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Security, Reliability, Functionality!

In our endeavour to bring you relative and important information concerning technology, our aim is to ensure that our information is as clear and concise as possible.

When we present computing technology options to current and potential customers, we have three points that we emphasize; security, reliability, and functionality. In today's ever increasing connected world of the Internet and Intranet, the increased security threats to business networks is becoming a real and serious problem, and it is becoming ever harder for IT professionals to plug the gap of vulnerabilities in corporate networks. Pretty much everyone has heard of the data breaches at large retail stores within the last few months, and even banks are not immune and are trying to do their best to secure their systems from outside attacks.

In this article, we will present secure and resilient options that small to medium sized businesses, and also consumers can implement to help put a stop to the nasty threats of viruses, malware, spam attacks, and hacking into your servers and workstations. We do ask that you keep an open mind to what you will learn here, and much of the information contained here may be different than what you have been taught or heard elsewhere, but our goal is to hopefully get you to think outside of the traditional mindset that; "If it's not Microsoft", or "The world runs on Microsoft". This article will disprove many of the misconceptions that you have been led to believe, and much of the information in this newsletter is quite informative.

Linux vs. Windows Viruses

We probably have all heard that the reason Microsoft Windows gets more viruses than say Unix or Linux operating systems is because Microsoft Windows is more widely used, but that given time, Unix and Linux operating systems will eventually get their share of viruses and security threats when they become more popular. This is simply not true, and to be fair, there are viruses that have been created for other operating systems. But here are some interesting numbers on this. Since there are new viruses created everyday, it is difficult to get an exact number on how many are really out there. Microsoft Windows, 60,000; Apple, 40; Commercial Unix versions, 5; and Linux, 40. It should also be noted that security firm Secunia has declared Apple products have more security threats than any others, including Microsoft. Linux users as a whole have much less to worry about than either Microsoft or Apple users when it comes to security threats.

Linux vs. Windows Viruses (cont.)

Why are Unix and Unix-like (Linux) systems safer?

Unix and Linux systems are designed to be safer, and virus writers use the ways of conning people into doing things on their e-mails they should not be doing, like clicking on attachments that carry viruses and worms. Horribly designed software makes it easier for hacking to take place. Such software can also subvert efforts of security-minded individuals or an entire organization. The two factors can turn a single virus into a widespread disaster.

-Unix and Linux operating systems enforce strict security procedures. The separation between standard users and the root user, the Unix and Linux user would have to run as root to do much of any damage to the system. The more steps, the less likely the virus has a chance of infecting the entire system, and in Unix and Linux, you do have more steps to give any infected attachment executable permissions, and then run the executable. On Mac OS X, which is based off of Unix, does not allow users to use the root account unless it is first enabled.

-Regrettably, running as a root (Administrator) is standard on Windows. Microsoft is engaging in dangerous territory with this practice, and Windows XP, which was supposed to be Microsoft's most secure desktop operating system, automatically makes the first named user of the system an Administrator, with the ability to do anything he or she wants to do to the computer. One would think that after years of frustration, lost productivity, and numerous viruses, hacks and worms, that Microsoft would have updated their mindset in making their operating systems more secure like Unix and Linux

Malware

More than 11,000 pieces of malware that affect Microsoft Windows systems were discovered in the second half of 2005 alone. According to Kaspersky Lab, more than 800 total pieces of malware have been discovered that affect GNU/Linux systems, over the entire course of its existence since the early 1990's. Most, if not all, of these 800 pieces of malware will not execute on the typical GNU/Linux systems, because the privilege separation designed into the OS requires user intervention to get the malware to execute, while most malware on Windows systems will utilize the OS' own auto-execution facility to operate without the user's knowledge. Whereas malware vulnerabilities are typically patched in the Linux kernel and libre software affected by the malware, dealing with malware that effects Windows is usually left up to third party malware scanning and removal software.

Vulnerability Response

The quickest response from Microsoft, from public announcement of a security issue to distribution of a patch was around ten days. Most patches take longer, often months or even years, and in fact Microsoft only offers patches on a once per monthly schedule in the majority of cases. GNU/Linux security patches have been developed, tested, and issued in a matter of hours, and the average response time for patch deployment is less than a week. Availability of a GNU/Linux patch may be delayed in many cases by the process of incorporating patches into various distributions.

