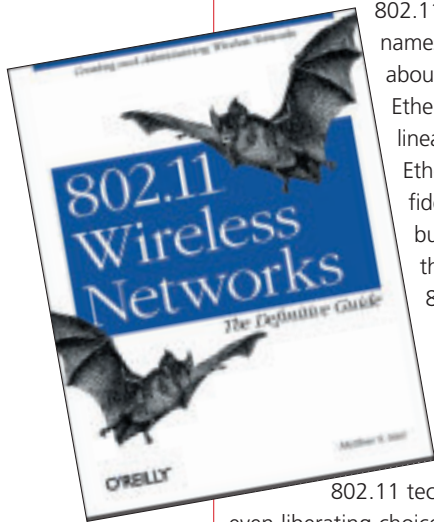# LINUX NEWS

No strings attached

802.11 technology goes by a variety of names, depending on who is talking about it. Some people call it wireless Ethernet to emphasise its shared lineage with traditional wired Ethernet. Wi-Fi, from wireless fidelity, is another popular name, but those who work hands-on with the technology call it simply 802.11.

In *802.11 Wireless Networks: The Definitive Guide*, author Matthew S Gast delves into the intricacies of wireless networks, revealing how 802.11 technology can be a practical and even liberating choice for businesses, homes, and organisations. At the same time, he leads the reader through all aspects of planning, deploying, and maintaining a wireless network, and covers the security issues unique to this type of network.

The adoption of 802.11 wireless technology is moving at an explosive rate. With transfer speeds of up to 11 Mbps, it's the fastest practical wireless technology approved by the FCC for low-power unlicensed use.

"Using new network technology always requires a balance between theory and practice," says Gast. "The theory helps you design the network and troubleshoot the equipment when it breaks, but it is not always helpful when you have a piece of equipment that implements one vendor's view of the world. Most books will tell either how the standard works or how to use a specific piece of equipment or software. In this book, I have tried to weave together both the theory and the practical sides of the matter."

802.11 Wireless Networks: The Definitive Guide shows readers how to configure wireless cards under Linux, Windows, and OS X systems. The book is written for the serious system or network administrator who is responsible for deploying or maintaining a wireless network.

Info
802.11 Wireless Networks: The Definitive Guide
http://oreilly.com/catalog/802dot11/

Banks stay closed

Thanks to some banks' insistence on using closed format information protocols, some people are being effectively shut out of using online banking systems and taking part in the 'information revolution' that is supposed to be happening. If your bank likes to say 'this Web site is designed for the following technology' and you don't fit their bill, then cold comfort is at hand with the knowledge that you're not alone.

Evan Leibovitch has been collating information about how well the banks suit the needs of the computer literate general public. On his Web site you will find details of banks in 32 countries. It shows that, in the UK, there is multi-platform support available from a lot of the banks. It's just a shame that some of those that are still letting the side down happen to be big high Street names.

To find out whether your bank is a stick in the mud, check out how it fares at *http://www.starnix.com/banks-n-browsers.html*.

C# in a Nutshell

C# in a Nutshell, written by Peter Drayton, Ben Albahari and Ted Neward is designed to be the handbook for the new breed of programmers to this language, who the authors expect will use the book daily and will keep next to their keyboards for years to come.

Two years ago, there were no C# programmers: the language didn't even exist. Now all C# programmers find themselves in the same boat, having to learn to master a language and a new platform in quick order, without a lot of tried-and-true resources on which to depend.

Neither a "how-to" book nor a rehash of Microsoft's documentation, this latest addition to O'Reilly's Nutshell series goes to the source of the language and APIs to present content in a way that professional programmers will value above all other books.

According to the co-author Neward: "Hordes of programmers will be migrating to this entirely new platform and an entirely new language. Just as happened with Java, programmers will want somebody to point out the new and interesting stuff and will need careful guidance to avoid the 'gotchas' in this brave new world."

In addition to the reference section, "C# in a Nutshell" includes an accelerated introduction to the C# language and the .NET Common Language Runtime and a tutorial section on using C# with the core classes of the .NET Framework Class Library.

"C# in a Nutshell" was written for the working C# programmer who will be able to find answers to most questions of syntax and functionality that he or she encounters on the job. Experienced Java and C++ programmers encountering the C# language and the CLR for the first time will be able to put this book to good use.

