

tegnologie



DETROIT

kids bringing technology to kids
in the tradition of ubuntu



A program developed by the Good News
Gang Community Development
Corporation of Detroit, Michigan



what is technologie-DETROIT?

A non-profit program which:

- **Targets inner-city youth**
- **Teaches technology, entrepreneurship, and the sharing philosophy of Ubuntu**
- **Turns a profit** (self-sustainable business plan that can generate its own revenues)
- **Touches others**, by giving back locally and globally



how does it work?

- Companies/people donate older PCs to a 501-c-3, Good News Gang Community Dev Corp. in SW Detroit
- Inner-city kids clean up/refurbish older computers; load the Linux distribution of "Edubuntu" + good content-filtering software
- The kids sell computers for \$100 each to mid/upper income families with multiple kids. Computers are marketed as good, safe kid-friendly "2nd/3rd" computers so each kid in the house can have a PC to surf the web, use OpenOffice, play education games, etc.
- For each \$100 computer purchased, technologie-Detroit kids donate an edubuntu PC to a low-income kid in Detroit; purchaser gets \$100 donation receipt for the donated PC.
- Money will be used to provide jobs for inner-city kids, fund technology scholarships, and for program administration
- Kids are taught entrepreneurship, business skills, technology skills, and lessons in "giving back" to one's community



why is it called “tegnologie-Detroit”?

- “tegnologie” is the African word for technology.
- We chose the African translation because the program is driven by the cooperative and “sharing” spirit found in the African philosophy of Ubuntu.
- “Ubuntu” means “humanity to others”. It also means, “I am what I am because of who we all are.” As an ideal, it promotes co-operation between individuals, cultures and nations.
- “Ubuntu,” “Kubuntu,” and “Edubuntu” are the names of three distributions of the Linux operating system, created by Mark Shuttleworth from South Africa. These Linux distributions “bring the spirit of Ubuntu to the software world.”
- tegnologie-Detroit loads “Edubuntu” (the educational version of Ubuntu) onto all of its computers.



what is edubuntu

EDUBUNTU IS A COMPLETE LINUX-BASED OPERATING SYSTEM

Edubuntu is a complete Linux-based operating system, freely available with community based support. The Edubuntu Linux distribution brings the tradition of Ubuntu to young people and schools, through its customized school environment. Therefore, Edubuntu is known as "Linux for Young Human Beings."

THE EDUBUNTU MANIFESTO

The Edubuntu community is built on the ideas enshrined in the Edubuntu Manifesto, that

- software should be available free of charge
- that software tools should be usable by people in their local language and despite any disabilities, and
- that people should have the freedom to customize and alter their software in whatever way they see fit.

Therefore, the team behind Edubuntu makes the following public commitment to its users:

- Edubuntu will always be free of charge, and there is no extra fee for the "enterprise edition", we make our very best work available to everyone on the same Free terms.
- Edubuntu includes the very best in translations and accessibility infrastructure that the Free Software community has to offer, to make Edubuntu usable by as many people as possible.
- Edubuntu is released regularly and predictably; a new release is made every six months. You can use the current stable release or the current development release. Each release is supported with security updates for at least 18 months.
- Edubuntu is entirely committed to the principles of free and open source software development; we encourage people to use free and open source software, improve it and pass it on.

These freedoms make Edubuntu fundamentally different from traditional proprietary software: not only are the tools you need available free of charge, you have the right to modify your software until it works the way you want it to.

16000 SOFTWARE APPLICATIONS, ONE CD

Edubuntu includes more than 16,000 pieces of software, but the core installation fits on a single CD. Edubuntu covers every standard desktop application from word processing and spreadsheet applications, educational software, to internet access applications, web server software, email software, programming languages and tools and of course several games.

Edubuntu is suitable for both desktop and server use. Edubuntu 5.10 also includes a built-in Linux terminal server. The current Edubuntu release supports Intel x86 (IBM-compatible PC) and AMD64 (Hammer) architectures.

