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HERON Technology Corporation

Linux Brochure

HERON AND THE LINUX OPERATING SYSTEM



This brochure addresses the world market's reaction to the LINUX Operating System and why Heron uses it to support their Patient Administration System (PAS).

From ITBusiness Report, May 2003. By Dave Webb

Why LINUX, Why Now?

There are many reasons to believe the open source operating system is hitting its stride in the enterprise.

LinuxWorld 2002 in San Francisco marked a watershed for the open source operating system. Big Computing was out in force — HP, IBM, Sun Microsystems — wooing the geeks with product and service launches and general abandon. Sun jumped back into the 32-bit server market it had given up on in 1990 with its Linux-based LX-50. IBM countered with a "three-pronged attack" that included "SWAT" teams to migrate Sun customers from the proprietary Solaris Unix platform to IBM-based Linux on its own x335 server. Even open source nemesis Microsoft had a presence there, warily observing the proceedings. If Linus Torvalds' brainchild hadn't been prime time material before, the big vendors were sending the message that Linux was indeed ready for its close-up, Mr. DeMille.

Alan Freedman, research manager, infrastructure hardware with IDC Canada in Toronto, says Linux is the only OS showing significant growth in the number of servers shipped — 31 per cent for 2002, and a predicted 60 per cent in 2003, compared to three per cent growth for Windows boxes and virtually flat Unix numbers.

That underestimates what's actually happening in the market, though most copies of Linux are downloaded, not shipped installed on servers.

To read the rest of this article, please visit our website.

From The Inquirer. November 20, 2002. By Egan Orion:

Linux wins one in India

State that is....

AT LEAST ONE SAVVY state government in India has told Bill Gates to get lost and take his "free" Microsoft software with him, according to a story in Economic Times.

Chief Minister Digvijay Singh of Madhya Pradesh told Gates personally that the State will be going forward with projects based on Linux. The most visible of these is the Headstart programme for computer-aided education. The first phase of that initiative used Windows, but the government has decided to switch to Linux for the second phase.

R Gopalakrishnan, state coordinator for the Rajiv Gandhi missions said: "This should set at rest any fears that we are anti-Microsoft as such. But we have opted for Linux in this phase, because of the cost factor, and the fact that it avoids costly upgrades and improved versions that are an inseparable element of Microsoft packages".

According to Mr. Singh: "For us it is not a question of Microsoft versus Linux. It is just a matter of choosing between a free software and a monopoly. We feel that when we are putting public information out in the open, then it should not be through a proprietary software.

"It is a considered decision taken by us. We've noted that several governments in the west and other countries too have opted for Linux instead of Microsoft because of a host of considerations."

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For more information, visit our website at:
www.herontech.com

HERON press release, March 17, 2000

LINUX O/S in Jamaican Hospitals for PAS

March 17, 2000, Markham, Ontario, CANADA: Heron Technology Corp. (HTC) announced today that it is now installing the Linux open source operating system in six hospitals in Jamaica in support of the HTC PAS [Patient Administration System]. The PAS contract, valued in excess of \$1 Million [Cdn], was received in the fall of 1999 from the Ministry of Health of the Government of Jamaica. The contract relates to the provision of application software modules, training and implementation services to computerize 18 hospitals in that country with the PAS.

The Canadian Government, through Canadian Commercial Corporation [CCC] a \$1 billion annual business reporting to the Parliament of Canada, has entered into this contract with the Government of Jamaica on behalf of HTC, to provide these additional products and services during the next two to three years, during which time standardized IT systems will be implemented in all of the Government hospitals in Jamaica.

The contract, signed by the Minister of Health, the Honourable John Junor, and by the Permanent Secretary of Health, George Briggs, is an add-on to the original HTC contract for the computerization of five hospitals, valued at \$420,000, signed in March of 1997. The first 5 hospitals became fully operational with their computerized systems in February of 1998. The total of 23 hospitals, representing over 4,000 hospital beds, covers all Government and Specialist hospitals in Jamaica, and covers a population of 2.5 million.

