From Home to Homeland

Linux In the Network and News —Presented by Don Corbet

by Edwin Davidson, co-Acting Editor of "The DataBus"

A day in the life of a small business is the focus of our March monthly meeting. Our speaker will be Linux expert, DMA® trustee and member Don Corbet, thelinuxguy®. This "user friendly" presentation is for the business professional or home hobbyist who desires an understanding of lower cost operating systems and improved performance. There is no need for a background in GNU/Linux or Unix.

This presentation will cover recent news-breaking topics regarding the decision process for identifying, developing strategy, and deploying GNU/Linux® products as a low cost, high availability alternative to other competing proprietary systems in the Business Application Server, Office Workstation, and embedded manufacturing systems environments.

Over the last year, Linux has exploded onto the Government, business and personal computing scene. Within a variety of markets, the business system software packages, stronger GUI tools, and wide selection of support offerings from major hardware and application vendors have made the migration to Linux and Open Source solutions a much easier one. Estimates of Linux on business workstations worldwide now range from 7% up to 24% and are predicted to outpace Macintosh OS in 2003. Over 60% of Internet-dependent businesses have embraced the stability and improved hardware legacy lifecycle, prolonged by the switch to Linux, as seen in recent business publications.

HP, IBM, Sun and even Microsoft are all making money off of Linux software, billions at this time. www.linux.com/ is one of the best sources I have been able to find on general Linux news. Linux's popularity with programmers has already managed to make a huge dent in the market share of Unix and now it's gradually threatening to do the same with Windows. Note "programmers" is one of the key words here. I would like to get into Linux but the fact is I haven't done much programming since I started working with Windows. I have almost always been able to do the task at hand but the cost of software and subsequent upgrades are getting to me.

How can you as a private citizen and a small business count on Linux to provide your needs? www.gnu.org/philosophy/why-free.html is a website promoting the use of non-proprietary software.

The different flavors of Linux are all compiled from an association of computer users that started in 1984. Getting a user-friendly version of Linux might be a reason to buy one particular brand over another, but the operating system itself is currently free. The different flavors of the Linux operating system along with some open source programs can keep you working. Don says that he is using only a few programs outside of his Linux software bundle.

"GNU, which stands for Gnu's Not Unix, is the name for the complete Unix-compatible software system which I am writing so that I can give it away free to everyone who can use it. Several other volunteers are helping me. Contributions of time, money, programs and equipment are greatly needed." - Richard Stallman. Thus the open source concept was born, which does allow charging for certain things while keeping the ability to trade and barter in other areas. Check out www.gnu.org/gnu/thegnuproject.html. It is now because of Linus Torvald's Unix-compatible kernel (Linux), combined with the GNU system, and the xFree86 compliment of drivers that we are able to have all of these software compliments to the operating system.

It comes as no surprise that "The Department of Homeland security has adopted Oracle/Linux server technology and has abandoned Windows 2000 and SQL. Windows' malicious code vulnerability was exposed again when the Slammer worm disabled countless Windows servers in late January of this year", at least those that didn't implement their software patch last July. This continuing statement can be found on Don's website (www.dlcorbet.com): "Experts say that

Slammer may have been one reason why DHS selected Linux and Oracle. It's far more likely that it was a planned switch to an operating system that they know they can more easily lock down. Linux can be "locked down" much more effectively, according to a source close to the situation. He also stated that Windows 2000 doesn't offer either the same kind of granularity of configuration or the equivalent ability to inspect pieces of the operating system."

Don is planning to show us a demonstration of the Linux software that can emulate PowerPoint, Word, Excel, and Front Page. The K-mail he is planning to show sounds like it will be my favorite demo. When I asked about getting any virus detection software, he told me that they do not need any virus protection. He said that he would show us a demonstration of this during the monthly meeting. I hope to have time during the next Linux Installfest to see how I can get this loaded onto a machine.

About the Speaker:

Donald L. Corbet, a.k.a. thelinuxguy®, is President and CEO of D. L. Corbet & Associates, LLC, located in Centerville, OH (www.dlcorbet.com/). He is a co-founder, and sits on the Board of Directors, of Gaspricewatch, Inc. (www.gaspricewatch.com) and a board member/trustee for the Dayton Microcomputer Association, Inc. Don was the person responsible for getting Mandrake-Linux, SA (Paris, FR) to create the first Mandrake training center in North America, located in Dayton, Ohio (at Sinclair's Miami Valley Research Park). He is a Linux-Mandrake and TurboLinux Certified Trainer, and an active member on the advisory counsels for Linux Professional Institute (Brampton, Ontario, Canada) and CompTIA Linux+ Certification.

In the media, thelinuxguy® is heard every Saturday at noon on 1290 WHIO-AM's "On-Technology", the region's highest-rated technology talk show*. Don has also appeared in past issues of The DataBus, Midwest PC Review, Dayton Business Journal, and ActiveDayton.com/technology. He is seen on (reruns of) the PBS television show "Computer Chronicles" and at many Computerfest® seminars

Prevent Identity Theft

 By Jerry Wonderly, regular contributor to "The DataBus"

Jerry Wonderly A native Daytonian, Jerry has been involved with computers since the mid-80's. "I cut my teeth on CP/M Plus." He says that 'computering' can be very expensive but doesn't have to be. "Ask questions. Think cheap. Shop around. And don't assume your computer needs to be traded in. I'd rather put my money in my 401(k) than spend it on a complete new system and software."