NO SOFTWARE LICENSING FEES

We're not selling you a software license to Edubuntu, because it is not proprietary. We are only selling you the computer. We are giving you a copy of Edubuntu (pre-installed in the computer, plus a CD to use for re-installation), our custom configurations and our own Edubuntu manual.

TECHNICAL SUPPORT FROM AROUND THE WORLD

Technical Support for Edubuntu is available from a variety of sources: from the community, from Canonical Ltd and other organizations, and from developers directly through open web forums, mailing lists and IRC channels. Free technical support for Ubuntu is available online; members of the Ubuntu community answer questions through mailing lists and IRC channels. Paid support is provided by Canonical Limited and other companies that are listed on the Ubuntu website.



the benefits of using tecnologia-DETROIT computers pre-loaded with our custom version of edubuntu

OUR COMPUTERS ARE EFFICIENT AND EASY-TO-USE

Our desktop computers are pre-installed with **Edubuntu**, a distribution whose motto is "Linux for young human beings." We at tecnologia-DETROIT are excited about Edubuntu because of its **efficiency, stability, and gorgeous visual design**. Its unique graphics make this system inviting and enjoyable for kids in primary and middle school. It contains a bounty of **education-specific applications** aimed at the 6-18 age group, including GCompris and the KDE education suite. And being GNU/Linux, it is **immune to the viruses and spyware that are corrupting Microsoft Windows computers worldwide**.

OUR COMPUTERS ARE SAFE AND SECURE FROM VIRUSES AND SPYWARE

In many families, the kids' computers are not available for homework because they are corrupted by spyware and viruses. This computer will not be "on the blink" at term paper time. It will also free Mom and Dad from installing Windows security patches, scanning for viruses and spyware, and paying the local technician for those all-too-familiar virus cleanouts and re-installations of the operating system.

Edubuntu is resistant to security problems in a variety of ways:

- (1) Being GNU/Linux-based, Edubuntu is not vulnerable to Windows malware. There is no registry, which is the target of most spyware and viruses.
- (2) Even among GNU/Linux systems, Edubuntu is exceptionally secure. You are unable to go online from an account with administration privileges, only as a limited user. Signing on as a limited user restricts an attacker's options.

OUR CHILDREN ARE SAFE FROM "ADULT" MATERIAL AND IMAGES ON THE INTERNET

The tecnologia-DETROIT distribution of Edubuntu is unique because it is **pre-loaded** with some of the best free content-filtering software available, and is **pre-set** to strictly block most, if not all, material on the internet that is inappropriate for children.

OUR COMPUTERS ARE PRE-LOADED WITH A BOUNTY OF SOFTWARE APPLICATIONS

These computers are some of the first family computers to be entirely equipped with free and open source software. They are pre-loaded with dozens of kids educational games (see next page for a list of some of the games).

Educational software for GNU/Linux is under constant development worldwide, and new applications and upgrades will always be available free of charge with this system. If you have purchased educational software before, you know what a savings that will be! So you can start your kids out with a great system and it will only get better from there--for free!

OUR COMPUTERS ARE "NOT JUST KIDS' STUFF"

Edubuntu contains all the features of its "parent" distro, Ubuntu. Its first screen looks like a children's book, but this system is fully-featured and powerful enough for business and office use. There are web browsers (Firefox and Konqueror), mail clients (Thunderbird and Evolution Mail), a full office suite (Open Office 2.0), an image/photo manipulation program (Gimp), a web design program (NVU), and access to free and open source software (through Synaptics Package Manager) for almost anything else you can think of, from accounting to video production to multimedia and iPod synchronization. Over 18,000 free applications are available to you in the Debian repositories.



tegnologie-Detroit computers with edubuntu come pre-loaded with many kids' educational games