Info

C# in a Nutshell
http://oreilly.com/catalog/csharpnut/
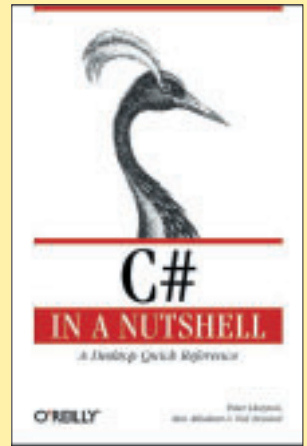
Red Hat Alliance

The Linux provider Red Hat has announced the Red Hat Alliance: a partner programme designed to enhance and strengthen relationships between Red Hat and the premier technology providers to the enterprise market. Recently committed partners include: AliaslWavefront, BMC Software, Borland Software Corporation, CheckPoint Software Technologies, ComputerAssociates, IBM, Legato Systems, Novell, Rogue Wave Software, Softimage, Synopsis, TIBCO Software and VERITAS Software.

Through the Red Hat Alliance, Red Hat is forging long-term relationships with partners who are supporting Red Hat's enterprise family of products, including the recently released Red Hat Linux Advanced Server. Advanced Server is the ideal Linux solution for partners and customers due to longer release cycles, added enterprise-class features, and unprecedented reliability and stability.

The Red Hat Alliance provides viable Linux solutions to enterprise customers through:

● Certification: Certified software and hardware programmes assure customers that their applications and hardware are certified to work on Red Hat's enterprise products.

● Support: Red Hat will work closely with its partners to ensure that customers deploying enterprise-class Linux solutions receive enterprise-class support.

● Technology: Red Hat and its partners will collaborate to improve Linux solutions for enterprises looking to migrate to Red Hat Linux.

● The Red Hat Alliance programme is a milestone for Red Hat, uniting the top hardware, software and embedded technology providers in a partnership with Red Hat to deliver the best enterprise Linux solutions to their customers," said Mark de Visser, Vice President of Marketing at Red Hat. "We look forward to working with our partners to drive further innovation in Linux-based enterprise solutions."

Info

Red Hat Linux   http://www.europe.redhat.com
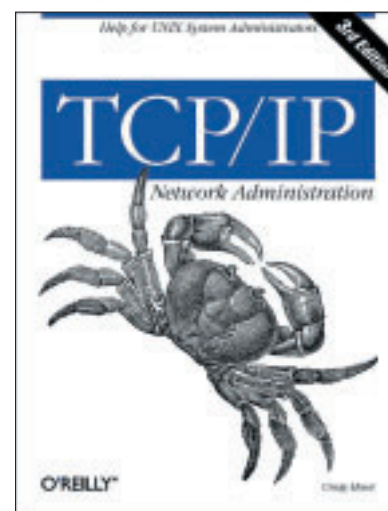
Network administration

As Craig Hunt comments in the just-released third edition of his *TCP/IP Network Administration*: "The Internet has grown far beyond its original scope. The original networks and agencies that built the Internet no longer play an essential role for the current network. The Internet has evolved from a simple backbone network, through a three-tiered hierarchical structure, to a huge network of interconnected, distributed network hubs. Through all of this incredible change one thing has remained constant: the Internet is built on the TCP/IP protocol suite."

TCP/IP is a set of communications protocols that define how different types of computers talk to each other. The suite gets its name from two of the protocols that belong to it: the Transmission Control Protocol (TCP) and the Internet Protocol (IP). According to Hunt, TCP/IP is the leading communications software for Local Area Networks and enterprise Intranets, and is the foundation of the worldwide Internet. As such, it is the most important networking software available to a Unix network administrator.

"This book is a practical, step-by-step guide to configuring and managing TCP/IP networking software on Unix computer systems," says Hunt. "It's a book about building your own network based on TCP/IP. It is both a tutorial covering the 'why' and 'how' of TCP/IP networking, and a reference manual for the details about specific network programs." Hunt also provides a tutorial on configuring important network services, including DNS, Apache, sendmail, Samba, PPP, and DHCP, and covers troubleshooting and security issues.

With coverage that includes Linux, Solaris, BSD, and System V TCP/IP implementations, *TCP/IP Network Administration*, Third Edition is intended for everyone who has a Unix computer connected to a TCP/IP network.