Source:

www.theregister.co.uk/2003/10/06/linux_vs_windows_viruses/
www.wikivs.com/wiki/Linux_vs_Windows

Advantages of Unix



- Unix is more flexible and can be installed on many different types of machines, including main-frame computers, supercomputers and micro-computers.
- Unix is more stable and does not go down as often as Windows does, therefore requires less administration and maintenance.
- Unix has greater built-in security and permissions features than Windows.
- Unix possesses much greater processing power than Windows.
- Unix is the leader in serving the Web. About 90% of the Internet relies on Unix operating systems running Apache, the world's most widely used Web Server.
- Software upgrades from Microsoft often require the user to purchase new or more hardware or prerequisite software. That is not the case with Unix.
- The mostly free or inexpensive open-source operating systems, such as Linux and BSD, with their flexibility and control, are very attractive to (aspiring) computer wizards. Many of the smartest programmers are developing state-of-the-art software free of charge for the fast growing "open-source movement".
- Unix also inspires novel approaches to software design, such as solving problems by interconnecting simpler tools instead of creating large monolithic application programmes.

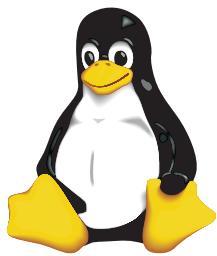
Interesting facts on Unix:

- Development: Started in 1969 by Bell Telephone Laboratories.
- Developers: Ken Thompson, Dennis Ritchie, Brian Kernighan, Douglas McIlroy, and Joe Ossanna.
- Computer Language: C and Assembly language

Source:

www.opengroup.org
www.about.com 

Advantages of Linux



-Low cost: You don't need to spend time and money to obtain licenses since Linux and much of its software come with the GNU General Public License. You can start to work immediately without worrying that your software may stop working anytime because the free trial version expires. Additionally, there are large repositories from which you can freely download high quality software for almost any task you can think of.

-Stability: Linux doesn't need to be rebooted periodically to maintain performance levels. It doesn't freeze up or slow down over time due to memory leaks and such. Continuous up-times of hundreds of days (up to a year or more) are not uncommon.

-Performance: Linux provides persistent high performance on workstations and on networks. It can handle unusually large numbers of users simultaneously, and can make old computers sufficiently responsive to be useful again.

-Network friendliness: Linux was developed by a group of programmers over the Internet and has therefore strong support for network functionality; client and server systems can be easily set up on any computer running Linux. It can perform tasks such as network backups faster and more reliably than alternative systems.

-Flexibility: Linux can be used for high performance server applications, desktop applications, and embedded systems. You can save disk space by only installing the components needed for a particular use. You can restrict the use of specific computers by installing for example only selected office applications instead of the whole suite.

-Compatibility: It runs all common Unix software packages and can process all common file formats.

-Choice: The large number of Linux distributions gives you a choice. Each distribution is developed and supported by a different organization. You can pick the one you like best; the core functionalities are the same; most software runs on most distributions.

-Fast and easy installation: Most Linux distributions come with user-friendly installation and setup programmes. Popular Linux distributions come with tools that make installation of additional software very user friendly as well.

-Full use of hard disk: Linux continues work well even when the hard disk is almost full.

Advantages of Linux (cont.)

- Multitasking: Linux is designed to do many things at the same time; e.g., a large printing job in the background won't slow down your other work.
- Security: Linux is one of the most secure operating systems. "Walls" and flexible file access permission systems proven access by unwanted visitors or viruses. Linux users have the option to select and safely download software, free of charge, from online repositories containing thousands of high quality packages. No purchase transactions requiring credit card numbers or other sensitive personal information are necessary.
- Open Source: If you develop software that requires knowledge or modification of the operating system code, Linux's source code is at your fingertips. Most Linux applications are Open Source as well.

Beatrice Technologies, Inc. Will Announce Product & Service Change For Customers



Beginning December 1st, 2014, bci360i will begin to realign our technology business away from certain business offerings, and all existing customers that will be effected by this change will be notified by direct mail from us.

Q: Why will bci360i only be serving select business customers?

A: Our parent company, Beatrice Technologies, Inc. (BTI), has decided to focus our resources and efforts in the Enterprise and Government (Public Services Sector), with our flagship product offerings from IBM, which is IBM Power, and IBM Storage. We will still offer Lexmark, Avaya, Lenovo, and CommScope products upon request for our Enterprise and Public Services Sector customers

BTI has been slowly shifting away from small and medium sized businesses, and has ramped up training in the IBM Power and IBM AIX (Unix) platform because of the growth potential in this arena within the public services sector. The growth in the cabling, personal computers, telephony and peripheral business has been slowing in the last year, and in order for our company to survive, we need to expand outside of our traditional business market into completely new areas.

Stay tuned for further developments in this area.