

TECH FOCUS

Linux: spoiled for choice!

SHAHRIAR ROBIN

LINUX is an operating system that was initially created as a hobby by a young student, Linus Torvalds, at the University of Helsinki in Finland. Linus had an interest in Minix, a small UNIX system, and decided to develop a system that exceeded the Minix standards. He began his work in 1991 when he released version 0.02 and worked steadily until 1994 when version 1.0 of the Linux Kernel was released. The kernel, at the heart of all Linux systems, is developed and released under the GNU General Public License and its source code is freely available to everyone. It is this kernel that forms the base around which a Linux operating system is developed. There are now literally hundreds of companies and organisations and an equal number of individuals that have released their own versions of operating systems based on the Linux kernel.

Apart from the fact that it's freely distributed, Linux's functionality, adaptability and robustness, has made it the main alternative for proprietary Unix and Microsoft operating systems. IBM, Hewlett-Packard and other giants of the computing world have embraced Linux and support its ongoing development. More than a decade after its initial release, Linux is being adopted worldwide as a server platform primarily. Its use as a home and office desktop operating system is also on the rise. The operating system can also be incorporated directly into microchips in a process called "embedding" and is increasingly being used this way in appliances and devices.

Throughout most of the 1990's, tech pundits, largely unaware of Linux's potential, dismissed it as a computer hobbyist project, unsuitable for the general public's computing needs. Through the efforts of developers of desktop management systems such as KDE and GNOME, office suite project OpenOffice.org and the Mozilla web browser project, to name only a few, there are now a wide range of applications that run on Linux and it can be used by anyone regardless of his/her knowledge of computers. Those curious to see the capabilities of Linux can download a live CD version of Knoppix or Ubuntu and venture out. It comes with everything you might need to carry out day-to-day tasks on the computer and it needs no installation. It will run from a CD in a computer capable of booting from the CD drive. Those choosing to continue using Linux can find a variety of versions or "distributions" of Linux that are easy to install, configure and use.

Distribution

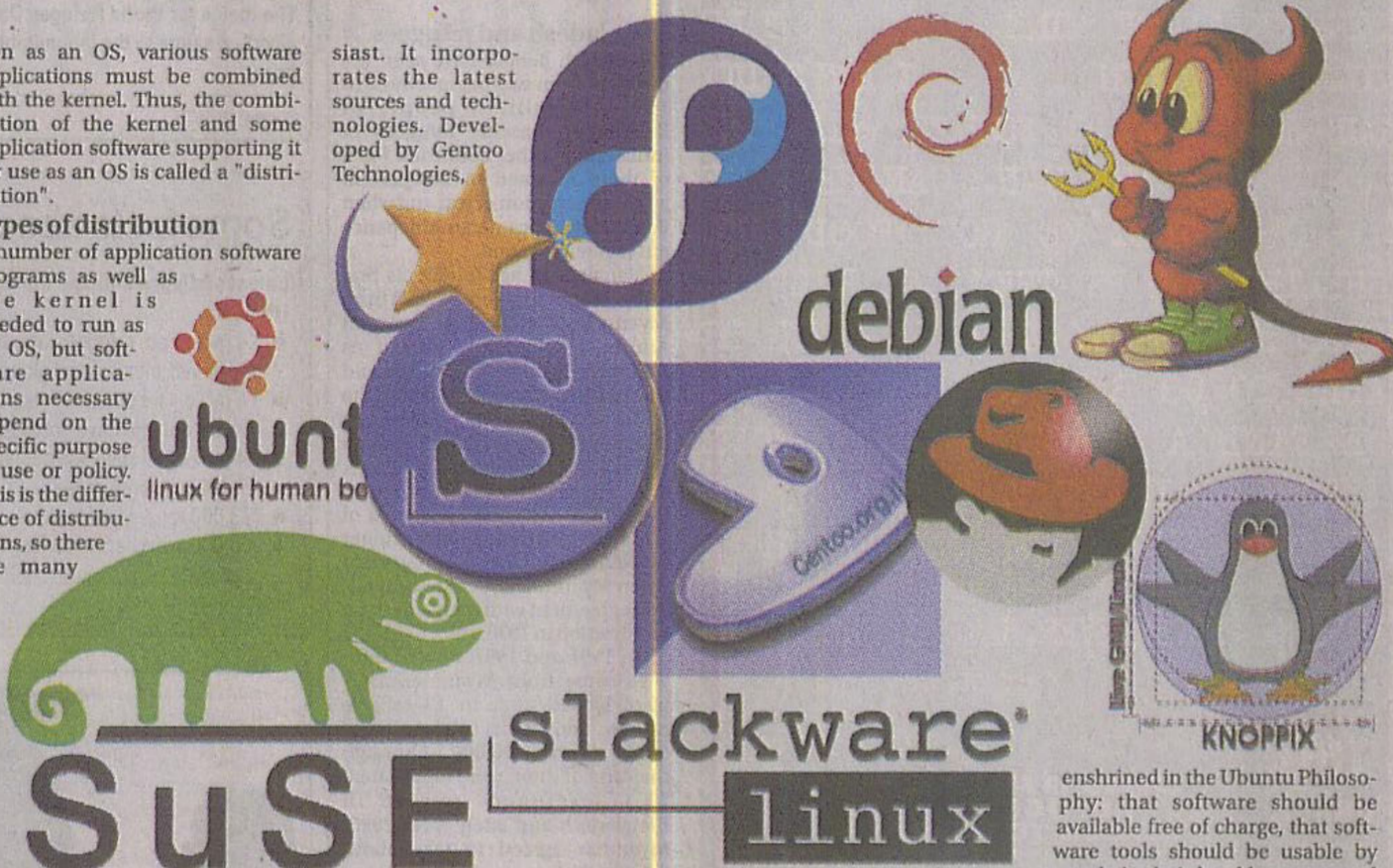
Although Linux is originally the kernel created by Linus, it does not function as an OS generally available with only the kernel. To func-

