

Software and Hardware

CNZ Technical Literacy Index

To assist readers in selecting the right articles to read for updating or learning, we introduce a literacy index here. The index is a reading classification guide and is not vigorous enough for testing competence. Please email editor@cnz.co.nz if you have different ideas.

1 = computer user, management
2 = advance user & technician
3 = computer consultant

Voice over IP Coming up (TL1)

Many organisations have invested capital in new VOIP (Voice over IP) systems and lately the press have increased their coverage and hype on VOIP. Is the technology mature and ready for deployment by the average business? We have completed an 8-month research project with the University of Auckland in 2005 to collate the big picture. The research includes peer to peer calls, outsourced & managed services, corporate Private Automatic Branch Exchange (PABX) and of-course the key performance indicators for a reliable voice service. Irrespective of the decision of merging voice with data network or keeping them separate, VOIP shares the same fabric as already in place such as Ethernet switches and cabling. We just need a gateway for talking to the Public Switched Telephone Network (PSTN) and a desktop device for converting analogue phones that we want to keep. We can even share firewalls and content filters already in place. The research will continue in 2006. Feel free to contact us (editor@cnz.co.nz) for information if you plan to replace your phone system.

Windows XP Professional 64bit (TL1)

To go into the 64bit world and enjoy its huge memory addressing capability and higher computational performance, we require the computer hardware platform, the operating system and the application to be 64bit compliant. Microsoft has released the 64bit version of Win XP Pro for a few months already. Most hardware platforms are also 64bit capable by this time. However, not many off-the-shelf applications are. Time is not quite right for large scale 64bit deployments. In the meantime, we have recorded a minor incidence that reflects the state of 64bit technologies. A few Compucon systems pre-installed with the 64bit version of Win XP have gone through production lately. We have found the CD burning management software Nero 6 DMA Manager detects the date of BIOS as 255. We got this error message: Nero DMA Manager only works correctly for systems with BIOS date >=1999. In reality we have successfully burned data CD in the presence of the statement.

Open VPN for Virtual Private Network (TL2)

New Zealand is a low population density and lifestyle country. The needs for remote communication are significant. VPN is the norm for many businesses rather than a desire as the use of the Internet becomes more prevalent. VPN does not just mean remote access as can be implemented through the PPTP (Point to Point Tunnelling Protocol) within Windows 2000 or 2003. It refers to authenticated sender and receiver, encrypted and integrated data transmission. IPSEC (Internet Protocol Security) is one of the



approaches that fulfil the criteria. Mike Grant of ITCL, a Compucon and CNZ ally based in Auckland, shared with us his experience of using various means of setting up VPN at a CNZ continuous professional development seminar. He described 3 scenarios of using integrated, separate ADSL modem and IPSEC appliances, and provided a few brands that have worked for him for the integrated device scenario. Mike also told us of his success with Open VPN- a pure software approach. The software has to be installed at both ends. He commented that the software is difficult to set up, but it is very effective once properly configured. It can be installed in Windows, Linux, Mac or BSD environment. The software is free but the knowledge and time for setting up is not.

Windows for nVidia SATA RAID (TL3)

This article is about the Hardware Assisted Software (Hosted) RAID designed by nVidia for SATA Hard Disks. Their Windows XP drivers are Microsoft WHQL certified whereas their Windows 2000 drivers are not. This is because Microsoft no longer certifies Windows 2000 drivers. The Windows XP drivers actually work under Windows 2003 as Compucon has tested. The rationale is that nVidia SATA RAID is for workstation and not server use and people can use it for servers at their own discretion.