Identity Theft is increasing at an alarming rate. Once someone assumes your identity, it can take years to clear your good name. The obvious key is to prevent it in the first place. The Dayton Daily News wrote an article about ID Theft a few weeks ago but didn't give enough information on how to prevent identity theft in the first place. So, here are some tips to prevent identity theft from happening to you. Further information can be obtained from the following great websites: www.consumer.gov/idtheft and www.idtheftcenter.org.

- Do not sign up for unfamiliar contests or sweepstakes. Information you provide could be sold and reproduced hundreds of times.
- Install a lockable mailbox at your home so thieves cannot easily take your mail.
- Don't put outgoing mail in your mailbox. Drive to the post office to mail.
- Remove your name from commercial marketing databases by writing to Direct Marketing Association's Mail Preference Service (P.O. Box 9008, Farmingdale, NY 11735) and Telephone Preference Service (P.O. Box 9015, Farmingdale, NY 11735).
- If your mail suddenly stops, check with the Post Office. Someone may have filed a change of address form.
- Stop credit bureaus from selling your name (header information). Call the toll-free telephone number used by all three credit bureaus and take advantage of their "opt-out" service. One number, (888) 5OPTOUT, or (888) 567-8688, reaches all three bureaus. You can also opt out of unsolicited credit offers.
- Put a fraud alert on your name via the three credit reporting agencies. Fraud alerts prevent any credit from being granted in your name without calling you. Simply give them your cell phone number and carry your cell phone when out shopping. If you phone the credit reporting agencies, you can establish a fraud alert for a few months. If you write them, you can establish a fraud alert for a few years.
- Write to National Demographics and Lifestyles and ask to be deleted from its mailing list: National Demographics & Lifestyles, List Order Department, 1621 18th Street, Suite 300, Denver, CO 80202. (800) 525-3533.
- Check out the various snail mail and email scams going around by visiting the ID Theft Center's page at: http://www.idtheftcenter.org/html/scam-alerts.htm.

Credit reporting bureaus:

Equifax: P.O. Box 105069, Atlanta, GA 30348.
Report fraud: Call (800) 525-6285 and write to address above.
Order credit report: (800) 685-1111. Web: www.equifax.com

Experian (formerly TRW): P.O. Box 9595, Allen, TX 75013.
Report fraud: Call (888) EXPERIAN (888-397-3742) and write to address above. Fax: (800) 301-7196.
Order credit report: (888) EXPERIAN. Web: www.experian.com

Trans Union: P.O. Box 6790, Fullerton, CA 92834.

Report fraud: (800) 680-7289 and write to address above.

Order credit report: (800) 888-4213. Web: www.transunion.com

Telemarketers Trump TeleZapper

By George Gibbs, co-Acting Editor of "The DataBus"

Back in January, we published an article, "Zap Those Telemarketers", which told you how to set up your answering machine message to fool those automated telemarketing calls into thinking your phone number is disconnected. Well, the telemarketers are striking back with a new technology that renders obsolete not only the $40 TeleZapper and our alternative free hint to you, but also the phone company privacy services offered by SBC (Privacy Manager) and Sprint (Privacy ID), among others.

Massachusetts-based Castel Inc. (http://www.castelhq.com/), a maker of automated dialing technology, has upped the ante in the privacy arms race by introducing their DirectQuest software for predictive dialers. They boast the software will ignore the "disconnected" tones emitted by the TeleZapper. According to Castel's marketing director, Walter Elicker, instead of relying upon audio tones, the software determines the status of the phone line directly by reading signals sent from the phone company's computers and completely ignores the tones put out by the TeleZapper.

In order to avoid triggering phone company privacy services that rely on the inability of the predictive dialer to transmit caller ID data, DirectQuest allows telemarketers to transmit a phone number or text message of their choice to caller ID displays. According to Castel chief executive Geoff Burr, DirectQuest can make sales calls less intrusive by providing the identity of the company on whose behalf the telemarketer is calling, thus giving people the option to refuse the call. "If you're an operator that calls on behalf of MasterCard, you're supposed to put out 'MasterCard' and a number that gets to MasterCard," he said. Am I the only person out there who thinks that will get abused in short order?

Lest you think that all hope of avoiding the dreaded telemarketers is slipping away, hang in there. Joe Consumer may again regain some control over his phone line(s) with the scheduled introduction of the Federal Trade Commission's national "Do Not Call" list. The FTC will begin accepting names and numbers this summer and expects it to become operational in the fall. According to the proposed rules, telemarketers who call listed numbers can receive fines up to $11,000 per violation. Be aware, however, that many telemarketing solicitations won't be restricted by the FTC's list. Calls for long-distance phone companies, banks, airlines, insurance companies, political campaigns and charities, among other solicitations, can be exempt.

In the meantime, while you're waiting for the first telemarketer to breach your telephone defenses with this new technology, prepare yourself to fight back with a freeware download of Enigma v1.2 for Windows from pcworld.com (http://www.pcworld.com/downloads/file_description/0,fid,21981,00.asp).

According to their write-up: "Tired of the phone ringing with yet another telemarketing pitch during dinner? Strike back at telemarketers with the Enigma Anti-Telemarketing guide. When you install and run Enigma, you'll be ready the next time the phone rings with just the right questions to drive telemarketers crazy--and hopefully away forever. Enigma knows just what you should say in every situation, including how to ask for a telemarketer's name, address, and understanding of the federal 'Do Not Call' laws of the Telephone Consumer Protection Act."

I've used this software for over two years now and can vouch for its effectiveness in preventing callbacks from many unwanted telemarketers. A Mac version is available at http://www.rynosoft.com/downloads/Enigma.hqx.