- Dr. Geo is a Math Tool
- Gcompris Educational Suite has numerous math activities, board-based activities, computer discovery, experiential activities, amusement activities and reading activities
- Gperiodic is a program for looking up data of elements from the periodic table.
- Hhangman s the classical hangman game.
- Kalzium is an application which will show you some information about the periodic system of the elements.
- Kana Test is a drill game to learn Japanese kana characters.
- Kbruch is a program for generating tasks with fractions.
- Keduca is an educational project to enable the creation and revision of form-based tests and exams.
- Kig is a program for exploring geometric constructions.
- Kiten is a Japanese reference/learning tool.
- Klatin is a program to help revise Latin. There are vocabulary, grammar, and verb testing sections. In addition there is a set of revision notes that can be used for self-guided revision.
- Klettres aims to help to learn the alphabet and then to read some syllables in different languages.
- Kmessedwords is a game based on word/letter puzzles.
- KmPilot is a mathematical function plotter.
- Kpercentage is a small math application that will help pupils to improve their skills in calculating percentages.
- Kstars is a Desktop Planetarium program.
- Ktouch is a program for learning touch typing.
- Kturtle is an educational programming environment using the Logo programming language.
- Kverbos is an application specially designed to study Spanish verb forms.
- Kvoctrain is a vocabulary trainer. Like most of the other vocabulary trainers it uses the "flash card" approach.
- Kwordquiz is a tool that gives you a powerful way to master new vocabularies.
- LabPilot is an application for plotting of data sets and functions
- LabPlot is an application for plotting of data sets and functions.
- Stopmotion is a program to create stop-motion animations
- TuxMath is a math training game.
- TuxPaint is a paint program. (Edubuntu also has Kolourpaint and GNU Paint pre-installed. Gimp, a powerful, pre-installed image editor, is easy to use after experience with these.)
- TuxTyping is a typing training game.



edubuntu has an easy-to-use interface



Welcome Screen in Edubuntu



Nautilus in Edubuntu



Settings in Edubuntu

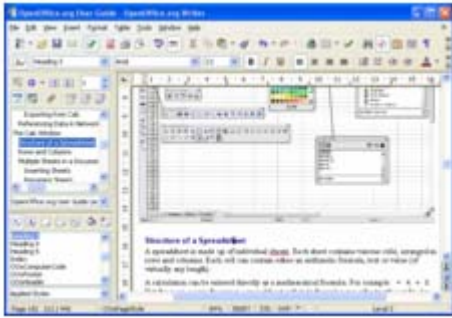
Starting in April 2006, the Edubuntu main screen will picture drawings of kids of multiple races or will not have pictures of humans at all.

Nautilus is the file and document manager of edubuntu – it is similar to “Windows Explorer” in MS Windows operating systems.

Users can customize their colors, look and feel, and many other settings – just like in Microsoft Operating Systems.



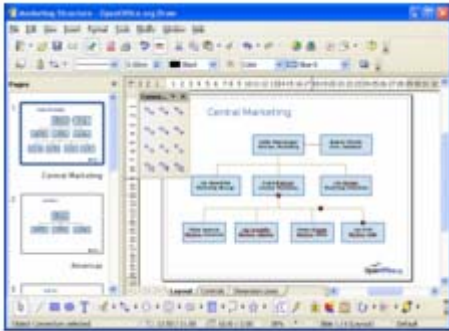
edubuntu has a complete Office Suite



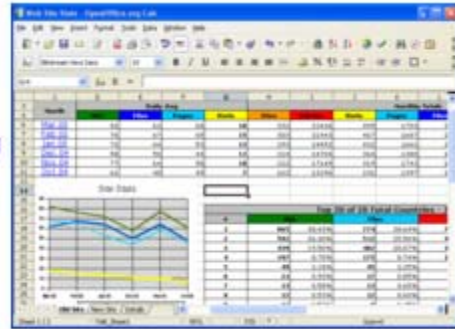
Write – Full-functioning Word processor; compatible with MS Word.



