

Challenge Brings Opportunity

This is where NCSS can help

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NCSS Linux Solution Presentation



Studies continue to show the pending potentially catastrophic results of the degrading global climate. Adding to this concern the current global financial crisis, many smart businesses are now looking and moving to alternative solutions to operate a greener and economic environment.



NCSS, Linux and you.

Raising alternative strategies is our objective, in this regard we are proposing a fundamental revision of IT strategy that is based on Linux.

A Linux environment sets a benchmark in stability, cost and environmental response to today's community.

Previously Linux may not have been seen as a serious challenge to the safe Microsoft environment, but with challenges to implement cost effective IT strategies and solutions, the time and opportunity is right to seriously consider Linux and NCSS.

How can NCSS help? As many businesses make cuts to IT spending, NCSS would like to objectively draw attention that real alternatives are available outside of Microsoft.

- **Linux provides a cost effective, robust and reliable alternative.**
- **Opportunity to trial Linux in the business, government, school environments, including consideration of replacing Microsoft products with Linux alternatives.**

What is Linux?



- Linux is a free Unix-type operating system
- Developed under the GNU General Public License, the source code for Linux is freely available to everyone.
- 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.
- Linux has been adopted worldwide primarily as a server platform. Its use as a home and office desktop operating system is also on the rise.

Why is Linux used? Due to its stability, Linux has been used for many years as the operating system behind point of sale equipment.

Recent advances in the Linux "front end" now enable friendly and easy use which now sees it as the standard operating system for multimedia and notepad machines.

Linux is now a serious contender to Microsoft in supplying user friendly IT environments.

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Green Computing

Reduce your Eco Footprint by multiplying your PC's



	10 Useful workstations	10 Desktop computers	Useful savings
Manufacturing:			
Electricity (KWh)	1818	17,271	15,453
Produced CO2 (kg)	1278	12,143	10,865
Chemicals (kg)	21	200	179
Water (kg)	1090	10,355	9,265
Use Per Year:			
Electricity (KWh)	526	4,997	4,471
Produced CO2 (kg)	370	3,512	3,142

Power efficiencies – Significantly reduce your IT running costs and reduce power emissions at the same time with no extra effort.

Clustering – Gain space and power efficiencies using PC clustering technology. Using a product called Useful allows NCSS to cluster up to **10 users on one PC**.



Only one PC required for 10 workstations.

In Call centres we configure Useful machines to suit workgroups that operate with full capability of any Linux desktop under the control of one PC.

Useful PC Multiplier leverages off basic dual-head GPU technology and USB inputs to turn a monitor, keyboard and mouse into a complete workstation. The user has a range of environments to work in, all of which are fully customisable.

Undertaking a clustered approach to computing needs, there are other substantial savings in environmental issues related to computer usage as we know it today. The adoption of Clustering technology is represented below in the detail table.

For example a 10 user system can reduce CO2 emissions by up to 15 tons per year per system (based on 526kWh/PC/year for operation; 1818 kWh/PC for production; electricity generated at 0.70 kg (1.55 lbs) of CO2/kWh.)

How Linux Delivers Cost Reductions:

The Linux direct comparison for product supply using:

- Ubuntu as the server and workstation operating systems
- Mozilla as the web Browser
- Evolution as the Mail server and clients
- Open Office as an alternative for Microsoft Office
- MySQL for the database
- No Tape archiving system other than "tar"
- No virus systems other than inherent capability of Linux
- No firewall systems other than inherent Linux firewalling technology
- No content filtering systems other than inherent Linux repulsion
- No Pop up protection other than Linux inherent capability

Linux = \$0.00

- Open Office software package comes standard with alternatives to Microsoft Office and specialist products including, Project, Visio and Adobe Acrobat Writer.
- **Open Office = \$0.00**

Microsoft environment:

Server Investment (50 Users)	Price	w/Software Assurance
Server # 1: Database (Exchange) Server		
Windows 2003 Server	\$825	\$1,787
Windows 2003 Server CAL (\$48 per user)	\$1,190	\$1,787
Basic OS for Exchange Server 2003	\$825	\$1,787
Exchange Server 2003 Standard	\$1,689	\$1,738
Exchange Server 2003 CAL (\$109 per user)	\$5,450	\$8,300
Total	\$9,979	\$11,825
Server # 2: SQL Server		
Basic OS for Exchange Server 2003	\$2,234	\$1,787
SQL Server 2003 Standard	\$1,849	\$1,599
Standard Server 2003 CAL (\$240 per user)	\$12,000	\$18,100
Total	\$16,083	\$21,485
Server # 3: Data/Backup Server		
Open file option	\$1,272	
Exchange agent	\$1,415	
SQL agent	\$1,415	
Total	\$5,233	
Total Servers	\$31,295	\$40,331
Workstation Investment (50 Users)		
Windows Vista Ultimate (\$423 per user)	\$21,120	
Office 2007 Standard Word, Excel, PowerPoint, Outlook (\$547 per user)	\$27,350	
Total Workstation	\$48,470	
Additional Specialist Software Packages		
Adobe Acrobat Writer (\$688 per user)		
Microsoft Project 2007 (\$949 per user)		
Microsoft Visio Pro 2007 (\$869 per user)		