The HTC PAS application software modules address the functional processing needs in such departments as Admitting, Inpatients, Outpatients, Accident & Emergency, Billing and Accounts Receivable, Health Records Abstracting, and MOH Statistical Reporting. The IT (Information Technology) systems will be the same in all hospitals, providing significant cost benefits in such areas as initial and on-going training, employee transfers and hiring, data information exchange and MOH data collection, because of the standardized procedures and coding at all facilities.

Industry information indicates that Jamaica is the first, and only jurisdiction in the world to plan to implement a standardized on-site PAS in all public hospitals.

No on-site hospital technical support personnel are required for the HTC PAS, which would be prohibitively expensive were 23 hospitals expected to support such a technical cost at each site. HTC supports all sites remotely, at minimal cost.

According to Peter Wright, Senior IT adviser at the Jamaican MOH: "The performance of the HTC PAS is second to none. It has functioned with very limited downtime [only 72 hours] since its implementation more than two years ago. Collectively, there are more than 100 users, working 24 hours a day, 7 days a week, in the five institutions.

Accordingly, the up time experience equates to an impressive 99.995% during the past two years, the equivalent of over 1.5 million hours of end-user operation".

Mr. Wright adds, "This is attributable to HTC's solid application program code, and to the very stable UNIX operating system."

Contributing to the Government's decision to extend the HTC PAS to the additional 18 hospitals, is the very low TCO [Total Cost of Ownership] exhibited by the HTC systems.

The introduction of the Linux operating system, version 6.0 from Red Hat Software, further contributes to the Government's objective of keeping costs in line, since Linux is free. An individual hospital could easily have over 100 desktop devices in operation, and accordingly the savings will be considerable. The Linux O/S is now rapidly becoming the O/S of choice around the world.

The PAS desktop devices can be very low-cost "thin clients", or CRT devices, instead of having to be PC's [Personal Computers/fat-clients] which are mandated by many software vendors. This non-PC approach [thin-client] can reduce the on-going technical support and maintenance costs by as much as 80%, as reported by such noted industry experts as IDC, and the Gartner Group Inc., a Stamford, Conn.-based research firm.



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SECRETARY AND THE FOLLOWING

November 14, 2002

Ron Hébert
Heron Technology

Canadian Awards for International Cooperation - Jamaica PAS

The **Ministry of Health Jamaica** embarked on a process of computerization of hospitals. This has been done utilizing a Patient Administration System (**PAS**) developed by **Heron Technology Corporation**, which has seen the computerisation of eleven of the twenty-two hospitals across the island. This system provides a standardised data platform that collects data on 70% of the discharged patients from hospitals islandwide.

The PAS has been customised allowing for the addition of modules readily adaptable to the users needs. In Jamaica four modules have been added to the **PAS** to allow for injury surveillance. This system called the Jamaica Injury Surveillance System (**JISS**) contains modules for tracking motor vehicle accidents, violence related injuries, accidental injuries and attempted suicides. The availability of these data characterising injuries has allowed for production of reports both at the local and national level and provides guidance for an intersectoral approach to activities aimed at reducing the disease burden due to injuries.

Another planned development is to add an occupational injury module to **JISS** and this will be presented in June 2003 to other health personnel within the Caribbean region and to **PAHO** Occupational Health and Safety Division. These developments are a clear indication of the interest in what Jamaica is doing re the utilisation of computers in health care within the **PAHO** region.