Now if only there was a better way to stop spam….

For more information, some humorous, on countering telemarketers:

http://www.junkbusters.com/ht/en/telemarketing.html

http://www.junkbusters.com/links.html#telemarketing

http://antitelemarketer.bizland.com/how_to_get_rid_of_telemarketing.htm

http://antitelemarketer.bizland.com/state_no_call_list_websites.htm

http://www.cexx.org/telejunk.htm

A Google search for "anti-telemarketing".

George Gibbs

George is co-Acting Editor of The DataBus and an active DMA® Member.

Software Review: CD-ROM Tool

 by Dan Woodard, regular contributor to "The DataBus"

Dan Woodard, At the tender age of 9, Dan got his start enjoying computer games on his TI-99/4a home computer, and he's been at it ever since.

He graduated in 1996 with a B.S. in Environmental Studies. Dan has been a DMA® member for about 9 years now, and enjoys playing Othello, other strategy and role playing games, backpacking, fishing and gardening.

He also dabbles in computer repair and upgrades, & is currently studying for his Network+ certification.. Dan is a regular software reviewer in The DataBus.

Like me, you've probably encountered at least one noisy CD-ROM drive over the years. You know, the one that sounds like a blender or spins up and down all the time, annoying the heck out of you. I have one of these on my secondary system right now, a Sony CD-RW drive that always spins up and is so loud that it reminds me of a washing machine when all the clothes end up on one side. For years, I thought I just had to put up with the frustrations and inconveniences inherent to such a drive. Enter CD-ROM Tool from Naiobrin Software, a software utility that finally puts the reigns back in the user's hands.

 Naiobrin Software's CD-ROM Tool was designed by someone who recognized that most modern CD-ROM drives are excessively fast and often have short spin down times. Many drives allow you to set the read speed lower than the default setting, which results in a marked decrease in mechanical noise. Also, quite a few drives allow users to set the spin down time to a value higher than the default. This leaves the drive spinning and allows access to data without having to wait for the drive to spin back up. Although these features are available in many drives, most do not ship with any software tools to allow the end user to have any control over these settings. This is where CD-ROM Tool comes in extremely handy.

 The first thing that users will notice when launching CD-ROM Tool is that it does a pretty good job of automatically detecting CD drive(s) and displaying their firmware information. It shows the manufacturer, model number, maximum speed settings, current spin down time, and whether the drive door is locked. It also gives the firmware version number. From this same screen, you are presented with 4 sub-menus through which you accomplish everything that this utility offers. On the main screen, you can try to auto detect the various speed settings that the manufacturer shipped the CD-ROM drive with. You can also manually set speed and spin down times. Using the shortcuts menu, you can create - you guessed it, shortcut icons. It lets you create a Quickset Icon on the desktop with just about any combination of speed and spin down time you want. This is my favorite feature of the program. I have several icons on the desktop for the same drive - essentially slow, medium and fast settings. In this way, I can get the drive to behave almost exactly as I want it to. The author does suggest, however, that setting a drive to the maximum speed and shortest spin down times is probably not a good idea.

The automation tab allows users to control several more features. For instance, you can adjust a drive to automatically set to a certain speed and/or spin down time whenever a disk is inserted. You can also have the program check every so often to be sure that any specific drive is set to whichever parameters you choose. Lastly, in the advanced tab, you can manually add settings that may not have been provided by the manufacturer. These will not always work but I have found that they do the vast majority of the time. For example, I was able to manually set a data throughput speed for

the drive in KB per second, and then I could use this setting for icons and such. This allows a lot more control that simply telling a drive to operate at 24x.

Summary: Naiobrin Software's CD-ROM Tool is an excellent utility for anyone who has a CD-ROM or CD-RW drive and wants to exert more control over it. It is especially useful in reducing drive noise and time spent by the drive spinning up and down. By decreasing read speed, it has also been shown to make scratched CDs readable again on a drive. This is probably one of the best examples of useful freeware that can be found on the Internet today.

Rating: 10 out of 10

Requirements: Win '95 or better

Reviewed: P4 1.4 GHZ, 128 MB RAM, 16MB Video, 32x CDRW, Win XP, DirectX 8, 20GB HD

Best Price: Free! 274 KB full version download at http://cdromtool.hopto.org.

Technology.talk — Taxing Software

By Patrick J. Suarez, regular contributor to "The DataBus"

Patrick J. Suarez is a nationally recognized Internet writer, trainer, speaker and consultant. He has appeared on numerous radio and TV programs across the United States. He is the Internet speaker at the annual Computerfest® trade show in Dayton, OH each spring.

Mr. Suarez published a tutorial software program called "The Beginner's Guide to the Internet" in 1993, and a book by the same title followed in 1995. In addition, Mr. Suarez has been published by Que.

Mr. Suarez operates a Web site supporting people who have just learned that they have a tumor. Pat is an independent writer and trainer and shares his computing time between Linux and Windows.

This year, more than a third of all taxpayers will take advantage of the electronic filing capabilities of Tax Cut and TurboTax. The latter is a member of the Intuit family that includes Quicken and Quickbooks. Up until this year, taxpayers seemed content with the TurboTax/Quicken juggernaut. Not any more.

Intuit is tired of people copying and freely distributing its flagship products. As these products are reasonably priced, so that nearly every taxpayer can afford them, this is stealing for stealing's sake. The situation compounds because you can deduct the cost of the tax preparation software. So, Intuit remedied things by entwining a program called C_dilla into TurboTax 2002. C_dilla ensures that you install the software, fully, on only one machine.