tion as an OS, various software applications must be combined with the kernel. Thus, the combination of the kernel and some application software supporting it for use as an OS is called a "distribution".

Types of distribution

A number of application software programs as well as the kernel is needed to run as an OS, but software applications necessary depend on the specific purpose of use or policy. This is the difference of distributions, so there are many

types. It incorporates the latest sources and technologies. Developed by Gentoo Technologies.



distributions. Popular mainstream distributions are mentioned below, both Unix based and Linux based, but do note that not all of them are free to download and use.

Debian

Debian GNU/Linux is a free distribution of the Linux based operating system. It is maintained and updated through the work of many users who volunteer their time and effort. Along with its large selection of pre-packaged software is contains advanced package management tools that allow for easy installation and maintenance on individual systems and workstation clusters. Extensive pre-release testing is done to ensure the highest degree of reliability possible, and a publicly accessible bug tracking system provides an easy way to monitor customer feedback. Debian supports Intel compatible, PPC, Alpha, Sparc, Other, Mainframe, m68k, 64bit processors. However you can download just over a hundred megabytes from the internet burn it on a CD and install all the software you need from the Debian ftp servers. Website: www.debian.org

Knoppix

Full-featured Linux distribution that boots from a CD. Includes the latest version of KDE and OpenOffice.org. Can be used to work from Linux on PCs without actually installing it, so it's ideal for demonstrations of Linux. Knoppix is based on Debian and supports Intel compatible processor based computers. Website: www.knoppix.net

Gentoo

Gentoo Linux is designed for the developer, power user and enthu-

siast. It incorporates the latest sources and technologies. Developed by Gentoo Technologies. Website: www.gentoo.org

Mandriva

Mandriva Linux is a powerful operating system that is available for many platforms: 32 bit processors such as Intel Pentium, AMD Athlon, PowerPC; and 64 bit processors such as Intel Pentium D, Itanium and AMD Opteron. Mandriva Linux includes many graphical administration assistants & wizards that make it intuitive and fun to use while providing all the power and robustness of other Linux systems. Hundreds of included applications make it an ideal solution for both professional and home users. Website: www.mandriva.com

RedHat

Red Hat Enterprise Linux is a high-end Linux distribution geared toward businesses with mission-critical needs. It supports most of the processors available in the market today but the OS is not free. But it is the most popular Linux distribution in Bangladesh. Website: www.redhat.com

Slackware

Slackware Linux by Patrick Volkerding is an advanced Linux operating system, designed with the twin goals of ease of use and stability as top priorities. Including the latest popular software while retaining a sense of tradition, providing simplicity and ease of use alongside flexibility and power. Slackware Linux provides new and experienced users alike with a fully-featured system, equipped to serve in any capacity from desktop

workstation to machine-room server. Website: www.slackware.com

SuSE

Both SuSE and Novell supports platforms based on the Intel compatible, PPC, Alpha, Sparc, Itanium, and other mainframe processors including 64 bit processors. SuSE, now a subsidiary of Novell, produces one of the most popular mainstream Linux distributions. Website: www.suse.com