Yours sincerely

Dr. Elizabeth Ward
Director, Disease Prevention and Control

PeopleSoft press release, May 6, 2003

PeopleSoft and IBM Team to Deliver Enterprise Solutions for Linux

Linux Ready for Primetime

May 7, 2003 - Today at its 2003 Leadership Summit, PeopleSoft Inc. (Nasdaq: PSFT) announced a strategic joint development initiative with IBM Corp. (NYSE: IBM) to port and optimise PeopleSoft's industry-leading enterprise applications to Linux running on IBM hardware and software. PeopleSoft has selected IBM eServer xSeries, DB2 Universal Database and WebSphere Application Server as its Linux development platform of choice. Companies running mission-critical PeopleSoft applications on Linux and IBM eServer xSeries systems will benefit from improvements in performance, reliability and manageability for core business applications.

"Linux is ready for primetime -- it is now capable of running mission-critical applications," said Rick Bergquist, chief technology officer, PeopleSoft. "We're teaming with IBM to deliver PeopleSoft applications in a Linux environment, which gives our customers greater choice and is another milestone in our commitment to open standards."

"As businesses look to maximise their existing IT investments with an eye to the future, Linux is becoming increasingly attractive. PeopleSoft customers now have the option to go with this reliable, low-cost operating system to streamline business processes and develop an open, on-demand environment that enables greater responsiveness to customers and suppliers," said Steve Mills, senior vice president and group executive, IBM Software Group. "Building on our strategic alliance, this agreement represents the broadest commitment to deliver industry-leading solutions using IBM hardware and software for Linux by an application partner to date."

All PeopleSoft applications will be supported on Linux including: AppConnect; Customer Relationship Management; Enterprise Performance Management; Enterprise Service Automation; Financial Management Solutions; Human Capital Management; Supplier Relationship Management and Manufacturing.



Reuters, Wed May 28, 2003. By Hans Nagl

Microsoft Loses City of Munich Deal to Linux

MUNICH (Reuters) - The city of Munich said on Wednesday it would switch 14,000 computers from Microsoft's Windows operating system to rival Linux in a deal estimated to be worth tens of millions of euros.

The decision is a blow to U.S. giant Microsoft, whose chief executive Steve Ballmer had personally campaigned for Microsoft's counter-offer to the city, based on Windows XP.

Microsoft has created two funds to discount its products against the emerging Linux software, which is eating into its most profitable business.

"This strategic decision makes Munich less dependent on one IT supplier and sets a trend toward more competition," Munich mayor Christian Ude said in a statement.

Analysts said Munich's decision to choose open source software, which means Linux, was a breakthrough.

"It is one of the largest desktop migrations to Linux ever seen," said Gartner Dataquest analyst Nikos Drakos in London.

Linux suppliers welcomed the move by one of Germany's largest cities, where many of the country's biggest corporations have their headquarters.

"You can compare this to the fall of the Berlin Wall," said Richard Seibt, Chief Executive of Linux software provider Suse. Suse is bidding for the Linux contract together with International Business Machines Corp.

Linux is considered by many to be the only big rival to Microsoft's Windows and can already be found on 15 percent of all computers sold in Western Europe.

A Microsoft spokesman in Munich said his company was still at hand if the city found that certain units could not switch over to Linux. "Some applications do not run on Linux," he said.

LINUX GROWING IN GERMANY

The Munich decision comes as the German government is installing Linux throughout certain ministries and public institutions.

In the northern state of Lower Saxony, 11,000 police computers will be switched from Microsoft Windows to Linux next year, according to the interior ministry.

Companies and governments are increasingly opting for Linux, written by Linus Torvalds and further developed on the Web with the help of thousands of volunteer programmers, because it is a stable software and not controlled by just one company.

Hundreds of companies distribute the software, charging little or nothing for the core software, but taking fees on modifications, services and maintenance.

IBM and Suse declined to give the value of the bids for their Linux offerings.

Media have reported that Microsoft's offer of about 27.3 million euros (\$32.3 million) had been almost three million euros below that of the Linux competitor, but the city had still chosen Linux for strategic reasons.

Microsoft confirmed it had offered discounts for the total project, but declined to give details.