Info
TCP/IP Network Administration   *http://oreilly.com/catalog/tcp3/*

A force to be reckoned with

Caldera, Conectiva, SuSE and Turbolinux have joined forces, resources and resolve and created UnitedLinux.

Linux is good at supplying verity and alternatives; which many developers see as one of its strengths. Enterprise users, and the majority of business users, see this as a cloud of uncertainty and have been know to back away from using Linux because of this.

Now uniformity is at hand. Software vendors including AMD, Borland, Computer Associates, Fujitsu Siemens, Fujitsu Japan, Hewlett-Packard, IBM, Intel, NEC and SAP, have also come together to support this effort in creating standard Linux platform

This new initiative will streamline Linux development and certification around the globe, with it's uniform distribution of Linux designed for business. UnitedLinux addresses enterprise customers' needs for a standard, business-focused Linux distribution that is certified to work across hardware and software platforms, accelerating the adoption of Linux in the enterprise. Under terms of the agreement, the four companies will collaborate on the development of one common core Linux operating environment, called UnitedLinux software. The four partners will each bundle value-added products and services with the UnitedLinux operating system and the resulting offering will be marketed and sold by each of the four partners under their own brands.

Nearly every vendor supplying a piece of the technology infrastructure used by businesses has expressed support for UnitedLinux, including systems and software vendors AMD, Borland, Computer Associates, Fujitsu Siemens, Fujitsu Japan, Hewlett-Packard, IBM, Intel, NEC, and SAP. Independent hardware and software vendors spend considerable effort certifying their products and services on individual Linux distributions to ensure product compatibility for their customers.

UnitedLinux will significantly diminish the number of distributions that vendors are asked to certify and will provide a true standards-based Linux operating environment. The collaboration of these four Linux companies will result in an enterprise Linux offering which is truly global by virtue of the companies' ability to provide local language support, training and professional services, in addition to the support of strategic partners.

UnitedLinux will provide one unified Linux codebase for IBM's complete eServer product line and AMD 32-bit and 64-bit platform and Intel's x86 32-bit and Itanium processor family platforms.

In addition UnitedLinux unleashes a massive research and development organisation for Linux in the enterprise. Effectively, the four companies involved in this process will shift dollars and resources once allocated to creating and maintaining custom Linux operating environments and divert them to new R&D on Linux enterprise software. UnitedLinux is dedicated to bolstering the enterprise readiness of the platform, but in the same collaborative spirit from which Linux was founded and continues to flourish.

Info
UnitedLinux   *www.unitedlinux.com*

Open APIs enable seamless sharing

Webraska has released SmartZone Application Platform 4.0.

According to JF Sullivan, Vice President of Telecom Marketing at Webraska: "A major focus for Webraska is to find ways to increase application ease-of-use, drive down development lead-times and enable applications to share data and interact with each other."

The SmartZone Application Platform supports standards-based interfaces that help application developers create a continuous end-user experience. The platform provides powerful foundation technologies that enable development of viral person-to-person and community applications, while still maintaining privacy of subscriber information. These technologies accelerate and simplify the construction of location-based services.

This launch makes the following services of the SmartZone Application Platform available to local and remote applications via Simple Object Application Protocol (SOAP) and Java APIs:

● Application Integration Services that allow applications to work together and share subscriber context information

● Access Control Services providing protection of personal subscriber information

● Publishing Services for the creation, storage, retrieval and sharing of information and search results by different applications and subscribers

● The SmartZone supports MMS and WAP 2.0, in addition to the interfaces supported by previous versions (Web, WAP 1.0, SMS, i-mode and HTML browsers on PDAs).

"Our customers require software which greatly improves the ease with which they roll out their LBS applications", added Korak Mitra, VP Telecom at Webraska. "The release of SmartZone(TM) Application Platform 4.0 provides the killer environment to develop every conceivable LBS application and quickly deploy those services to their end-users."

The Webraska SmartZone Application Platform, used alone or combined with Webraska's SmartZone Geospatial Platform, enables the rapid development, integration and deployment of high-usage viral location-based applications and services. Supporting the latest wireless industry development standards including Java, XML, SOAP, and Web Services, the SmartZone Application Platform is easily integrated into mobile operator environments. The platform architecture is fully redundant and can be scaled to handle requests from millions of active subscribers. Webraska's SmartZone Application Platform can be deployed on the customer's premises or hosted by Webraska on their behalf. Solaris, Linux and Windows operating systems are supported.