All well and good, but two problems have arisen with C_dilla, and I'm not sure which is the worse nag. The only way to rid your system of this hassle is to completely delete TurboTax 2002. You can delete C_dilla by removing the hidden folder and extricating it from the registry, but, surprise, after you restart your PC, it reappears like a Vegas magic act!

The reason C_dilla is a virtual software Phoenix is that it writes information to your computer's boot sector. So, when you restart your PC, Intuit resurrects it from TurboTax. You can overwrite the boot sector with a bootable fdisk CD to knock out the boot sector code, but you might inadvertently open a Pandora's box of other difficulties.

Want more bad news? C_dilla can play havoc with previously installed applications. Great program, guys. You can keep it.

The other issue is Intuit's corrosive attitude. Instead of explaining Intuit's antipiracy measures in a friendly manner, Intuit has adopted a "take a hike" attitude, practically daring their long term users to opt out for Tax Cut.

I took the dare and bought both Microsoft Money and H&R Tax Cut. Who needs the old California superiority act?

Phooey on Intuit. You want to lose paying, loyal customers? You're succeeding admirably.

And That's Not All

Many people, yours truly included, have taken Microsoft to task for some its questionable wares. But this company does make products that are Best of Show.

Money is one, and so is Streets and Trips, snatching the Best Mapping Software prize away from that category's pioneer, Delorme's Street Atlas USA. Street Atlas has become a nightmare. Its interface is clunky and difficult, and its maps don't present as much information about restaurants, hotels and the sort as Streets and Trips.

But Streets and Trips is not superior because Street Atlas is inferior. Streets is superior because its maps are easier to read, they are more current, they display more information about goods and services (even if this information is sometimes inaccurate, placing an oil lube store a block away or on the wrong side of its street) and the interface is easier to use than the competition. Updateable road construction information and global positioning system receiver use are both available, as well.

Old standbys Project, Powerpoint and Visio also remain at the top of their game, as does Publisher for brochure creation. I wish there were a way to resuscitate Microsoft's long defunct classical music, movie and baseball applications. Alas, they are gone forever.

In the Pen

Remember the old fountain pen? Not the kind fed by cartridges, but those with the ink reservoirs that you filled from squatty bottles of blue-black (or purple) ink. Yes, they can be messy and, yes, they can be pricey. But no pen feels better in your hand or writes as nicely as a good fountain pen. Bic, Parker and the rest keep offering variations (and combinations) of felt tip and ball point pens in their never ending quest to match the feel of a fountain pen, but I doubt they ever will. I use a Cross ink-reservoir fountain pen and love it. Feeding time for the pen results in random blue splotches on my fingers, but that's a small price to pay for the joy of writing with pen technology that dates back centuries and has never been equaled. If you care to take the plunge, visit www.worldlux.com and indulge.

Snow Job

NOAA promised us a mild winter, but we got nothing of the sort. NOAA had no way of predicting a weather oddity called the North Atlantic Oscillation, during which the "negative" flux creates a powerhouse low-pressure system south of Greenland and flows unending cold, wet air over our part of the globe.

What was predictable, and did come to pass, was WDTN's and WHIO's game of "Can you top this?" on Sunday, February 16th. WDTN won, based on their light-hearted, casual-clothes attitude and their willingness to read user e-mail, live, on the air. WDTN took its viewers and its job, not itself, seriously. They had the requisite radar sweeps, live photos and weather maps, but they didn't beat their viewers over the head with how good they are.

Meanwhile, Darth Vader was alive and well over at WHIO. Everyone had his or her game face on as they constantly reminded us about two things: It was snowing hard outside and they were superior to everyone else, including (in their minds), WDTN and even their viewers. In one special Hall-of-Shame moment, white-shirted-and-tied Scott Dean snapped at his viewers, growling at them to stop calling Channel 7 to complain about the preemption of regular programming so that we could be reminded, for hours on end, that the Dayton metro area was experiencing heavy snow and that roads were hazardous. If Tiger hadn't played at the Buick Open, they might still be wallowing in their meteorological marathon. So, Scott Dean, I award you the Royal Intuit 1-800-GET-LOST medal for your ungracious attitude toward the people who make your salary possible. Hey, Scott and WHIO, lighten up, already.

That vented, I must congratulate WHIO for its redesigned Web site, a wonderful mix of look, feel and content. Check it out at www.whiotv.com.

When Size Really Matters

When business software first appeared (circa 1982), the packaging was elaborate, replete with small three ring binders, prepunched manual pages on shiny paper stock. You could count on a protective box to hold the manual(s) and installation disks. By 2000, all you got was an installation CD or two, with the documentation imprisoned, in PDF form, on the CD.

But the box that now contained a solitary CD stayed the same size as the box that used to hold all those three ring binders, outer protective cases and disks. The situation was not unlike potato chip bags: a little content and lots of air.

The problem was perception. If Corel Office came in a massive, colorful, mostly empty box, Microsoft Office had to follow suit. Ditto Photoshop vs. Illustrator. To be smaller than your competitor was considered marketing suicide.

This approach was stupid and wasteful. Users could not have cared less about the size of the box. They just wanted useful applications.

At long last, the software industry has returned to Planet Earth, and now offers its wares in downsized boxes that still effectively describe the products therein. So, when you wander (the ever shrinking) software aisles at CompUSA or Best Buy, you're not seeing optical illusions. Those boxes really are smaller. And more sensible.