ReallyLinux.com, by Mark Rais, author of the new beginner Linux book, Linux for the Rest of Us

Opportune time to switch to Linux

With Microsoft pushing for Windows NT retirement and Linux applications maturing rapidly this is a unique moment. There has never been a more opportune time to switch operating systems.

This brief article provides a glimpse at the significant number of applications available to those seeking a switch from Microsoft NT to Linux.

In a strange and perhaps macabre irony, close to the horrible September 11th tragedy of 2001, Microsoft first officially announced their decision to retire Windows NT. By July 1st of this year, the standard edition will not be available through the system builder channel, and support will run out by July 2005.

Halfway through this substantive retirement, which is impacting large and small corporations world wide, another phenomenon is happening related to Linux. Just as Microsoft is pressing for further acceptance and migration towards its newer Windows server product line, a wave of significant application successes are impacting the Linux world.

Substantive strides have been made in the performance and security of recent Linux server flavors based on the stable Linux 2.4.x kernel. Many of these flavors have also been thoroughly tweaked to the point in which I have personally seen a Linux server outperform far more expensive or numerically more servers running other OS's.

However, although the OS itself has gained great strides, applications and their availability has been a reason for hesitation among some corporations. They have tended to delay migration from Microsoft to Linux, holding out to avoid affecting business critical applications and to better evaluate ROI.

Now, however, the time has come to seriously consider switching, as many of the key applications for Linux have matured significantly. Core applications are far beyond simple compatibility and are making substantive impact in the business mainstream.

I provide only a minor sampling of this below:

OFFICE EMAIL SERVING

In an excellent Newsforge article Robin "roblimo" Miller notes the benefits of replacing Exchange Server with Communicate Pro. Calling it a "corporate email/groupware alternative to Microsoft's Exchange Server" is both reasonable and accurate, although it is not Opensource. Similarly there is also the server from Bynari called InsightServer. At the same time, SuSe has been promoting its release of OpenExchange Server, which is also less expensive and believed more manageable than MS Exchange Server.

Considering where Microsoft Exchange servers and their market share were just a year or two ago, these three alternatives are profoundly impacting corporate perspectives. And for those well versed with Linux, I should not miss the fact that the sendmail utility continues to do its job across many corporate servers.

OFFICE PROXY AND FIREWALLS

By now these two aspects of Linux have been well proven. Firewall setup and configuration as well as getting an office web proxy established are renowned attributes of Linux servers, with most versions offering not only tools like squid (see also this helpful article), but GUI interfaces to make custom configuration changes easy. And as always, Linux was written as a network operating system from its inception and has long since been successful in this arena.

MICROSOFT OUTLOOK, IE, AND THE OFFICE SUITE

Undeniably, Ximian's Evolution email and productivity application has been making inroads with companies struggling to address the licensing and market dominance of Microsoft Outlook. Evolution provides an almost mirror of the Outlook features and functionality at a substantially better price and with far more gentle licensing terms. A major leader in the Linux applications world, Evolution is certainly not the only competing tool to Outlook. There are others well worth mentioning to keep people clear on just how much really exists for Linux. A couple other options I know of personally among many: phpgroupware and billworkgroup.

Of course, in the general shrink-wrapped applications categories now available for Linux, a standout remains SUN's StarOffice Suite, and it's comparable Opensource version, OpenOffice well used world wide. Fully compatible with Microsoft and many other applications, the suite offers a feature rich environment that is similar to the Microsoft Office Professional experience and gains from it's stability and performance in the Linux environment -- as well as in its far lower price. It may be further validation of a trend among Linux applications to provide "More for Less."

CUSTOM AND PROPRIETARY APPLICATIONS

In business settings where a history of legacy applications exist, Linux offers corporate IT and software development teams the tools for long-term benefits. In a number of situations, business applications have been home grown and significantly modified with custom functionality and code around their NT environment. In such situations the question remains the same.

