange suitable venue and fix dates in consulation with us. Contact any member of the project committee or visit our website or mail us at contact@pragfoundation.net for further details and how to benefit from our programmes.

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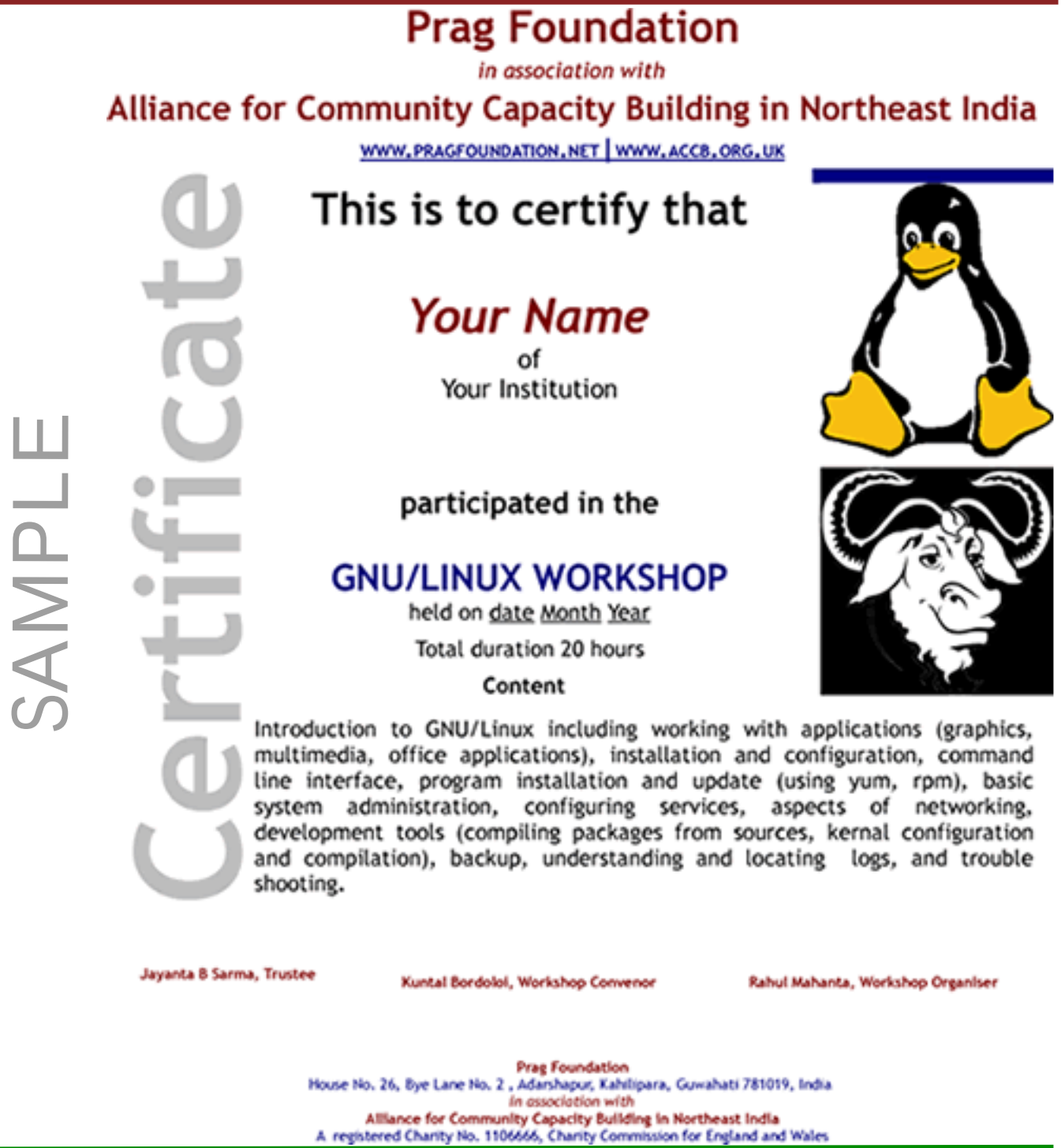
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SAMPLE

Certificate

This is to certify that

Your Name

of

Your Institution

participated in the

GNU/LINUX WORKSHOP

held on date Month Year

Total duration 20 hours

Content

Introduction to GNU/Linux including working with applications (graphics, multimedia, office applications), installation and configuration, command line interface, program installation and update (using yum, rpm), basic system administration, configuring services, aspects of networking, development tools (compiling packages from sources, kernal configuration and compilation), backup, understanding and locating logs, and trouble shooting.

Jayanta B Sarma, Trustee

Kuntal Bordoloi, Workshop Convenor

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## GNU/LINUX Workshop

To participate in our next GNU/Linux workshop contact at contact@pragfoundation.net. Course fee is Rs. 1500 which includes a CD containing manuals and other useful resources. The course is suitable for novices as well as new linux users. We also recommend the workshop to those who want to explore Linux System Administration as a career option and do LPI certification. Successful completion will earn you a colourful GNU/Linux certificate.

"I attended the GNU/LINUX workshop conducted by ACCB. I, being a computer science student have been through the operating system course in my curriculum where I used Linux in the lab with hardly any knowledge about its workings and functions. After attending the course I gained the basic idea of workings of Linux. This course helped me a lot to build a foundation on Linux. Linux as we know is a very vast and strong operating system; mastering it completely is not possible. The course not only taught me the basics of Linux but also the right way to learn Linux.I feel lucky that I got to attend this short but effective crash course on Linux which paved the way for learning more of LINUX". - Pranamita Baishya (pranamita_911@yahoo.co.in)

# Input Schemes and Keyboard Layouts

## Typing in Assamese/Bengali on Windows platforms using 'open source' key board layout and fonts

Note: Most major distributions also offer or include free Bengali language packages, which include keyboards and fonts. We do not want Window user to be left out of the excitement of being able to type in Assamese/Bengali - hence this 'Know How' on MS Window in this 'Open-Source Northeast'.