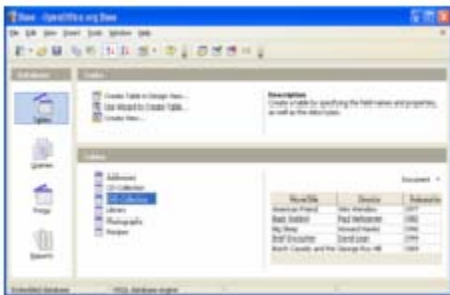
Impress – Full-functioning Presentation software; compatible with MS Powerpoint.



Draw – Full-functioning vector drawing program, like MS visio.



Calc – Full-functioning spreadsheet program; compatible with MS Excel.



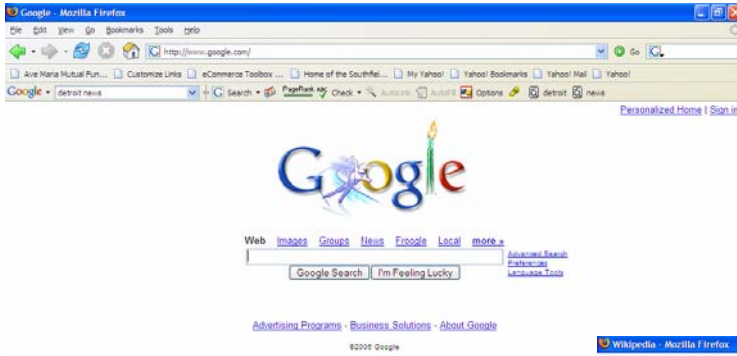
Base – Full-functioning database program, compatible with MS Access.



Math – something Microsoft doesn't have! Create equations and formulae for your documents.



edubuntu uses Mozilla Firefox to surf the net



Done

Search – Kids can search for anything on the web through Google



Research – Kids can research for school reports using the largest free encyclopedia in the world, Wikipedia.



Play Games – Kids can take advantage of thousands of free games on the internet.



why kids should use "Open Source" Software

ENCOURAGE YOUNG PEOPLE TO LEARN HOW SOFTWARE WORKS

Get involved with the GNU Project

The GNU Project, which is primarily supported by the Free Software Foundation, has a philosophy for schools that makes sense for parents as well. It says that we should promote the use of free software to children just as we promote recycling. It is clearly expressed by free software pioneer Richard Stallman, who wrote in the GNU Project website:

If schools teach students free software, then the students will use free software after they graduate.

Free software permits students to learn how software works. When students reach their teens, some of them want to learn everything there is to know about their computer system and its software. That is the age when people who will be good programmers should learn it. To learn to write software well, students need to read a lot of code and write a lot of code. They need to read and understand real programs that people really use. They will be intensely curious to read the source code of the programs that they use every day.

Proprietary software rejects their thirst for knowledge: it says, "The knowledge you want is a secret--learning is forbidden!" Free software encourages everyone to learn. The free software community rejects the "priesthood of technology," which keeps the general public in ignorance of how technology works; we encourage students of any age and situation to read the source code and learn as much as they want to know. Schools that use free software will enable gifted programming students to advance.

The next reason for using free software in schools is on an even deeper level. We expect schools to teach students basic facts, and useful skills, but that is not their whole job. The most fundamental mission of schools is to teach people to be good citizens and good neighbors. Teaching the students to use free software, and to participate in the free software community, is a hands-on civics lesson. All levels of school should use free software.

We at technologie-DETROIT agree wholeheartedly with this philosophy.



who is involved in tecnologie-DETROIT?