Is it more beneficial to rewrite custom applications for the 2000+ environment or to begin a transition to Opensource? In a number of cases, the mid-to-long term benefits are so apparent that a shift to Opensource becomes not only rational, but also obvious. Many IT leaders I've talked with prefer to begin a transition now, rather than to rewrite twice -- once for NT's retirement and the second time for long term benefits of Opensource. To help facilitate a move to Opensource, there are many established tools for Linux porting.

Also, for those considering the near term impact, there are useful tools to help lessen the pain of any transition by letting you run Windows programs under Linux native including Wine, which is an Opensource Windows API emulator for Linux. For those who are locked in to their Microsoft applications for some time due to licensing terms, there is always the opportunity to use the reasonably priced commercial alternatives to run this software under Linux such as: CrossOver Office, which is a

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The Register, October 15, 2003. By John Lettice

Motor giant Ford to move to Linux

Motor giant Ford is switching to Linux for its sales systems, human resources, customer relations and infrastructure, according to a report in yesterday's Scotland on Sunday. But although the company is undoubtedly a megawin for Linux, Register sources suggest that the real battle was between the Linux vendors, with maybe just a soupcon of Sun.

Ford is of course a global company, with major sites in the US, Germany and the UK. Our understanding is that the battle boiled down to one between Red Hat and SuSE, with the signs earlier this year being that Red Hat might just have got the deal. Ford seemed to want a Red Hat systems admin in Detroit back in January, anyway, but it'd maybe make some sense to use the local player in Germany, and our sources claim SuSE and Red Hat both pitched in the States, so you could maybe view the job as being more about bringing Linux servers into the infrastructure than specifically running Red Hat.

Whoever won, the contract is a serious step forward for Linux in the corporate market, but it can really only be seen as a defeat for Microsoft if you count not being seriously considered as being a defeat. But presumably there are still going to be Windows clients in there - by coincidence, we note that this quarter Dell will begin saving the company from the legacy diskette drive. Ford standardised on Dell for Intel clients in 1999.

Opportune time to switch to Linux

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company owned product that allows use of MS Office products running under Linux; and Win4Lin, also a company product that allows the running of Windows software under Linux.

WAITING MAY NOT PAY OFF

Waiting longer to make a decision, for example until the completion of NT retirement, and then move to the benefits of Opensource may potentially result in greater long term costs and a more difficult road. If the paradigm is shifting, and the cost basis and even the support basis is changing so dramatically in the next year or two with NT retiring, etc., the timing for a decision becomes more urgent.

Therefore, now is a very reasonable moment to assess what may be gained from both the licensing freedoms and the benefits of using Linux.

If a corporation is already beginning the transition plan from NT to something else, it is in the best interest financially and strategically to assess the benefits of Linux. Undeniably, with the advent of ever improved and mainstream applications for Linux and the continued retirement of NT server support, there has never been a more opportune time to switch operating systems.

News.com.au, September 29, 2003. By Justin Pope

Massachusetts gives MS the flick

MASSACHUSETTS, the lone holdout state still suing Microsoft for antitrust violations, will become the first state to adopt a broad-based strategy of moving its computer systems toward open standards, including Linux.

State Administration and Finance Secretary Eric Kriss said the decision, adopted at a meeting of state information officers, was made on "technical grounds" and had nothing to do with Attorney General Thomas Reilly's pursuit of Microsoft.

Microsoft's software is considered "closed" because application developers and other programmers don't have free access to the source code.

Mr Kriss said the state's decision was driven by a desire to reduce licensing fees but also "by a philosophy that what the state has is a public good and should be open to all," Mr Kriss said. He characterized the decision as the "most visible concrete action by a state government" to move toward open standards.

A Microsoft spokesman had no immediate comment.

Microsoft is facing increasing challenges from Linux, which has been developed over the past decade by a global community of programmers who share their work on the condition that it be redistributed freely. It has become appealing to cost-conscious companies looking for an inexpensive means to run their servers.