Be a Star!

Did you ever want to host your own radio show, offering your thoughts or information on whatever is near and dear to you? Think you can outRush Limbaugh? Now, you can, and for almost no money!

Make sure you have a large hard drive, at least 80GB. Download MusicMatch or Windows Media Player 9 (or any other software than builds and saves WAV files that were created by a microphone and a sound card).

Gather your thoughts and notes, open your media recorder software, begin a new recording and start talking.

When you finish, use MusicMatch Jukebox (www.musicmatch.com) to convert the WAV file to an MP3 file set to about a 64K sampling rate (you select this within MusicMatch, under File, Recorder, Quality). You can use a 128K sampling rate to slightly improve the quality of the sound, but the MP3 file size will increase.

Upload the MP3 file to the same server that holds your personal Web site, put the appropriate information and graphics on a Web page, establishing a link to the MP3 file. Upload that new Web page, and you're in business.

Your audience can click the MP3 file link, then download the file and listen to it.

You can download a free program called Audacity (audacity.sourceforge.net) to edit your WAV file and to add sound effect WAV files. It's easy to use, and very effective. Do this before you create your MP3 file.

Once you are "on the air", promote your show through newsgroups or free/inexpensive listings in search engine Web sites.

You'll get out in front of a global audience, you won't have to break for ads and you won't have to deal with the eternal frustration of radio station program directors who consistently turn great shows back into merely good shows.

Finally, if you would like to "stream" your MP3 file, visit www.shoutcast.com for more information. Streaming technology allows your listeners to hear your show as a "stream" of sound instead of having to download the entire MP3 file before being able to play it.

Thanks for reading

November DMA Meeting Report

by Jim Dalley, DMA® Member

Jim Dalley Jim is an Embedded Software Engineer. He has been an enthusiastic member of DMA® since the 1980s. He is also a Senior Member of IEEE and can be reached at dalley at computer.org.

[The following article was inadvertently misfiled when received and not published when it should have been. We apologize to the author for the omission and present it here now for your reading.]

The Editors

Nearly everyone has used PKZIP, according to the show of hands at the November DMA® meeting. The ubiquitous compression program is named for its creator; the PK stands for the late Phil Katz who created the first package on his mother's kitchen table in 1989.

Phil Katz put the source code into the public domain, ensuring its universality. When you use competing compression such as WinZip Computing's WinZip, the code under the covers is PKZIP.

Following the passing of Phil Katz, his brainchild has entered a new phase of growth. The new organization of PKWARE of Brown Deer, Wisconsin, has merged with a local company, ASi (ASCENT SOLUTIONS Inc.). The Miami Valley's own Lee May and Tait Hamiel of ASi shared with us the plan of how the local organization is involved in developing new PKWARE products.

Lee May told us about the history of PKZIP and described the new products that add security and integrate the compression into other desktop products. Since Release 4.5, PKZIP can be integrated with Microsoft Outlook to allow attached files to be compressed and encrypted automatically. Regarding data security, he emphasized that the goals of the data security were:

Authentication
–Verifying identity of the file author or sender

Non-Repudiation and Data Integrity
–Binding the file with the owner
–Knowing that the file has not been tampered with

Confidentiality
–Knowing that the information has not been compromised or viewed by others.

Tait Hamiel, an ASi specialist for PKZIP on IBM mainframe and AS/ 400 platforms, explained this side of the PKWARE business. During his lifetime, Phil Katz had not pursued the upward integration. Now files can be shared between large systems and between large and small systems, all using PKZIP format. All versions of PKZIP since Release 4.5 produce compatible files regardless of the computer platform. Conversions of character codes are done automatically between ASCII, EBCDIC and Unicode.

Why would anyone want to use PKZIP on large mainframe computers? Now they can send documents efficiently and securely by telecommunications. The mainframe licenses for PKZIP are priced according to the power of the CPU; one example of how cost effective it is was cited at the DMA® meeting. A company was sending magnetic tapes by airfreight to Europe. The application was changed to send PKZIP files by telecommunications to Europe instead of airlifting the tapes. Not only was the electronic transfer much faster, but also the $64,000 PKZIP software license paid for itself on the first day of use.

Lee May and Tait Hamiel fielded questions at the end of the DMA® meeting. Most of the questions involved encryption theory. Tait Hamiel sent me a copy of a 10-page document he has written called, the "Cryptography Handbook." It

explains in the principles of cryptography. There is not enough space here to reasonably review that paper. Perhaps we should invite this team back soon to give us a tutorial on the subject of encryption.

MPEG-4 Video Has Become A Three-Ringed Circus

by Timothy Everingham, North Orange County Computer Club

We currently have three proprietary standards for Internet video: Windows Media, Real Video, and QuickTime. Of course with such proprietary standards there becomes an issue of interoperability, which leads to having to potentially have servers and/or players for each one. So why not create an international video standard for the Internet like the MPEG 1 & 2 standards used on CDs and DVDs. Enter MPEG-4. An international standards committee developed it. Of course one of the problems with doing it that way is it takes longer. With Internet video technology changing at an extremely rapid pace, by the time the standard was agreed up it was two years behind current technology the proprietary standards were using. However, with some updates it still looked good to many because the content providers would only have to encode and manage one format instead of three and some quick updates could be added to bridge some of the technology gap. Apple was one of those companies. They announced last June at the Streaming Media West Conference that they were throwing their lot with MPEG-4 and was no longer going to do developing for QuickTime Internet video. They are now regretting that decision.