- Tiger Whitehead, Founder and Director.
- **Good News Gang Community Development Corp (GNG CDC):** Arthur Ledlie. GNG CDC is a non-profit group mentoring inner-city Detroit kids for last 15 years. tecnologie-DETROIT is a program of GNG CDC.
- **Inner-city kids from Detroit:** Many children from Detroit that are involved in the Good News Gang Metro program are involved with tecnologie-DETROIT.
- **Ubuntu Detroit Linux Team and Michigan User Group (Linux Group)**
- **UofDetroit Jesuit High School:** John Hansknechdt. UofD Jesuit High is the school highlighted in a NewsForge article because the school installed Linux machines throughout the school.
- **VisionIT:** CEO, David Segura; I.T. Manager, Aaron King. VisionIT is a technical staffing company in Detroit, MI – listed by Inc 500 as one of America's fastest growing technical staffing companies.
- **A host of volunteers**



what we provide..

- Low cost computers for your kids (\$100 each)
 - If local, \$100 includes a 15" monitor
 - If remote, \$100 includes shipping, but no monitor
- opportunity to give a computer to an inner-city kid; get a good feeling and a tax deduction
- opportunity to donate your or your organization's older computers – get a good feeling and a tax deduction
- Low-cost Edubuntu CDs, pre-loaded and pre-set with content-filtering software. \$15 per CD includes shipping.
- "tegnologie team" startup kits. \$200 kit includes 5 edubuntu CDs (with content-filtering), logos customized for your city (i.e. "tegnologie-YOURTOWN"), and instruction manuals teaching non-profits how to start a tegnologie team in their city.



what we need..

- Time and Talent of Volunteers
- Donated PCs, Parts, and 15" Monitors (17" good too!)
- Internet Solutions/Donations for the low-income families...
- Creative Design skills for web graphics, brochures, etc.
- Website skills, Brochure/Print skills
- Contacts, Connections, and Introductions to other people who may be able to help
- Cash donations are always accepted! (and tax-deductible!)
- Purchases of our computers, edubuntu CDs, and "tegnologie-team" startup kits.



African software gains global popularity

Gary Wilson

'12-SEP-05 08:00'

New York - A decade ago, Ubuntu was a word that shook apartheid South Africa. Today, it is a word that may be keeping Bill Gates awake at night. Ubuntu is an African word that is one of the founding principles of the new South Africa, and it also is the name of a new computer operating system developed by South African Mark Shuttleworth and his company Canonical.

The word "Ubuntu is very difficult to render into a Western language", writes Archbishop Desmond Tutu in "No Future Without Forgiveness". It means "you are generous, you are hospitable, you are friendly and caring and compassionate. You share what you have".

Ubuntu Linux calls itself the "Linux for human beings". In less than six months from its introduction in October 2004, Ubuntu Linux became the most popular Linux desktop distribution in the United States.

In July, PC World magazine named Ubuntu Linux one of its "100 Best Products of 2005". And it has won numerous other awards. A special version was developed by Hewlett-Packard for its laptop computers that are sold in Europe, the Middle East and Africa.

Linux is a computer operating system, the software that makes a computer work. The operating system most commonly found on desktop computers in an office, at school or at home is Microsoft's Windows.

The second most common desktop operating system is Apple's MacOS, which at 4.5% of the market in the United States is a distant second. Linux is third at about 3.5% of the desktop computers.

That's not insignificant though - it means that about one of every 28 computers in the United States is using Linux, and outside the US the figure is much bigger.

Government agencies and local governments in Germany, Spain, Sweden Brazil and China have already changed from Windows to Linux. New Linux usage is picking up and its use on the desktop in the US is expected to reach six percent in 2007.

Linux has been described as the most popularly used operating system that most users don't know that they use every day. Google.com's search engine is driven entirely on a giant Linux cluster. Amazon.com, eBay and a great many other websites are run on Linux systems.

But Linux has not been as popular on desktop systems. There are many reasons for this, starting with the fact that almost every computer comes with the operating system already installed and unless you make a special request, you won't get Linux on your computer.

Ubuntu Linux has been successful where others have failed, helping to take Linux into a significant segment of users much like that held by Apple's Macintosh.