Government agencies from Germany to France to Peru have adopted or are considering Linux-based software as a cheaper alternative to Microsoft products.

The Japan Times: January 8, 2004

Linux sales increase 37.5% to 2.6 billion yen

Sales chalked up by Linux under licensing agreements totaled some 2.6 billion yen in Japan in 2003, up a sharp 37.5 percent from the previous year, a high-tech research firm said Wednesday.

Linux is an open-source operating system.

Domestic sales of other operating systems, including Windows, grew a meager 0.5 percent to 321 billion yen, according to International Data Corp. of Japan.

Although Linux is offered free of charge, users must pay when the operating system is processed into package software and other products.

IDC Japan believes the domestic market for Linux will exceed 12 billion yen in 2007 -- though it will be unable to grab a bigger market share than the Windows operating system due in part to limited availability of application software.

Israel suspends Microsoft purchases

The Israeli government has suspended its acquisitions of new computer software from Microsoft, citing price issues and the U.S. company's refusal to sell individual programs from its standard software package, the Finance Ministry said Tuesday.

A spokeswoman for the ministry, which oversees government purchases, said the government would use the company's existing products for the time being. She did not know when purchases of new software would resume.

The government will also encourage the development of lower-priced alternative software to help expand computer use with the public.

The Ministry of Finance has cooperated with Sun Microsystems and IBM in designing the Hebrew language version of Open Office software, one of these alternatives.

The move with Microsoft was a purely economic decision, the Finance Ministry spokeswoman said, speaking on condition of anonymity. The Israeli government will not be purchasing new products from Microsoft, but will implement its contract to secure existing systems.

The spokeswoman said the decision stemmed from unhappiness with the price package that Microsoft has offered and its refusal to sell individual programs from its standard Office package. Not all departments require the entire suite of programs, she said.

Microsoft representatives in Israel did not immediately return a message.

The Israeli decision came against the background of growing public sector interest in open standards, open source technology.

The open source movement is a broad, philosophical endorsement of computer technology with publicly available software code that can be customized, such as the Linux operating system. Microsoft's Windows uses closed, or proprietary, code that the company closely guards.

The spokeswoman said that encouraging the development of open-source technology had also played a role in its decision.

On a policy level, the government is committed to expanding computer use. We want open source technology to spread, so more people will be able to afford computers.

A number of other foreign governments have also embraced open-source technology.

Federal agencies in France, China and Germany, as well as the city government of Munich, have already opted for Linux systems. Britain, Brazil and Russia are exploring it.

Governments are a huge software market, accounting for about 10 percent of global information technology spending, according to research firm IDC.

Federal, state and local governments in the United States spent \$34 billion last year on huge systems to track everything from tax collection to fishing licenses.

Newham council: how Microsoft fought back against the Linux onslaught

At the end of last year, arguably the most IT-savvy government organisation in the UK, Newham Borough Council, stunned observers by dropping out of a government-sponsored open source project and announcing its decision to partner with Microsoft for all its IT needs. Was the tide turning against Linux after several months of advance?

It was certainly a sensational coup for Microsoft and helped stopped the momentum that had been building since May 2003, when Munich Council decided to install Linux on all its computers, cocking-a-snoop at Windows NT and Microsoft CEO Steve Ballmer personally. The shockwaves from Munich had been felt in the UK. Particularly, as the Office of Government Commerce (OGC) had decided to run nine "proof of concept" open-source trials with IBM. While the Linux community celebrated, Microsoft executives went straight into a war cabinet.

The nine organisations chosen were four central government departments - Office of the deputy prime minister; work and pensions; culture, media and sport; and e-engage - the Central Scotland Police Authority, Office of Water Service and three councils - Powys, Newham and Orkney.

Microsoft was desperate to "get a win" and the councils were clearly going to be easier to approach due to their comparatively smaller size, greater independence and the existence of single heads of IT who were able to make the decision, one way or another.