For typing in Assamese/Bengali on Windows platforms, use one of the following options:

• Windows XP Service Pack 2 Keyboard Layout: The Windows XP Service Pack 2 upgrade features Bengali Unicode support. After the upgrade, the keyboard layout may be selected by navigating to: Control Panel > System > Languages. (Click on "How to Install Fonts and Layouts" in the left navigation bar for more information). The keyboard may be viewed with the On-screen Keyboard Viewer (Start > Program Files > Utilities > Accessibility > On Screen Keyboard). See Microsoft's Keyboard Layouts page to view various layouts available for Windows XP/2000/Server 2003. Microsoft's Keyboard Layout Creator allows the user to create a new keyboard, if the default keyboard layout is undesirable. Note: If Windows XP Service Pack 2 is not installed, Bengali will not appear as an option in the language support menu.

• Bengali Indic IME: Microsoft's BhashaIndia site provides a set of phonetic input method editors (IMEs) for Hindi, Bengali, Gujarati, Kannada, Malayalam, and Tamil. The IME is a separate application that must be run alongside Microsoft Office software. Compatible with Windows 2000/XP.

• Ekusheyr Shadinota: Free Bangla and Assamese keyboard interfaces for Microsoft Windows 2000/XP/2003 developed by Ekushey.org, currently offering five different keyboard layouts: Bangla Unicode, Rupali, iNSCRIPT, Probhat, National, and Uni Joy (a modification of the popular Bijoy layout). Compatible with the new Unicode 4.1.0 implementation of Bengali.

• OpenOffice.org: A free, open-source office suite project that is Unicode-savvy, OpenType enabled, and able to run on Linux/Sparc, Mac OS X (with X11), and all modern Windows platforms, including Windows 95.

However, if not already, you first need to enable South Asian Language support for which you may need the MS Window XP installation CD. Follow the following steps:

## Installing Fonts and Keyboard Layouts

In order to type in South Asian languages, you need to setup a keyboard. Use the following instructions to activate a keyboard. Most contemporary operating systems come with fonts that can display South Asian languages. If you would like to add other fonts, use the "Installing Fonts" instructions below. If you are just learning how to type in a South Asian language, you may want to activate an on-screen keyboard.

### Enabling South Asian Language Support:

#### Windows XP:

1. Navigate to: Start > Control Panel > Regional and Language Options

2. Select the "Languages" tab

3. Check "Install files for complex script and right-to-left languages (including Thai) and click "Ok." Windows may require you to insert the original installation CD to complete the installation.

4. Reboot the computer.

### Activating Keyboard Layouts:

#### Windows XP:

1. Complete "Enabling South Asian Language Support" above.

2. Navigate to: Start > Control Panel > Language and Regional Options

3. In the dialog window, select the "Languages" tab.

4. Click on "Details" under the "Text Services and Input Languages" header.

5. Under the "Installed Services" menu, select "Add." This will take you to a dialog window which will allow you to add language input services, including assorted keyboard layouts for South Asian languages. Select the language under "Input language." Press "OK."

6. Repeat steps 4 and 5 to add additional languages. Click "OK" and then "OK" again.

7. At the bottom of your screen you will see a Language bar, which probably says "EN" for English. Click it to change the input language. You can also move between languages by pressing "Alt-Left Shift"

## Installing Fonts:

Windows 2000 / XP:

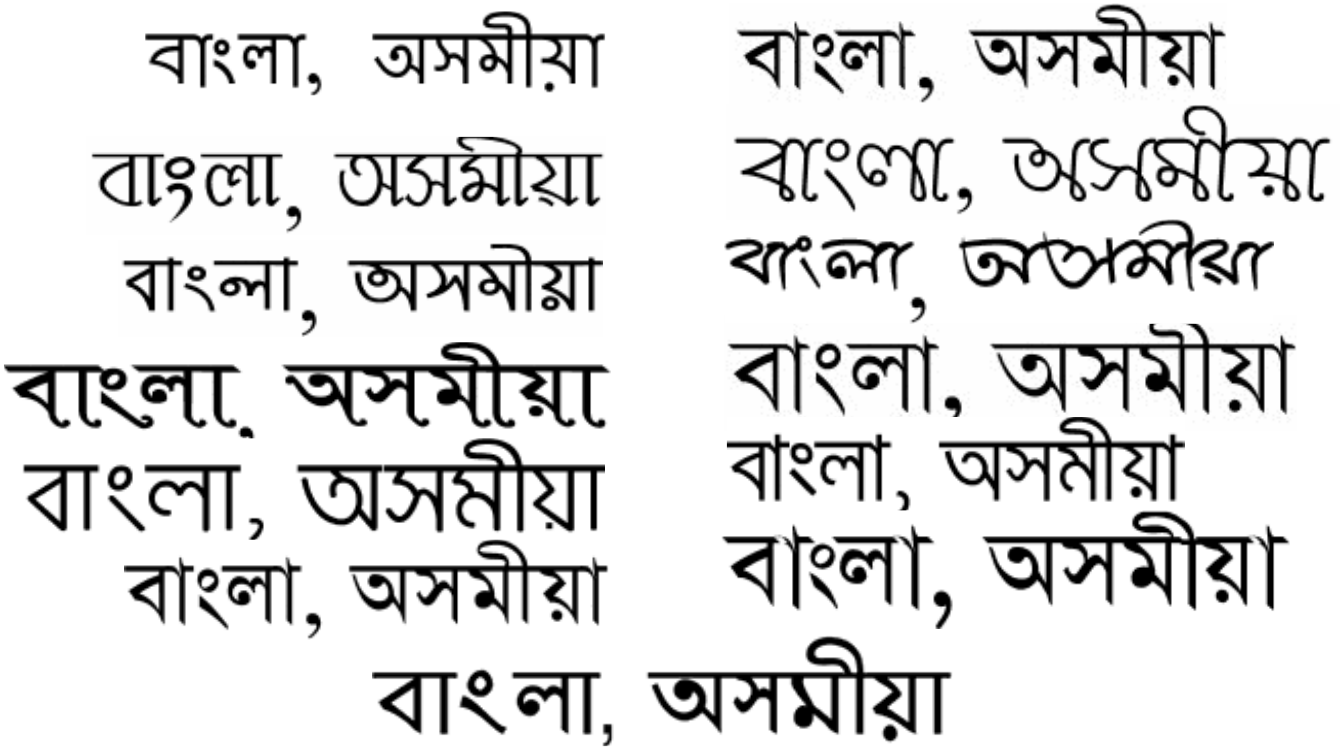
1. Download font (or .zip file containing font) to a temporary location (e.g., the desktop).