*Figures taken from Harris Technology website July 2009

Software purchasing license fees pricing is \$0.00.

N.B. There are installation and customisation costs that would be the equivalent of those charged for Microsoft product installation.

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Return of Investment

Hardware

Imagine the capital savings not only on the use of your hardware for another term, but the elimination of another round of operating system updates and office software.

Standard Linux offers a powerful environment requiring no desktop hardware or software investment other than knowledge.

And, the unbelievable part of this strategy is the speed of implementation. Even more impressive is that an old P133 will operate like a 3GHz flyer.

Users have to pay for professional services for configuring and installing this environment, but that is generally no more than the typical cost of installing traditional Microsoft software environments.

A typical application is the harnessing the power of Linux in conjunction with terminal server and our old hardware.

A typical 3GHz can easily support up to 20 obsolete PC's with the latest operating environment - Linux. Legacy applications based on Microsoft are accessible via products such as Citrix and Go Global.



Software

Linux, at the server end has proven ability to integrate with all major databases today.

Open source software offers users a wide array of alternative software with some unique features not available with mainstream databases. None of this alternate software is available in the Microsoft environment.

The desktop benefits of Linux are equally stunning:

The exposure to viruses today is virtually none because of the inherent design and security. Every PC has its own firewall capability as standard for further security of mail applications.

The desktop suite (Open Office) is every bit as capable as the Microsoft offering and has more features. Indeed today it can be downloaded for free to run in any Microsoft environment.

With this capability alone, businesses could reduce the requirement for larger PC's to run Microsoft software no matter how attractive the price looks.

An entire suite of alternative software exists for users replacing products like Visio, Photoshop & Project Manager that provide similar or enhanced functionality with in most case inter-changeability of files.

Remembering of course that in nearly every case open source software by its very nature is free to users.

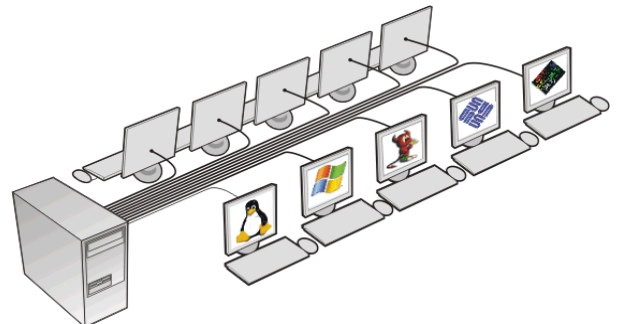
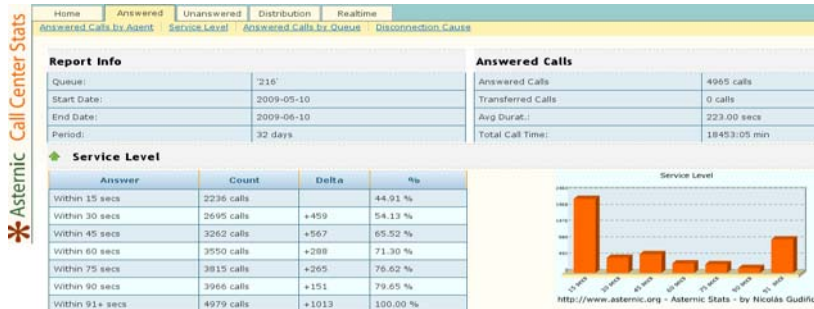
Linux in the voice arena

The delivery of "VoIP" services over normal Category 5 cable infrastructure brings voice and data under the control of IT.

Now YOU can have a single implementation and support capability. Large suppliers such as Cisco, Mitel and Avaya are mostly based on a Linux core and thereby have already introduced Linux into infrastructure.

NCSS has also taken up the challenge of VoIP and implemented a Linux strategy via Asternic. Asternic has given us overwhelming control and reporting with our customisation seeing capability unavailable except to the most expensive of products.

Dynamic reporting is impressive (as per the example below):



Linux and Open Source is a proven secure, stable and low cost alternative to a Microsoft environment