It was assumed that like MPEG 1 & 2, that once the standard was set there would not be significant licensing issues regarding the patents that are part of the standards. However, MPEG 1 & 2 was developed in a different environment, especially economic. Technology companies have been really hurting and are under pressure to increase revenues. This includes royalty payments from patents. The patent holders of MPEG-4 for video portion decided to use the same patent licensing house to do a group licensing on MPEG-4 as MPEG-2 had used, MPEG LA. This way it would make it more convenient to license the technology than going through all the approximately 20 companies involved. However, in January when the licensing proposal came out there was a firestorm. They had included a per stream (viewer) fee and the accompanying record keeping that went with it. There were claims that this licensing went in violation of the international agreements that the standard was developed under. Deployment was stopped. In February Apple was going to release its QuickTime 6, which included MPEG-4; but the uncertainty regarding the licensing issues had made them put the release on hold.

There was a forum on MPEG-4 licensing on April 25 at the Spring Internet World/Streaming Media West Conference. The forum was expected to be hot, but that was an understatement. The moderator was from Philips Electronics, one of the patent holders. He could not get his laptop to work with the LCD projector properly, so he had to turn it over to the rep from MPEG LA to go over the licensing proposal. Right after that the moderator started to have the panelists do their opening statements. First was the Apple rep, who made it clear that Apple was furious over the licensing mess which had prevent the shipping of its products.

The next speaker opened up with calling the licensing organization in violation of antitrust laws, he had sicked the Federal Department of Justice and several States' Attorney Generals on them which where currently investigating MPEG LA, and intimated that he was considering filling suit against them. A person from Dolby Labs representing the audio portion of MPEG-4 patent holder spoke and was received as having a fair licensing proposal for audio. The group licensing organization rep spoke trying to calm everybody down with saying that these proposals were preliminary and a new proposal was being worked on because of all the criticism of the first one. Also she and the moderator said that you do not have to go through the group licensing organization to license the technology.

Other speakers on the panel expressed frustration and tried to find common ground for agreement.

Questions from the floor were received early in the session, and one of the first persons from the floor to speak was the Chief Technology Officer of Real Networks, makers of Real Audio and Video. He confronted the moderator from Philips Electronics saying that Philips and a number of other companies are not willing to discuss licensing their technology individually, so to get a license on one of the technologies you have to license the entire group of MPEG LA's MPEG-4 patents.

As such, the statements about not having to go through MPEG LA made by the moderator earlier were false. Neither the moderator nor the rep from MPEG LA denied the accusation. The CTO of Real Networks then charged that the people involved in creating the standard were getting preferential treatment by the patent holders, which is a violation of antitrust laws. At this point the moderator seemed to lose credibility with most of the panelists and the audience and lost the ability to guide the discussion, but only able to keep it so only one person talking at a time. The rest of the comments during the session were ones of animosity or frustration. Near the end one of the people in the audience expressed her frustration by saying that in her viewpoint that we would not be able to use some great technology because the licensing issues cannot be agreed upon. The session ended in frustration on the edge of chaos.

The night before the MPEG-4 licensing forum, the CEO of Real Networks spoke at the conference. He said that if MPEG-4 cannot get its licensing issues settled soon, MPEG-4 will become irrelevant. With what happened at the MPEG-4 licensing forum and the threat of legal action that could last for years, the odds are that MPEG-4 will become irrelevant and we will see few devices and software using it.

Further information can be found at http://home.earthlink.net/~teveringham.

Timothy Everingham

Tim is CEO of Timothy Everingham Consulting in Azusa, California. He is also the member of the Executive Council of the Los Angeles Chapter of SIGGRAPH, the largest chapter of the Association for Computing Machinery's(ACM) Special Interest Group on Computer Graphics and Interactive Techniques and one of Southern California's significant professional organizations within the entertainment and media industries.

He is also on the Management Information Systems Program Advisory Board of California State University, Fullerton; which he also graduated from with honors with the double majors of Management Information Systems and Accounting.

In addition he is the Vice President of the Windows Media Users' Group of Los Angeles. He is also part-time press in the areas of high technology, video, audio, and entertainment/media and has had articles published throughout the United States and Canada. He is a member of North Orange County Computer Club. You may contact Tim at teveringham at acm.org.

Computer Museum and DMA® @ TechFest2003

by Carol Ewing, Membership Chairman, DMA®

TechFest2003, a celebration of technology in the Dayton area, was held at Sinclair College from February 21-23, 2003. The purpose of this event was so everyone could learn, share and have fun with technology. Kids could have hands-on experiments; students could discuss careers in math, science, engineering, computing or technology with people from local universities and colleges; and adults could explore career opportunities and local technology.

Some of the highlights were: WPAFB Trek Bus, IRL Race Car and new Corvette, ASC Wave Science Kit Demonstrations, Engineering & Science Hall of Fame, demonstrations, exhibits and games prepared by Miami Valley professional societies, WPAFB Education Outreach Office, talks on the Wright Brothers and previews of Inventing Flight July 2003. Sponsors were NCR, UTC, Sinclair Community College, Hobart, LOGTEC, Shumsky Enterprises, YSI and ASM. This was a community service of the Affiliate Societies Council and the Engineering & Science Foundation of Dayton. It was the first year for this event, and with their great success we hope there will be another one in 2004 so we can participate again.