2. Open the 'Fonts' folder (Windows 2000: Start > Control Panel > Fonts; Windows XP: Start > Control Panel > Appearances and Themes > Fonts).

3. Drag font file (not the .zip file) into Fonts folder. Applications need to be restarted in order to recognize the font.

## Example Fonts

The Bengali alphabet uses the same written characters as Assamese. Assamese, however, contains two characters that are not used to write Bengali. Most of the available the fonts can be used to display all the characters in both languages for pedagogy and Internet applications:




More at The South Asia Language Resource Center, The University of Chicago (http://salrc.uchicago.edu/resources/fonts/available/bengali/)

# Product Information

OpenDisc is a high qualiy collection of open source software (OSS) for the Microsoft Windows operating system.

The two main goals of the project are:

• To provide a free alternative to costly software, with equal or often better quality equivalents to proprietary, shareware or freeware software for Microsoft Windows.

• To educate users of Linux as an operating system for home, business and educational use.

The majority of programs featured on OpenDisc are also available on Linux.

## Programs

If you don't want to download the entire disc you can instead download only what you like from this page. Clicking on an icon here leads you to the official site for that program and away from our site, so be sure to open links up in new tabs/windows or bookmark OpenDisc before you leave. Here's the programs featured on the latest version of OpenDisc:

### [Design]



Blender is an advanced 3D graphics modeling program capable of producing high quality animations, performing rendering, post-production, interactive creation and playback. It is the only 3D creation suite which allows the artist to model, texture, animate, render, and export the finished product in a package less than 10 MB.The active development community is steadily adding new features and extensions such as the superb Yafray rendering engine for generating photo-realistic effects. Blender natively exports to a multitude of 3D formats such as VRML, Cal3d, AC3D. With the powerful and easily extensible Python plugin support, you can write your own extensions or choose from a range of existing plug-ins.3D modeling remains a complex computing task, with the result that Blender is an extensive application with a steep learning curve.




Dia can be used to draw a variety of diagrams to suit your needs, such as entity-relationship models, UML diagrams, flowcharts, network diagrams, and simple circuits.

It can load and save diagrams to a custom XML format, and export diagrams to a number of formats including EPS, SVG, XFIG, WMF and PNG. You can also print diagrams, including those that span multiple pages.



The GIMP (or GNU Image Manipulation Program) is suitable for those wanting to manipulate digital photographs, design and export graphics for the web, convert images from one file format to another, or even produce complex high-resolution compositions for print. The GIMP features a number of paint tools with sub-pixel sampling for high quality anti-aliased brush strokes, a powerful gradient editor and blend tool, layers and layer masks with over 20 blending modes, support for importing and exporting in a myriad of image formats, unsharp mask, levels and curves tools for enhancement of digital photos and much more!

The GIMP is a feature-packed program which may seem overwhelming at first. We suggest referring to the manual and tutorials available from the Gimp web site.

The GIMP uses the GTK+ library which is also available on OpenDisc. It won't work without it, so ensure to install GTK+ first.



Inkscape is an easy to use vector graphics editor that uses the Scalable Vector Graphics (SVG) file format. Supported SVG features include shapes, paths, text, markers, clones, alpha blending, transforms, gradients, patterns, and grouping. Inkscape also supports Creative Commons meta-data, node editing, layers, complex path operations, bitmap tracing, text-on-path, flowed text, direct XML editing, and more. It imports formats such as JPEG, PNG, TIFF, and others and exports PNG as well as multiple vector-based formats.

You can use Inkscape to create diagrams for reports and projects. Because Inkscape uses "vector" rather than "raster" graphics editing (which is mostly used by the GIMP), you can always go back later to reposition items and change font sizes. More importantly you won't end up with blocky graphics because with vector graphics you can enlarge the

images to any size without losing quality.



Nvu is a fully featured What-You-See-Is-What-You-Get (WYSIWYG) web page editor, enabling you to create compelling web pages without having to devote months to learning HTML. Nvu includes an integrated FTP site manager, a style sheet editor, tabbed workspaces, and all the features you've come to expect from a fully-featured web page editor. It also features integrated support for HTML code validation, to help you make your HTML as clean and light-weight as possible.



Scribus is a professional desktop publishing application, with a combination of "press-ready" output and new approaches to page layout. With it you can create just about anything you can imagine, from brochures, magazines, bulletins, and even books!

Underneath the modern and user friendly interface, Scribus contains professional publishing features, such as CMYK color, separations and ICC color management. It also supports OpenType Fonts and Unicode text including right to left scripts such as Arabic and Hebrew.



Tux Paint is a free drawing program designed for young children (aged three and up). It has a simple, easy-to-use interface, fun sound effects, and an encouraging cartoon mascot who helps guide children as they use the program. It provides a blank canvas and a variety of drawing tools to help your child be creative.