Whether Microsoft chose Newham on its past record (it has, in many senses, acted as the UK government's independent testing facilities) or whether Richard Steel, ICT head at Newham, recognised the opportunity afforded to him and contacted Microsoft himself, we do not know. What we do know is that just five days later it was announced Microsoft had hired Cap Gemini Ernst & Young to provide Newham Council with free consultancy about how it could save costs by using Microsoft products.

Matt Lambert, Microsoft's director of government affairs in Europe, was candid: "Newham is seen as a technology leader. It is an important account for us and we are trying to prove that we have the best offering." He declined however to say how much the software giant was paying Cap Gemini, or whether such consultancy would be provided to other councils in the future.

Richard Steel said that he intended to make decisions in December and, true to his word, he announced just before Xmas that he was proposing to the council that it go almost entirely with Microsoft following a new agreement struck with the company.

To read the rest of this article, please visit our website.

Governments vote against Microsoft

Microsoft has had its share of bad courtroom experiences, but lately the software giant has been taking some of its hardest knocks in city council and legislative chambers.

What's new:

High-profile deals to migrate to Linux and official backing for open-source software point to a greater willingness for governments to challenge Microsoft.

Bottom line:

The fear for Microsoft is that business customers--the company's bread and butter--might soon follow suit.

While government customers account for less than 10 percent of Microsoft's revenue, according to analyst estimates, they've caused a disproportionate share of headaches for the company over the past year. Ambitious projects to migrate government computers to Linux and other competing software, official decrees favoring open-source products and hard-nosed licensing negotiations have put government customers well ahead of private business when it comes to testing Microsoft's mettle.

Some of Microsoft's most publicized business defeats recently have come from government plans to migrate official computers to open-source software. The German city of Munich became one of the most high-profile Microsoft defectors last year, voting to move 14,000 city-owned PCs to open-source software. The Texas city of Austin embarked on a similar Linux project late last year. A number of British government agencies are looking at open-source, as are official agencies in Korea, China and Germany. And the Commonwealth of Massachusetts last year adopted an IT purchasing policy that favors open-source software, but it later modified the policy to emphasize "best value" products.

While some of announcements seem little more than negotiating tactics, the sheer volume of deals point to a greater willingness among governments to move out of Microsoft's fold. And it isn't just Linux on servers that's garnering interest: The open-source operating system finally seems to be making headway on the desktop.

"These kind of deals are symptomatic that Linux is really gaining credibility on the desktop," said Stephen O'Grady, an analyst for research firm Red Monk. "What we're seeing from government...is that certain constituencies are ready for that migration."

Follow my leader?

The fear for Microsoft is that business customers--the company's bread and butter--might soon follow suit. "Governments just get it faster in some areas, and I think open source is one of them," added Sam Hiser, the marketing guru for open-source software group OpenOffice.org. "Enterprises are very clubby; they need a sense of confidence that individually, they're not the odd one out.

To read the rest of this article, please visit our website.

How Linux saved Amazon millions

In a filing with the Securities and Exchange Commission, the e-commerce giant said it was able to cut technology expenses by about 25 percent, from \$71 million to \$54 million.

The reduction was attributed primarily to Amazon's "migration to a Linux-based technology platform that utilizes a less-costly technology infrastructure, as well as general price reductions for data and telecommunication services due to market overcapacity," according to the filing.

In a related development, an Intel executive said Tuesday that the Napster file-swapping service and Linux inspired the company to overhaul some of its technology infrastructure.

Amazon's disclosure could provide hard data for Linux proponents who have long argued that the open-source software can save corporations money over the alternatives, such as Unix and Microsoft's various Windows products.

Linux, which is developed by numerous volunteer programmers and companies, has some major pricing advantages.

"We've recently...found that Linux--if you look at the overall cost of ownership including the hardware, software, staffing, and purchasing and retirement costs--ends up being significantly less expensive than Unix over a three-year period for things like Web serving," said IDC analyst Dan Kusnetzky.