Free software

Part of Ubuntu's success has to do with its design. To understand the significance of this, you have to unravel one of the mysteries of Linux.

Linux, unlike Windows or the MacOS, is software that is distributed under a Free Software Foundation license. The core of the operating system, called the kernel, is really the only part that of the system that is Linux.

A Linux distribution takes that kernel and adds a great many additional software programs and utilities to make the whole system.

One common misunderstanding about Linux is to think that free software means that the work of developing it is being done for free. All the developers of the Linux operating system are being paid full-time wages.

Most are employed by the giants of the computer industry like Hewlett-Packard and IBM. IBM alone has over 600 programmers working full-time on Linux development.

These corporations have chosen to be a part of the Linux development because some experts in the field of computer technology think that free, open source software can be more stable and secure than closed, proprietary systems.

Linux has convinced many that this can be true.

Ubuntu Linux is built on one of the most stable and secure Linux distributions, adding an installer that is at least as easy to use as the Windows installer. The result has been described as "Grandpa's Linux" - that is, it is the Linux you would put onto a computer for someone who needs an easy-to-use system.

Which leads to another reason Ubuntu Linux has been successful. It is a community-based distribution.

If you look underneath Ubuntu Linux, you'll find another name in Linux systems: Debian. Debian calls itself the "free software community" and its collection of Linux software emphasises stability and security.

Ubuntu Linux is actively part of that free software community. This has made it attractive to users in school systems, where having access to completely free software can make a difference.

At Yorktown High School in Arlington, Virginia, they are using Ubuntu Linux, says Jeff Elkner, a computer science teacher at the school. He says that one reason they've chosen Ubuntu is because it is based on the Debian distribution.

Debian is essential, Elkner says, because it is not subject to commercial pressure and therefore has long-term stability.

In addition: "There is more free software packaged (for free download from the internet) for Debian than for any other (Linux distribution), so Ubuntu users have access to all that software."

Elkner is one of the developers of Edubuntu, a Ubuntu distribution customised for use in schools. It is already being used at Yorktown High School and is expected to be released for general use in October.



At an Edubuntu Summit in July in Australia, educators from every continent came together. Reports from the summit indicate that Edubuntu will soon be found in hundreds of schools across Europe from Sweden to Spain - in the state of Andalusia the government has chosen Ubuntu Linux for its schools, libraries and all public facilities.

In Brazil, Elkner says, more than a million pupils will be using Edubuntu.

China, India and South Africa are also countries where Ubuntu Linux user communities have developed.

Financing

Finally, Ubuntu Linux is successful because it has strong financial backing.

In July, Mark Shuttleworth and Canonical set up the Ubuntu Foundation with US\$10 million in financing. The money comes from Shuttleworth's deep pockets.

Shuttleworth came by his fortune by founding Thawte, a highly successful internet security company that was an early seller of the digital certificates needed for online commerce.

He sold the company for a reported US\$575 million in 1999. After the sale, Shuttleworth spent US\$20 million to be a space tourist on a Russian Soyuz rocket, spending eight days at the International Space Station orbiting Earth.

Back on land, he has put some of his fortune into developing Linux systems. His funding of the Ubuntu Foundation guarantees that Ubuntu Linux will have a stable future.

"The Ubuntu Foundation is a non-profit fund setup to ensure that a few core Ubuntu developers can be employed full-time for a few years, making good on commitments for long-term support for existing Ubuntu releases and also co-ordinating new Ubuntu releases," Shuttleworth told IPS in an email interview.

"So it allows people to be confident that Ubuntu won't go away, no matter what happens to me or to Canonical, the company behind Ubuntu."

*Gary Wilson is the author of "Samba Essentials for Windows Administrators" (Prentice Hall) and other computer-related books and articles. At the Columbia University Medical Center he directs a network of Windows, Mac OS, Linux and Sun OS computers in a research unit. - IPS



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