[Games]



The Battle for Wesnoth is a turn-based strategy game with a fantasy theme. It offers several extensive campaigns, and you can play as Humans, Elves, Dwarves, Orcs or Undead.

The characters you can recruit have a range of traits, offering various strategic strengths and weaknesses on different terrains and against different opponents. You can even join friends in online campaigns. The Wesnoth project also regularly organises online tournaments where the best campaigners can measure their skill.



Enigma is a puzzle game inspired by Oxyd on the Atari ST and Rock'n'Roll on the Amiga. The object of the game is to find uncover pairs of identically colored Oxyd stones. Simple? Yes. Easy? Certainly not! Hidden traps, vast mazes, laser beams, and, most of all, countless hairy puzzles usually block your direct way to the Oxyd stones.



Neverball is a maddeningly fun game where you tilt the floor to roll a ball through an obstacle course before time runs out. It's part puzzle game, part action game, and entirely a test of skill.

Neverputt is a hot-seat multiplayer miniature golf game using the physics and graphics of Neverball. With teleporters, sliding ramps and multi-story holes, this is unlike any miniature golf you've ever played!

A highly accurate physics modeling engine powers both of these games.



Sokoban YASC (Yet Another Sokoban Clone) is a maddeningly simple game first conceived by Hiroyuki Imabayashi, a Japanese programmer. The word Sokoban means "warehouse keeper." The object of the game is to put all of the crates in your "warehouse" into the designated storage areas. Sounds easy, right? Well, there are a few restrictions. You are not allowed to pull crates, only push; you cannot push more than one box at a time; you cannot pass through a box or wall.

These restrictions turn a seemingly simple task into a delightfully difficult challenge.

[Internet]



Azureus is a powerful BitTorrent protocol client. It comes bundled with many invaluable features for both beginners and advanced users, such as multiple torrent support, speed limiting, fast resuming and more.

The BitTorrent protocol is a "peer-to-peer" way to distribute files on the internet. It was designed to move large amounts of data to many users without the costly server space and bandwidth that a distributor would usually have to pay for. Users who download a file then become a new source for transmitting that data. You can read more about

BitTorrent at Wikipedia.



FileZilla is a fast and reliable FTP client and server with lots of useful features and an intuitive interface. Features include upload/download resume, site manager, keep-alive system, SSL and SFTP support, and a flexible file queuing system.In order for this software to work you must have the proprietary Java environment installed on your computer. If you do not have Java on your computer already, the Azureus installation will not be able to complete. You can download Java free of charge.



The Firefox web browser empowers you to browse web pages faster, more safely, and more efficiently. Key features include pop-up blocking to stop those annoying ads, tabbed browsing to let you view multiple web pages in a single window, and opening links in the background so that they're ready for viewing when you're ready to read them. The toolbars are fully customizable. Don't like the default order of the buttons? Right click, select "customize" and drag that button where you want it.

You can expand Firefox's functionality using a wide variety of extensions. These offer you the ability to customize your web experience through automatic form completion, flash blocking, in-browser games, or development tools to help you study how web pages are made. There is also a range of themes available to let you alter the look of the browser. The easy transition system imports all of your settings, including favourites, passwords and other data from Internet Explorer and other browsers, so you can start surfing right away.

Possibly the best reason to start using Firefox is its enhanced security. Built with your security in mind from the start, Firefox keeps your computer safe from malicious spyware by preventing harmful ActiveX controls, and offers a comprehensive set of privacy tools keep your online activity private. In this age of rampant virus, trojan and phishing attacks, Firefox provides a secure alternative.



HTTrack is an easy-to-use offline web browser utility. It allows you to download a web site from the Internet to a local directory on your computer, building a perfect mirror for your personal use. Simply open a page of the website in your browser, and you can browse the site from link to link, as if you were viewing it online. HTTrack can also update an existing mirrored site, and resume interrupted downloads.



Pigdin is an Internet Messenging (chat) client that enables you to chat with others in real time using any supported network, including AOL Instant Messenger, MSN Messenger, Yahoo!, IRC and Jabber. Pigdin can be simultaneously connected to several networks, so if you have contacts on different networks you can talk to them all at the same time, from one easy to use program.

Pidgin uses the GTK+ library which is also available on OpenDisc. Because It won't work without it, ensure you install GTK+ first.

RSS (Really Simple Syndication) gives users the power to collect and organize Web-based news and information in a very efficient way. RSSOwl lets you gather, organize, update, and store information from any website that has an "RSS feed" in a simple, easy to use interface.

Once you've added all your favourite blogs and news websites, you'll have a one-stop program to keep you up to date with every site you normally visit, and all at a glance.



SeaMonkey is an all-in-one internet suite which uses the same engine as Firefox and Thunderbird, and also includes a newsgroup client, an internet relay chat (or IRC) client, and a flexible HTML editor.

Like Firefox, the best reason to start using SeaMonkey is its enhanced security. Built with your security in mind from the start, SeaMonkey keeps your computer safe from malicious spyware by not loading harmful ActiveX controls, and a comprehensive set of privacy tools to keep your online activity private and your computer safe.



Thunderbird is a modern email client with features such as intelligent spam filters, a built-in spell checker, a range of themes and customisable layout. Thunderbird provides IMAP/POP support, HTML e-mail composing, quick search, address book, advanced message filtering, address completion, import tools, and the ability to manage multiple e-mail

and newsgroup accounts. You can add a wide variety of extensions to Thunderbird to add additional features or tweak its behavior to suit your own preferences.

As with Mozilla Firefox, security is a central theme. Thunderbird provides enterprise and government grade security features such as S/MIME, digital signing, message encryption, support for certificates and security devices. The intelligent Thunderbird spam filter analyzes your e-mails to identify those that are most likely to be junk. These can be automatically deleted or diverted to a separate folder. The spam filter is adaptive and also learns from your address book and usage to improve its accuracy.