Half the price tag

For 1,000 users tapping into a Linux server, the total cost is about a fifth to a half that of a Unix system, Kusnetzky said. The cost of administering a Linux system is about the same percentage of the overall cost for a Unix or Windows server, he added.

Cutting expenses is certainly important for Amazon right now. The company trimmed its losses by 30 percent in the third quarter, posting a net loss of \$170 million. Amazon has pledged that it will be profitable on a pro forma basis by the fourth quarter, and with revenue inching up only \$1 million from the year-ago quarter to \$639 million, every little bit helps.

Linux can cut costs in several ways. When a company first obtains the operating system, the software can be downloaded for free, or a single copy purchased from a company such as Red Hat or SuSE can be installed on as many computers as a company wants. Secondly, it comes bundled with other software for sending Web pages to people's browsers or running company e-mail.

Thirdly, in many cases companies don't have to pay extra licensing fees for the computers that connect to Linux servers. And finally, Linux is often used on inexpensive Intel computers, sometimes generic "white box" machines and sometimes older

Amazon said in June that it was revamping its computer systems and switching to "commodity" computers running Linux. Executives said at the time that they expected technology costs as a portion of net sales would decrease by 20 percent this year.

To read the rest of this article, please visit our website.

What is a Hospital Information System (HIS) and What is its Patient Administration System (PAS) Component?

Modules within an HIS

A Hospital Information System (HIS) consists of many Clinical and Financial application software modules, over 20 in total. The question often arises as to where a hospital jurisdiction should begin when it has been decided to implement an HIS throughout the country.

The main Application Software IT components within an HIS are:

- Patient Administration System
- Diagnostic Imaging System
- Middleware (Integration Engine)
- Financial Applications
- Clinical Laboratory
- Other Clinical Applications

Starting point and time frame for an HIS implementation

Where to start, and over what period of time would it take to implement an HIS, in a particular country, are often very challenging questions and of real concern to those who have not gone down this road before.

a) Where to start?

The core component, and starting point, for a country is the PAS, which includes a Master Patient Index (or Central Patient Index), and the Surveillance modules. This establishes the central repository of patient data that records all patient encounters, and which is the module to which future Clinical (and some Financial) modules will be integrated.

b) How long will it take for a PAS/HIS implementation overall?

The length of time required to implement a PAS will be dependent upon many factors, and will vary from country to country. Typically this will be from 2 to 7 years. Some factors are:

- The level of commitment at the top
- The number of hospitals and clinics within the country
- The GDP per capita and annual health care budget of the country
- The infrastructure of the country
- The level of success achieved in the first Phase of the implementation

The length of time required for a full HIS implementation will typically vary most considerably, and will be in the range of 10 to 15 years, or longer.



FAQ

What is LINUX and why is it becoming so popular?

The operating system that is causing a revolution in the world of computers. LINUX is a free Unix-type operating system originally created by Linus Torvalds, of Finland with the assistance of developers around the world. Developed under the GNU General Public License, the source code for Linux is freely available to everyone. This is quickly becoming the operating system of choice in China and developing countries such as India. Major North American corporations are also adopting LINUX as a way of saving money on IT systems and licensing fees. Canadian National Railways (CNR) announced their move to Linux in December 2002.

HERON's PAS operates under the LINUX OS. HERON has finalized and time tested the PAS product development, and method of implementation

Canadian Commercial Corporation (CCC):



A very important consideration associated with international marketing is the aspect of the purchasing country receiving a 'Sovereign' Guarantee from the selling country. This sovereign guarantee was extended to the Jamaica MOH by CCC in 1997 for the HERON PAS implementation, and can be anticipated in other countries, depending upon the business contract. CCC has shown considerable interest in HERON through an article in the 1998 CCC Annual report and through a write up in CCC's newsletter, the Exporter, in 1999.

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