Gary Ganger, a DMA® member and the Computerfest® Museum Curator, was asked at the Fall 2002 Computerfest® to attend and bring some of his museum for everyone to see the "old computers". Gary agreed and graciously had DMA® included in the invitation. Steve Frey was very helpful in getting Gary and DMA® signed up for this event. Gary took about 25 computers including Abacus, Commodores, Atari, Sinclairs, Compaq laptops, and right up to the modern day Palm. Most of the adults said they "used to own one of these" and the children would ask, "What is that?"

Some of our members volunteered to work at the DMA® booth. Carol and George Ewing set up the tabletop display and worked Friday and Sunday. Rammy Meyerowitz worked Saturday and most of Sunday. Lisa Singh worked Saturday, also working with another non-profit organization there, and most of Sunday. Everyone promoted DMA®, talking about OTAP, GEMAIR, Inc., and our SIG groups. They handed out fliers for Spring 2003 Computerfest® and information on the Hubble Exhibit and our ComputerFair. They had free student vouchers for 12 -18 years old to attend the show for the Hubble presentations, see the Wright B Flier, enter the ComputerFair, attend any seminars and much more.

We want to thank Gary Ganger for transporting some of his museum, working the entire event and for giving DMA® the opportunity to attend this event. We also want to thank Carol, George, Rammy and Lisa for spending two days at this event.

Carol Ewing

As DMA® Membership Chairman, Carol is responsible for bringing us all those wonderful membership discounts, growing the club ranks, as well as many other selfless, tireless activities.

Random Access Memory!

By Bob Elgines, CRCC Editor

CORE MEMORY '50: (1950)

Pictured here is a single ferrite donut used in a core memory unit for one bite of memory. When the core is magnetized that is equal to a one and when it is demagnetized that is equal to a zero. This required a lot of power, so large DC power supplies were needed producing a lot of heat. Core memory units were built to a maximum of 48K and were used

in the US until 1993. The last USAF tube type computer operating in the United States with a memory core unit was finally shut down in the summer of 1986. It was located in the Block house just outside the main gate of Luke AFB in Arizona. The computer tube type processor took up a room 40ft by 40ft with ten each 3ft by 8ft high cabinets and only 48KB of RAM to cover the South Western United States SAGE aircraft tracking system with multiple RADAR input feeds.

DONUT – Ferrite Iron Core
DATA-0 Line (one Bit)
ADDRESS-0 Line

CHIP MEMORY '69:

To speed up computers we now write and read more than one BIT at a time. Back in the sixties they decided a computer word would be a total of eight bites of data. Some of the first memory chips were 1kb, then increasing to 4k, 16k, 32K, 64K, ETC. As the late eighties came along such as the IBM 286 machine they decided to go with a 16 bit word (but as far as memory is talked about, really two eight bit words) using 256KB individual chips directly on the mother board to a max of 1MB. Since you require a data line for each bit the DATA BUS was increased to 16 data lines. [Editor: Isn't that a nice phrase? 'Data Bus'.]

30-pin SIMMS '89: [SIMM=Single In-line Memory Module]

They first came out with parity (requiring an extra chip for the parity bit) and then non-parity. Most of all your newer machines are capable of using non-parity (lower cost) type SIMMs. As the 386DX processor appeared, we now could shift a 32-Bit WORD around, but most programs still operate using 16-bit words at this time. Memory chips were put on separate printed circuit boards with 8 chips for no-parity and 9 chips for a parity bit location. So for a 16 bit word machine you would need two SIMM boards or for a 32 bit word machine you would need four each of the SIMM boards (32/8=4).

72-pin SIMMS '95:

Of course now with WIN 3.11 (WIN'95 & W1N'NT do the same thing) and the new programs and machines we can use true 32-bit word operation. In other words we can transfer 32 bits of data down the bus at any one time. This of course comes in handy mainly for graphics and internet operation. Otherwise there is not any difference other than you are required to have more memory to make this operation successful. Like with the 8-bit word, 64KB of RAM was great, but with the 32-bit word, 16MB of RAM is great. The reason being is RAM is still calculated using the old eight bit word, why as now you need four times more places in RAM for each WORD.(4 X 8-bites =32bites). The 72-pin SIMMs are a 32-bit setup so your machine would allow you too change or add them one at a time.

EDO SIMMS '96:

Then for the faster Pentium processors (now up to 266 MHz with MMX) and proper mother boards, the new EDO (Extended Data output) Simm memory boards came out with an added cache chip to help speed up memory access due to the mother board clock speed, which now runs up to 75MHz.

168 pin DIMMS '97: [DIMM=Dual In-line Memory Modules]

The new RAM boards out are called DIMMs, which is a 64 bit memory board @ 66MHz (like two 72 pin SIMMs on one). In 1998 and 1999 higher speed board arrived at 100MHz and then at 133MHz. 184 pin DDR '01: Some of the latest RAM arrived called DDR or PC2100 operating at 266MHz to aid in the operation of Intel's new P4 processor and AMD's 2100. Then in 2002 a higher speed DDR333 or PC2700 operating at 333MHz and DDR433 or PC3500 operating at 433MHz with CPUs over 1GHz.

184/232 pin RAMBUS/RIMM/RDRAM '02:

The latest type of memory operating up to 800MHz. Fast memory is finally here bypassing Motherboard speed. The type 1066 is a 16Bit, 184 pin module, and therefore must be installed as pairs. They are available up to 512MB per module (RIMM). The type 4800 uses RSL (RAMBUS Signaling Level) technology to achieve transfer rates exceeding 4.8GB/sec of Bandwidth. They are 32 bit, a 232 pin module and available up to 256MB (RDRAM). The architecture of RDRAMs allows the highest sustained bandwidth for multiple, simultaneous randomly addressed memory transactions. The separate control and data buses with independent row and column control yield over 95% bus efficiency. The RDRAM's multi-banks configuration supports up to four simultaneous transactions.