TightVNC is a remote control software that lets you see the desktop of a remote machine and control it with your local mouse and keyboard, just like you would do it sitting in the front of that computer. Ideal for remote administration, remote customer support, education, and for many other purposes, and because it works across different operating systems you can use almost any computer, from any computer.

The TightVNC package includes a server (which allows users on other computers connect to yours) and a client (for you to log in to others' computers).



WinSCP is a fully featured SFTP (Secure File Transfer Protocol) client.

Its main function is the secure file transfer between a local and a remote computer. It fully supports Secure Shell (SSH) and in addition to SFTP, the legacy SCP protocol.

[Multimedia]



Audacity is a sound editing program which can record, playback, and mix sounds or apply effects using a variety of filters.

Audacity lets you edit your sounds using Cut, Copy and Paste (with unlimited Undo) and mix multiple tracks together. Save your files in a number of formats, including WAV, Ogg Vorbis and AIFF, or use Audacity's native project format for high performance editing. It also has a built-in amplitude envelope editor, a customisable spectrogram mode and a frequency analysis window for audio analysis applications. Built-in effects include Bass Boost, Wahwah, and Noise Removal.

Use Audacity to record your own podcasts, mix music, or just be creative!



Celestia is a simulation of the entire universe, based on currently known astronomical information. It includes beautifully rendered planets, moons, and some smaller orbital bodies such as Mir and the International Space Station. Celestia is not limited to our solar system; you can visit other stars, or even travel outside the galaxy. You will find models of extra-solar planets in orbit around those stars for which we have evidence of planetary bodies. You have complete control over time and space, so you can view the stars from your chosen location and epoch. In addition, it is possible to create scripted presentations for complex demonstrations.

To get a good idea of Celestia's full capabilities, start the program and press D for Demo.

The Really Slick Screensavers are a collection of impressive savers to prevent permanent monitor burn-in on your computer screen. Each saver is highly customisable to cater not only for personal taste but also to make the most of your particular computer.



Stellarium is a planetarium for your computer. It shows a realistic sky in 3D, just like what you see with the naked eye, binoculars or a telescope. Just set your local co-ordinates (or choose to look at the sky from any other place or time on Earth!) and you're treated to a natural and accurate view of the night's sky.




Sumatra PDF is a flexible and lightweight PDF reader, with a minimalistic design that allows fast browsing and even faster loading times. It also remembers the last page of every PDF you read, so you can resume reading at any time in the future.

The VLC media player supports numerous audio and video file-types out of the box, so you don't have to download



individual software to play most media files. You can also encode media to a variety of formats, and streaming support for audio and video over the internet/networks is also available.

[Productivity]



GnuCash is personal and small-business financial-accounting software, which allows you to track bank accounts, stocks, income and expenses.

Features include double-entry accounting; stock/bond/mutual fund accounts; customers, vendors, jobs, invoices, A/P, A/R; QIF/OFX/HBCI import; transaction matching; reports and graphs; scheduled and financial calculations.



A wiki is a tool that allows many users to collaborate on generating and organising content. A wiki is usually hosted on the web so that different people can connect through their web browsers to collaborate. However you can also use a wiki locally on your own computer to help you stay organised, structuring your information with categories, sub-pages and hyper-links, just like on the web. You can even create attachments to your pages, like pictures or word processing documents you are working on for a specific project.

A powerful feature of wikis is page versioning, which lets you store each page in multiple successive versions and track the changes between them. This is of course especially useful when multiple people are editing the same page. The Desktop Edition provided here has been especially provided for desktop use - all your edits are saved onto your hard drive.



Notepad2 is intended to be a replacement for the Notepad program that is included as part of Windows. Like Notepad, Notepad2 is small, fast, and has few frills. It does, however, add some functionality such as colour syntax highlighting that many people will find useful, especially those that have to edit the odd HTML page or script. You can select the level of zoom and select the editing font. Notepad2 supports Unicode, UTF-8, Unix and Mac text files.



OpenOffice.org is a full-featured productivity suite including a word processor, spreadsheet, web page editor and presentation program. Documents are stored in a compressed, open-standard XML format to ensure future availability of your data and to reduce file sizes. You can read and write documents in a wide range of formats including Microsoft Office.

The word processor component, Writer, is suitable for the production of professional documents, reports, newsletters, and brochures. A powerful spreadsheet module called Calc contains sophisticated tools for calculation, data analysis and visualisation, its built-in charting tools are able to generate customisable 2D and 3D charts. The presentation utility, Impress, uses effects, animation and drawing tools to help you create effective multimedia slide shows to present your the way you want to. Use the Draw component to produce either simple diagrams or complex 3D illustrations and special effects for use in documents and presentations. The database tool, Base, give you all the tools you need for day to day database work in a simple spreadsheet-like form.

Due to the high cost of commercial office suites, deciding to use OpenOffice.org will typically represent the single largest source of savings on software for organisations or individuals. OpenOffice.org is increasingly becoming an office suite of choice in education, government, and business. The OpenOffice.org website contains tutorials, manuals and many other tools to help you create professional documents.

Use PDFCreator to generate PDF documents directly from any Windows program. PDF (Portable Document Format) files are the de-facto standard in electronic publishing, because the author can be sure that the document will look as intended on all platforms, regardless of local fonts or lack thereof.

Once installed, simply select 'Print' from the File menu of any program that you can print from, and select 'PDFCreator Printer' from the list of printers. Print, and enter a name for your PDF output file. That's it!

Optionally you may also enter information to identify the document, such as Title, Creation Date and Author. You can set the resolution and compression levels for the various file types, control how fonts are included, and protect your document with a password.

# Product Information

[Utilities]



7-Zip is a program for creating or unpacking archived and compressed files in an enormous variety of formats.