Linspire

Linspire is a full-featured computer operating system designed for desktop and laptop computers. Based on Debian Linux, Linspire provides a powerful, stable, almost virus-free computing experience, yet is incredibly easy-to-use. Bundled software includes a Microsoft Office file-compatible office suite, a powerful internet and email suite, complete music and photo programs, media players for viewing animation and videos, and much more. Website: www.linspire.com

Fedora

Fedora Core is RedHat's plan to develop a complete, general-purpose operating system exclusively from free software. The distribution was created to replace low-end, consumer versions of RedHat Linux. Website: http://fedora.redhat.com/

Ubuntu

Ubuntu is a complete Linux-based operating system, freely available with both community and professional support. It is developed by a large community. The Ubuntu community is built on the ideas

enshrined in the Ubuntu Philosophy: 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 customise and alter their software in whatever way they see fit. Ubuntu can be downloaded from its website or you can have it delivered anywhere in the world via mail absolutely free of charge. Website: www.ubuntu.org

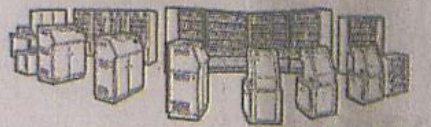
OpenBSD

The OpenBSD project produces a free, multi-platform 4.4BSD-based UNIX-like operating system. The efforts are emphasized on portability, standardisation, correctness, proactive security and integrated cryptography. OpenBSD supports binary emulation of most programs from SVR4 (Solaris), FreeBSD, Linux, BSD/OS, SunOS and HP-UX. OpenBSD is freely available from FTP sites, and also available in an inexpensive 3-CD set. OpenBSD is developed by volunteers. The project funds development and releases by selling CDs and T-shirts, as well as donations from organizations and individuals.

As shown above, there is a great variety of distributions. Since their software can be installed and deleted individually after installation, it is possible to make similar environments whichever you select. If you want to try using Linux for the first time, I would recommend Fedora Core 5, Ubuntu or the latest stable version of Debian from the viewpoints of easy installation and configuration, large collections of software, information on the internet on how to use them and the handling of bugs and security holes and because they are absolutely free. Sources: www.linux.org