Info
Webraskahttp://www.webraska.com

Linux excels at digital effects

IBM is to create the digital effects for the next Lord of the Rings film with a little help from Linux. Digital effects facility Weta Digital, Ltd. will move a significant proportion of production work related to the Lord of the Rings film trilogy onto IBM Intellistations running Linux.

IBM will supply Weta Digital with more than 150 6580-WEA Intellistation workstations with 21" CRTs by the end of 2002. Jon Labrie, who led the project for Weta Digital said: "We chose IBM as we were impressed with both the level of commitment to Linux on an organisational level, and the skills of the IBM Linux team members.

"Failure is not an option. I needed an organisation with a commitment as strong as my own to Linux. We're betting a good portion of our business on it. So has IBM. Our interests are in alignment and that's always a good starting point for a business relationship" said Labrie.

Labrie is responsible for the implementation of Linux as the primary operating system within the facility. The primary motivation for the shift to Linux has been cost. "Linux makes development work much more cost effective for us" said Labrie.

"The financial reasons for moving to Linux were compelling, as we're still growing at a phenomenal rate and we need to be able to support that growth in the most cost effective manner"

Weta Digital had run Linux on servers for two years and the success there in terms of price and performance was the catalyst that led to the investigation of Linux workstation options in the marketplace and the decision to partner with IBM.

The first of the new machines were installed at Weta Digital in early May for use by the special effects artists working on The Two Towers, the second film in The Lord of the Rings Trilogy.

IBM's New Zealand Southern Region Manager Sunil Joshi says the deal represents a significant win for IBM: "This deal showcases the value proposition that IBM's Digital Content Creation Solution delivers, and highlights our total commitment to Linux, being able to benchmark that commitment through significant deals like this is proof of our ability to deliver on our promise to the Linux market."

Fastest server at Wimbledon

This year was IBM's thirteenth year as official information technology supplier to the All England Lawn Tennis Club for the Wimbledon Tennis Championships, managing all parts of the club's e-business infrastructure.

New developments for 2002 included: improvements to the TV graphics and to the information system used by TV and radio commentators; increased Internet services for the players; and an enhanced Match Information Display to deliver scores and other information to the public in the grounds.

From speed-of-serve radar guns to the official Web site, IBM will provide the hardware, software and services needed to run, build and manage the club's e-business applications. Scoring information and a host of e-business services will be delivered in real-time via many channels, including the official Web site and an Intranet used onsite by players, press, public and media; Match Information Display in the Grounds; WAP and SMS services to mobile phones; and a data feed to BBC Interactive TV and other international broadcasters.

Security under the thumb

Or under the finger. AuthenTec have launched its new, some would say breakthrough, Fingerprint Sensor for low cost access control markets. AuthenTec, a developer in advanced biometric semiconductor technology, is showing off its new FingerLoc AFS8500 fingerprint sensor designed to enable integration into a whole new range of low-cost security applications.

The AFS8500 is relatively low in cost and its high level of integration makes it suitable for use in time and attendance, access-control, commercial and residential building security applications. Unlike any other sensor in its segment, the FingerLoc AFS8500 features a small form factor (14mm x 14mm x 1.4mm); a low price point of $23.00 for 10 KU quantities; a full industrial temperature range (-20°C to +85°C) and full +/-15KV (IEC61000-4-2 Level 4) ESD immunity. With high-speed serial and 8-bit parallel interfaces, the AFS8500 is the product of choice for easy integration.

Info
AuthenTec   http://www.authentec.com

Interface architects

Imperial Software Technology has introduced a new version of its X-Designer graphical user interface builder for Motif, Windows and Java.

Features of X-Designer 7: Enterprise Edition include full integral support for Motif 2, the latest version of the standard GUI toolkit for Unix and Linux workstations. Designers of application interfaces for Unix can now fully exploit the power of Motif 2, with the ability to transport the interfaces to Windows and Java for full cross-platform capable applications.

The new version also provides the ability to save GUI designs in XML, rendering them available for processing by other tools such as design documentation utilities or for translation to other types of interface. A legacy application migration feature enables existing Motif applications to be captured, optionally preparing the interface for generation as a Java GUI. Built-in XD/Replay technology offers automated interface testing.