7-Zip can both create or unpack the following formats: 7zip, ZIP, CAB, RAR, ARJ, GZIP, BZIP2, TAR, CPIO, RPM and DEB files. For the standard ZIP and GZIP formats, 7-Zip provides a compression ratio that is 2 - 10 % better than that provided by PKZip or WinZip, and the native 7zip format can provide a 45% reduction in file size from the common zip format. The program is highly configurable, allowing the user to balance the level of compression and speed. The interface is designed to mimic the standard Windows shell, Explorer, and is localized to 40 languages.



Abakt is a flexible backup tool for Windows that protects your valuable data. Using a combination of advanced filters you can select files, directories or whole drives to compress, copy or move. You can even automate the process for future backups.



Clamwin is a powerful anti-virus program with features high detection rates for viruses and spyware, a scanning scheduler, and automatic downloads of the regularly updated virus database.

Note: ClamWin does not include an on-access real-time scanner. You need to manually scan a file in order to detect a virus or spyware. This means that it will not protect you from, for example, viruses you receive in compressed folders unless you make sure to scan the files inside before opening them. For the best security, you need to keep informed and be wary of installing programs from unknown sources, or use a Linux-based operating system which has a superior security record.

Clamwin is still an excellent way to keep your computer safe or disinfect your computer, and new features are being added to the software all the time.



GTK+ is a multi-platform toolkit for creating graphical user interfaces. Offering a complete set of widgets, GTK+ is suitable for projects ranging from small one-off projects to complete application suites.

The GTK+ library is responsible for drawing the windows, dialogue boxes and buttons in the GIMP, Pidgin and hundreds of other programs.



HealthMonitor is a powerful and feature filled monitoring tool. It works in the background as a Windows Service, monitoring system performance (CPU load average, free memory, disk space, etc). It can log results into a database or send a notification by e-mail, sms, or a popup notification. HealthMonitor keeps a close eye on the functioning of your Windows computer, and reports to you if anything goes wrong.



TrueCrypt is powerful encryption software for your personal data. It works by creating creating a virtual hard drive within a file and mounts it, so your computer treats it as a real hard drive. You can choose to encrypt an entire hard drive, certain folders, or removable media such as a USB flash drive.

Encryption is automatic, real-time and transparent, so all the hard work is handled for you. It also provides two levels of plausible deniability, and supports various encryption algorithms depending on your needs, including AES-256, Serpent, and Twofish.



Workrave is a program that assists in the recovery and prevention of Repetitive Strain Injury (RSI). The program frequently alerts you to take micro-pauses, rest breaks and restricts the total time you work to a daily limit, and is fully customisable to each user's need. When it's time for a break, Workrave presents animations of the kind of exercises that will keep you limber and healthy. It will help you work more effectively and improve your general level of comfort while working.

Workrave is a must if you spend most of your day in front of the computer.

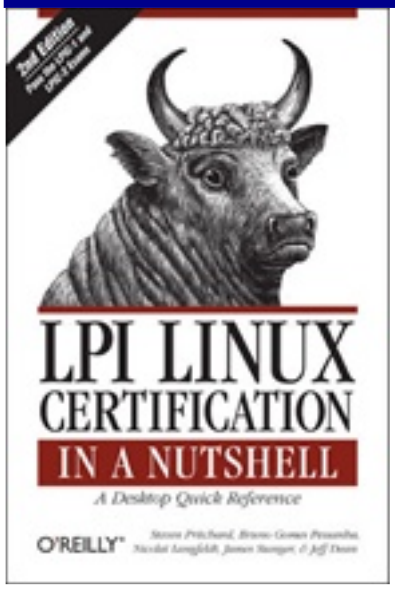
Download OpenDisc version 07.10 from http://theopendisc.com/latest-version/ Also, is of interest 'OpenEducationDisc' 07.10: This software builds on the OpenDisc and is aimed directly at schools and students aged 10-21+ giving the necessary tools to help them complete homework/coursework assignments.

# Book Recommendation

## LPI Linux Certification in a Nutshell, Second Edition (Paperback)

By Steven Pritchard, Bruno Gomes Pessanha, Nicolai Langfeldt, Jeff Dean, James Stanger, Paperback: 980 pages

Publisher: Oreilly (2nd edition July 2006) | List Price: $59.99 | Amazon.com Price: $37.79




### Book Description

LPI Linux Certification in a Nutshell, Second Editionis a thoroughly researched reference to the Linux Professional Institute exams. The book is divided into four parts, one for each of the LPI exams. Each part features not only a summary of the core skills you need, but sample exercises and test questions, along with helpful hints to let you focus your energies.

LPI Linux Certification in a Nutshell, Second Edition is an invaluable resource for determining what you need to practice to pass the Linux Professional Institute exams. This book will help you determine when you're ready to take the exams, which are technically challenging and designed to reflect the skills that administrators need in real working environments.

As more corporations adopt Linux as the networking backbone for their IT systems, the demand for certified technicians will become even greater. Passing the LPI exams will broaden your career options because the LPIC is the most widely known and respected Linux certification program in the world. Linux Journal recognized the LPI as the best Training and Certification Program. The exams were developed by the Linux Professional Institute, an international, volunteer-driven organization with affiliates in a dozen countries.

The core LPI exams cover two levels. Level 1 tests a basic knowledge of Linux installation, configuration, and command-line skills. Level 2 goes into much more depth regarding system troubleshooting and network services such as email and the Web. The second edition of LPI Linux Certification in a Nutshell is a thoroughly researched reference to these exams. The book is divided into four parts, one for each of the LPI exams. Each part features not only a summary of the core skills you need, but sample exercises and test questions, along with helpful hints to let you focus your energies.