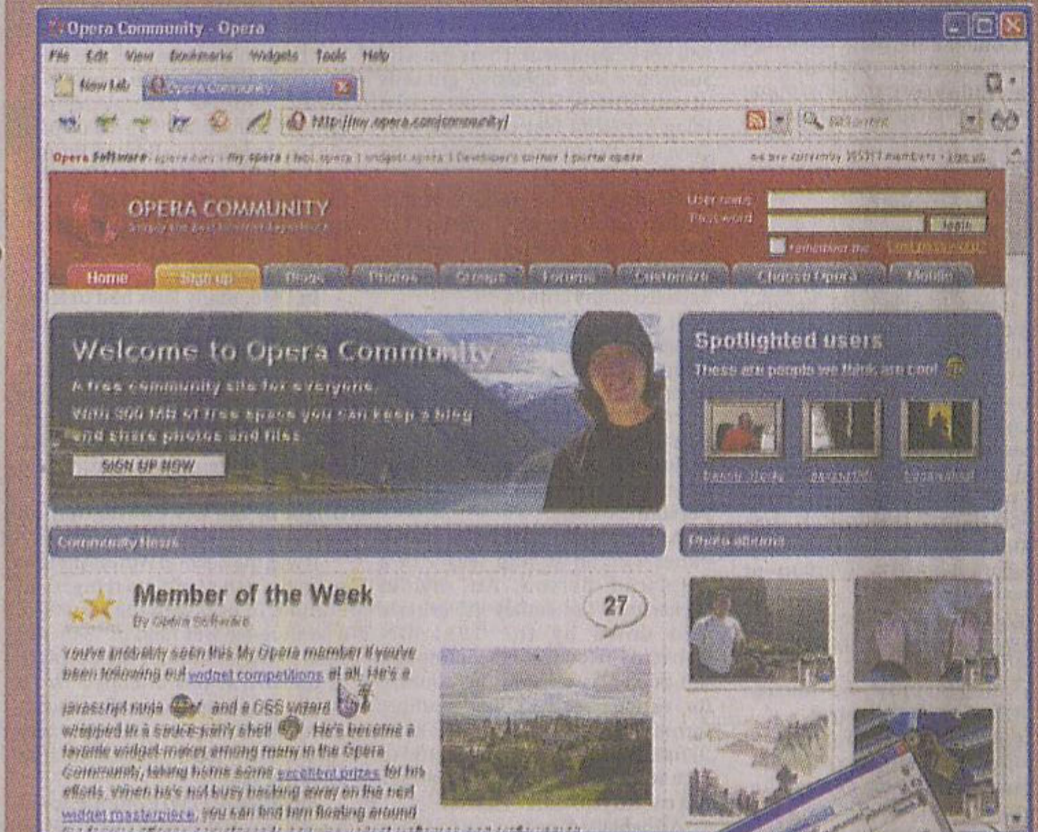
BESM

BESM is the name of a series of Russian mainframe computers. It stands for Bolshaya Elektronno-Schetnaya Mashina in Russian, which can be translated as "Large Electronic Computing Machine", or simply "Large Computer". Several types of BESM have been built. BESM-1 was built in 1953 using approximately 5,000 vacuum tubes. Only one such machine was ever built. At the time of completion, it was the fastest computer in Europe.



TECH NEWS

Opera 9 New feature-rich version released



AHMED ASHIFUL HAQUE

OPERA Software has released the ninth version of its popular web browser last week. The browser is available for free as a 5 megabyte download, in over 25 languages, for Mac, Windows and Linux, from the company's website at www.opera.com. The new Opera formally supports a popular file-sharing mechanism called BitTorrent and lets users customise preferences -- such as whether to allow JavaScript or show ads -- on a site-by-site basis.

Opera 9 also sports "widgets" -- Web-based applications that run off its browser but appear detached as stand-alone tools. With Widgets, users can play games, get organised, follow their favourite sports teams, and more. Anyone knowing web coding can develop widgets for Opera; others can download existing ones.

"For Opera 9, we worked hard to push the limits of what people expect from a browser, with increased speed, new web standards support and innovative features such as widgets

and BitTorrent," said Jon von Teichner, CEO of Opera Software. "Even though we shaped this browser for the future, we have the powerful features people want and need for their surfing today. I truly feel Opera 9 has something for everyone."

Other new features in Opera 9 include a content blocker for removing ads and images from a Web site, improved rich text editing and site-specific preferences. Opera 9 also offers a thumbnail feature, which enables users to mouse over an open tab to see a thumbnail preview of the page. Users can also change the look and feel of the browser, by downloading new skins or altering buttons to suit their choices.

Opera's security and pop-up ad blocker have been improved. A security bar has also been added to Opera 9, a response to the prevalence of phishing scams and identity theft. The security bar aims to

also includes technology to strengthen blocking of pop-up advertisements.

The software also includes tools to make it easier for sites to develop for emerging open standards: built-in Extensible Rendering Architecture (ERA) helps developers make sure their sites work well on any web-connected device from mobile phones to Nintendo's next-generation gaming console Wii.

To help promote Opera 9, the company has created an advertising campaign called "Your Web, Your Choice," which emphasises that users shouldn't be stuck with the Web browser that comes with Windows.



COMMUNICASIA 2006

Joerg Habetha, project coordinator with Philips research laboratories shows a prototype of the "MyHeart" vest, specially made to monitor cardiovascular activity of the body at the CommunicAsia, 2006 exhibition in Singapore on June 20. The vest monitor cardiovascular activity using a wireless technology and a laptop. And a mockup of Samsung Ultra mobile phone on display at its booth.

PHOTO: AFP

TECH NEWS



Microsoft upgrades instant messenger

AP, Washington

MICROSOFT Corp.'s latest instant messaging program is ready for prime time, the company said Monday.

Windows Live Messenger, which had been available in test form, will officially launch Tuesday.

The free program is an upgrade to MSN Messenger, the previous name for the software maker's tool for quickly communicating online. Such products have become incredibly popular for a wide variety of audiences, from teens to business people.

The basic service gives people a way to quickly type mes-

sages back and forth. Windows Live Messenger also offers video calling and ways to easily share files, among other features.

Competitors, including market leader AOL, also are adding such functions. On Monday, Yahoo Inc. said it was opening up its messaging service so that outside developers can create programs that plug into it.

Windows Live Messenger is one of the first products to debut under Microsoft's new "Live" brand. The company is renaming some products and launching others under the "Live" brand as part of an overall push to offer more Web-based products. It faces

intense competition in the field from companies including Google Inc. and Yahoo Inc.

MSN Messenger was the second-most popular instant messaging service, after AOL, for U.S. home and worker users, according to May data from Nielsen/NetRatings.

Globally, MSN Messenger is the most popular instant messaging client, with 204.6 million users in April, according to comScore Media Matrix. Yahoo is No. 2 with 76 million users, while Time Warner Inc.'s AIM and AOL messaging products together had about 51.3 million users, the research firm said.