"We have introduced the latest version because of unprecedented demand for a Motif 2 builder from our customers and huge interest shown in downloads from our Web site," says IST president and CEO Derek Lambert.

X-Designer provides a powerful application environment that not only includes GUI development but software test, design, capture, and replay.
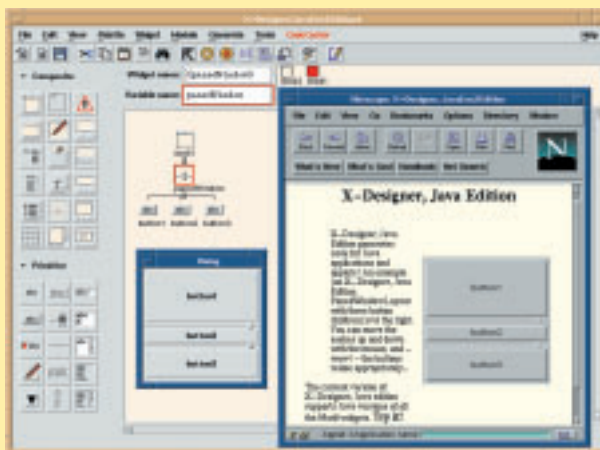
Info
IST   http://www.ist-inc.co.uk/NEWS/press/xd7_launch.html

Marker pens to become illegal

Well, possibly! How so? Some bright spark has discovered that by covering the rip protection track on some of the copy protected audio CDs that are on the market – these are the ones that will result in a Mac having to be sent back to the repair shop if one is inadvertently played on it – the rip protection is no more. The law is very clear, in some parts of the world, in expressing that "any device which circumvents such protection schemes is illegal, under the DMCA". Relax though, you can still use them to write license key codes on them.

The Digital Consumer organisation – protecting fair-use rights in the digital world – is trying to bring some sanity to the world of copy protection and has posted the "The Consumer Technology Bill of Rights" in the USA, with a plea for everyone there to write to their congressmen.

In the UK the Campaign for Digital Rights have similar goals in mind in defeating the EUCD – the European Copyright Directive – which, if taken to its current logical conclusion, would also want to see Post-It notes drummed out of town.

Info

Digital Consumer   *http://www.digitalconsumer.org/*
Campaign for Digital Rights   http://uk.eurorights.org/

Gartner see value in Open Source

Security by obscurity is not the way to go, claims Gartner in a recent report. Security is seen as top priority in the IT industry, even for Microsoft.

In its report Gartner "believes that Open documentation and public review of program interfaces between OSes and applications will lead to stronger security mechanisms over the longer term. Of course, attackers may exploit the exposed interfaces in the short term as the process brings to light existing yet undiscovered vulnerabilities. But this approach simply means that insecure code will become secure more rapidly."

"Computer hackers have had little difficulty breaking into Microsoft's closed source software. A strategy of relying on security through obscurity (hiding source code) has already proven a failure for Microsoft."

Info

Gartner
http://wwww3.gartner.com/DisplayDocument?doc_cd=106790

Lucas Linux renderfarm a success

Industrial Light and Magic produced its first movie after converting its workstations and renderfarm to Linux last year, That film? Star Wars, Episode II: Attack of the Clones, no less.

ILM took a big gamble when it undertook the move to convert to Linux, especially since it was in the middle of a major film production. "We thought converting to Linux would be a lot harder than it was", said the director of Research and Development, Andy Hendrickson. "Linux is so like what we had before. We pushed forward deployment in November 2001 and will finish conversion after Episode II."

All ILM 3D particle simulations are done in AliaslWavefront Maya. "We have, I'd say, 90 per cent of our Maya users on Linux", says Robert Weaver. "It seems incredibly stable on Linux. I haven't had Maya crash on me in months."

R&D Principal Engineer Phil Peterson reports that ILM is about 80 per cent finished with its Linux software conversion. He says, "A team of three people ported over a million lines of code to Linux."

"The biggest issue we had in porting was the compiler and other tools", says Peterson. "Newer C++ code is fairly dependent on STL." The gcc 2.96 compiler included with Red Hat didn't support the C++ Standard Template Library (STL), so ILM uses gcc 3.01 instead. Its multi-platform build environment is customized based on Python cooperating with GNU make.