Major topics include:

- GNU and Unix commands
- Linux installation and package management
- Devices, filesystems, and kernel configuration
- Text editing, processing, and printing
- The X Window System
- Networking fundamentals and troubleshooting
- Security, including intrusion detection, SSH, Kerberos, and more
- DNS, DHCP, file sharing, and other networking infrastructure
- Email, FTP, and Web services

Read about LPI certification in page 32

We can order the book from Amazon on your behalf if necessary. Contact us at contact@pragfoundation.net

# Classified

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# OA Resources

## Leading Open Source Projects

Apache | http://www.apache.org/
More than 50% of all web servers are powered by Apache. Apache was created by a loose confederation called the Apache Group who started out with a few "patches" to the web server originally created at the National Center for Supercomputer Applications (NCSA--the same outfit that built the original Mosaic browser). They have created the dominant industry standard. Apache Server Project: is the main Trust of the Apache community

C2NET Software | http://www.c2.net/
Most noted for their Stronghold Servers and full-strength encryption software (Perl and other Scripting Languages). Perl (Practical Extraction and Report Language) is a scripting language written by Larry Wall, with contributions from thousands of others. In the words of Hassan Schroeder, Sun's first webmaster, "Perl is the duct tape of the Internet."

www.perl.com | http://www.perl.com/
Launched by Tom Christiansen, www.perl.com provides a starting place for finding out everything about Perl. www.perl.com is also a mirror for CPAN, the
omprehensive Perl Archive Network.

The Perl Institute | http://www.perl.org/
A non-profit organization dedicated to making Perl more useful. Volunteers and interested parties are welcome to contribute.

Packaged Open Source Software: Hundreds, if not thousands, of companies now sell commercially packaged and supported open source software. While many open source software packages do run on proprietary systems (Apache is quite popular on all operating systems platforms), Linux distributions provide a complete (and in some cases, exclusively) open source environment suitable for hand-held, desktop, server, and high-end enterprise/cluster/mainframe use.

The Perl Journal | http://www.tpj.com/
A quarterly publication that offers a mix of articles for beginners and power users alike.

ActiveState | http://www.activestate.com/
ActiveState Tool Corp developed the original implementation of Perl for Win32, and is now the leading source of perl tools for the Windows Platform.

Tcl Resource Center | http://www.scriptics.com/resource/
Tcl (Tool Control Language) is a powerful and flexible general purpose command language. Scriptics is the company recently formed by Tcl's creator, John Ousterhout, to provide scripting tools, applications, and services based on tcl.

Python | http://www.python.org/
Python is an interpreted, interactive, object-oriented programming language that is often compared to Tcl, Perl, Scheme or Java. This site provides downloads, news, and much more.

Scriptics | http://www.scriptics.com/
A commercial venture that provides scripting tools, applications, and services. Scriptics is the primary distribution point for Tcl/Tk.

GNU Project | http://www.gnu.org/gnu/gnu-history.html/
The GNU Project began in 1984 when Richard Stallman wrote a UNIX compatible operating system and gave it away for free. The GNU Project is also dedicated to eliminating restrictions on copying, redistribution, understanding, and modification of computer programs.

Cygnus Solutions | http://www.cygnus.com/
Cygnus provides single-source, UNIX, and Win32 desktop and cross-platform development tools for 32- and 64-bit microcontrollers.

Netscape | http://www.netscape.com/
One of the big two in the browser and server market. Netscape made their code open source in the spring of 1998.

mozilla.org | http://www.mozilla.org/
Mozilla.org is Netscape's central point of contact and community for those interested in using or improving their source code.

# OA Resources

## Linux

a free implementation of a UNIX-like OS for personal computers created by Linus Torvalds

Debian GNU/Linux | http://www.debian.org/
Debian is a free operating system built on the Linux kernel. Included with it are over 1526 packages (precompiled applications).

Red Hat Software | http://www.redhat.com/
A computer software development company that sells products and provides services related to Linux, a freely available UN*X-like operating system.

Caldera | http://www.caldera.com/Caldera couples open-source operating system technologies, such as Linux, with traditional industry business practices, including channel partner distribution and support; leveraged third-party application development; and internal research and development, marketing and technical support.

The Silicon Valley Linux User Group (SVLUG) | http://www.svlug.org/
A very active Linux user group located in the heart of the valley.

VA Research | http://www.varesearch.com/
Develops Workstation, Server, and Internet products using the Linux operating system.

## BSD

an advanced BSD UNIX operating system for "PC-compatible" computers, developed and maintained by a team of volunteers. There are several active BSD efforts

bsd.org | http://www.bsd.org/
An umbrella site for all versions of BSD, both free and commercial.

Free BSD | http://www.freebsd.org/
The home site for FreeBSD.

NetBSD | http://www.netbsd.org/
The home site for NetBSD.

OpenBSD | http://www.openbsd.org/
A free BSD with emphasis on portability, standardization, correctness, security, and cryptography.

## Free Software Distributors: The following companies and organizations are clearinghouses for a variety of open source and free software

Prime Time Freeware | http://www.ptf.com/ptf/
Prime Time Freeware (PTF) publishes mixed-media (book/CD-ROM) collections of freeware, otherwise known as freely redistributable software.

The Written Word | http://www.thewrittenword.com/
Provides precompiled Open Source binaries for Solaris, HP-UX, IRIX, Tru64 UNIX, and AIX.

Walnut Creek CDROM | http://www.cdrom.com/
A long-time supporter for the free OS's, Walnut Creek publishes freeware on CDROM.

## Other Internet Software

Some of the most important software that runs the Internet is open source

BIND | http://www.isc.org/bind.html
BIND, the Berkeley Internet Name Daemon, makes the DNS work. Without it, you'd be typing addresses like 204.148.40.9 instead of www.oreilly.com. Bind was originally created as part of one of the great early free software efforts, Berkeley UNIX, and is now maintained by Paul Vixie of the Internet Software Consortium.

## OA Resources

Enhydra | http://enhydra.org/
Enhydra is an open source Java/XML Web application development and deployment environment.

Majordomo | http://www.greatcircle.com/majordomo/
Written in Perl, Majordomo is the program for managing Internet mailing lists. If you like Majordomo, check out MajorCool (http://ncrinfo.ncr.com/pub/contrib/unix/MajorCool/), a Web interface.

Sendmail | http://www.sendmail.com/
The majority of Internet email is routed by this open source program. Sendmail is still maintained by its creator, Eric Allman, who recently started Sendmail, Inc.

XEmacs | http://www.xemacs.org/
XEmacs is a powerful and highly customizable open source text editor and application development environment. It is very popular with internet application and web site developers.

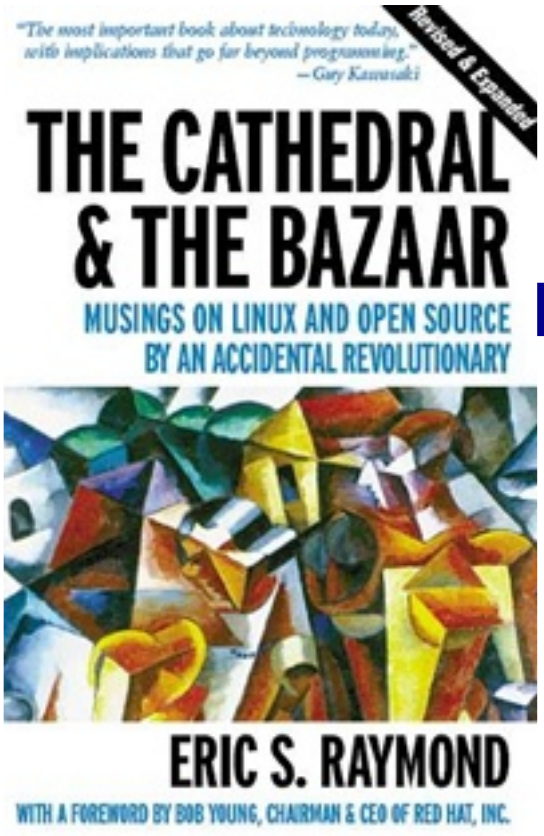
## Rich References

Open Source on Wikipedia | http://en.wikipedia.org/wiki/Open_source
Note that Wikipedia itself is implemented using MediaWiki 9http://www.mediawiki.org/wiki/MediaWiki) software, which is covered by the GNU GPL (http://www.gnu.org/licenses/licenses.html#GPL), a popular license that is both a free software (http://www.gnu.org/philosophy/free-sw.html) license and also approved by the OSI as an Open Source license.

David Wheeler's Why OSS? Just look at the numbers! http://www.dwheeler.com/oss_fs_why.html

David Wheeler's References | http://www.dwheeler.com/oss_fs_refs.html
The Free, Libre, and Open Source Software (FLOSS) Surveys and reports | http://www.infonomics.nl/FLOSS/
The Economic impact of FLOSS on innovation and competitiveness of the EU ICT sector, published 20 November 2006 by UNU-Merit | http://ec.europa.eu/enterprise/ict/policy/doc/2006-11-20-flossimpact.pdf

## Books




The Cathedral and the Bazaar |
http://www.catb.org/~esr/writings/cathedral-bazaar/
Open Sources: Voices from the Open Source Revolution
http://www.oreilly.com/catalog/opensources/
The Success of Open Source |
http://www.hup.harvard.edu/catalog/WEBSUC.html

Producing Open Source Software | http://producingoss.com/

## Open Source Software Directory

OpenSource Directory | http://www.opensourcedirectory.org/
OSD provides a resource for users to find stable Open-Source applications

The Free Software Directory | http://directory.fsf.org/
Lists over 5,000 packages. (Yes, Free Software is also Open Source Software

sourceforge.net | http://sourceforge.net/
Lists over 120,000 projects in varying stages of development. Mainly for developers. The public sourceforge.net site only hosts projects covered by an OSI-approved license (http://sourceforge.net/docs/about/02/).

freshmeat.net | http://freshmeat.net/
Lists over 60,000 new releases of Open Source packages. Mainly for people who want to download the latest releases from developers. Strongly prefers software covered by an OSI-approved license (http://freshmeat.net/about/)

# OA Resources

## Open Source Conferences and User Groups

OSCON | http://conferences.oreillynet.com/oscon/
Note that O'Reilly Media put on many other conferences, most of which have strong open source components and/or constitutents.

FOSS4G | http://www.foss4g2006.org/
Free and Open Source Geospatial Information Systems conference.

Blender Conference | http://www.blender3d.com/cms/Blender_Conference.52.0.html
There are other regional versions of this conference that can be found at the www.blender.org website.

The Ottawa Linux Symposium | http://www.linuxsymposium.org/2006/
A premier event for hackers to discuss implementation experiences and chart the future of Linux.

The Wizards of OS conference in Berlin | http://www.wizards-of-os.org/

The FISL conference in Porto Alegre, Brazil | http://fisl.softwarelivre.org/

The FOSSSL conference (and other events) in Colombo, Sri Lanka | http://www.foss.lk/events/

User groups tend to focus on software or groups of software used in a particular context.

Linux users in Northern Virginia | http://novalug.tux.org/

PostgreSQL users in Dubai | http://pugs.postgresql.org/uae/

Indian Chapter of OSGeo | http://wiki.osgeo.org/index.php/India

GIS developers and users who formed this group.

There are many thousands of user groups, and the best way to find the one that's right for you is to search the web, find the mailing lists, and make contact.

## Reports

Reports of tOSSad EU Project
The EU funded tOSSad project has created a collection of 15 documents, comprising over 600 pages, that sheds a light on the general economic and social benefits of Free and Open Source Software (F/OSS). The reports propose ways to overcome national barriers of F/OSS adoption, discuss how to improve the usability of F/OSS, outline a F/OSS curriculum for educational purposes and offer hands-on tips on setting up a Linux laboratory for schools: www.tossad.org.