This article is brought to you by the Editorial Committee of the Association of Personal Computer User Groups (APCUG), an International organization to which this user group belongs.

The Deals Guy

(The Cheapskate) Click [Bobclick at mindspring.com]. Visit my Web site at [http://www.dealsguy.com] for past columns. Also, I keep adding interesting articles (taken from user group newsletters) to my "Articles of Interest" page for viewing or downloading.

Greater Orlando Computer User Group

I enjoy all the feedback from my personal comments in the column. When I wrote about my experience with spyware on a friend's computer, I was surprised at how many people e-mailed to say how many spies they found on their own machine when they installed Ad-Aware, and many had over a hundred. Some even asked me where to get Ad-Aware and I thought that was pretty common knowledge. People must not be paying enough attention because I read about Ad-aware in many newsletters.

Last month's item about who are the doctors and who are not brought some interesting e-mail from people who found they were in the same situation, and didn't know it. They agreed with me. Some said they were satisfied with the PA they were seeing. I only had one person who took the doctor's side (a PA who says he is honest with his patients, and I salute him for that). The doctor I see now does not have any PAs in his office, but that's not why I chose him.

Heard about Turbo Tax lately? It looks like Intuit took lessons from Microsoft with their "product activation" scheme, but Intuit uses a third party software called SafeCast (by Macrovision) to keep track of the computer it is installed on, although it continuously works in the background. It sounds like there have been problems, but their tech support doesn't have much patience. I read about a guy who had hard drive problems. He replaced his HD and that one also became defective. He really got an attitude from their tech support. If you want to know more, go to [http://www.extremetech.com] and you'll see lots of information about it if you do a search. The article I read was "TurboTax, So What Should I Do Now?" It also had a list of other products that use the same product activation scheme. In my case, AARP volunteers did my tax return free.

*An Old Deal Resurfaced

A few months ago, I wrote about "Drive Rescue," but by the time the column was published, that freeware product was pulled. I believe a new pay version replaces it now. However, Ken Marple told me he found his original download and will send it to me. If anybody still wants it, let me know. A friend says it is also available at [http://www.absolutefreesoftware.co.uk/freeware_general_utilities.htm] as I write this. He says the author states it has bugs, so beware. Ken Marple said he accidentally found his HD problem anyway when he took off a virus detection software and the problem disappeared. He had been running two AVs, not a good plan.

There's not much in deals this month because I'm in the middle of company time, meaning lots of family visiting. Vendors didn't respond and I didn't have time (or ambition) to do any follow-up. The LensPen item is good until April 30, 2003. [http://www.lenspen.com] Also, the Man-Machine "Cool One" Keyboard is still good. 301-341-4900. I hope you got your machine "fixed" with [http://www.bigfix.com] if you were having problems. Here is what I liked this month.

*Zap Those Telemarketers

I read this one in the Dayton Microcomputer Association, Inc.'s newsletter, The DataBus, by Jerry Wonderly (and George Gibbs) and thought you'd like it.

He found this on Clark Howard's Web site [http://www.clarkhoward.com]. "Telemarketers (and bill collectors) often use Predictive Dialers to dial outgoing calls. These are computers that keep dialing phone numbers on a list until they reach a live person. The Predictive Dialer then transfers that call to the first live operator. That's why you sometimes hear silence for a while before someone gets on the line when you answer the phone. Some of them are bold enough to play a little recording asking you to "Please hold on for an important call!" (Yea, Right!) Telemarketers and bill collectors don't want to pay their operators for dialing and listening to busy signals and answering machines, so they have a computer do it for them.

'The Predictive Dialer is programmed to hang up if it hears a Special Information Tone. (SIT), since it knows the line is disconnected. It doesn't listen to what's said after the SIT tone since it doesn't understand words. Here's how that information helps you. If you download a file of these tones, and then record it to the beginning of your answering machine message before your real message, the automated dialer will be tricked into thinking your phone is disconnected and you'll be removed from their calling list. No more calls from them! In no time at all, you should be receiving far fewer telemarketing calls.

'You could always spend around $40 to buy one of those popular zapping machines, but I'll take the freebie. Readers can find this free, small (44 KB) sound file, sit_disconnected.wav, at [http://www.telephonetribute.com/tribute/signal_and_circuit_conditions.htm]." Thanks for tracking that down, Jerry.

*Backup Solutions For You Are On Sale

This one is running out fast. In fact, I don't even understand what all it is about, so check it out at web site. [http://www.centuriantech.com] Centurian Technology is having a winter sale that will end March 31, 2003. This product is unique for your backup and they have another product for hard drive protection.

Here is a brief description of Centurian Guard: The Centurion Guard® Hard Drive Protection Device protects your system by write protecting the hard drive at the physical level, similar to the way that you write protect your floppy disks by setting the write protect tab.

And this is a brief description of Drive Shield: DriveShield® is a new software based laptop/PC hard drive protection. DriveShield allows anyone who manages laptops/PC's to reset a system to its original configuration with a simple reboot.

Be sure to take advantage of this deal if you need the protection. I have not used either product so I cannot speak from experience. However, when I saw it demonstrated at a show, I was impressed, but a show presentation is designed to make you really want a product. You can also call them at 800-224-7977 and they say prices start at $58.00 a unit.

*Everything You Wanted To Know, and Also Things You Never Wanted To Know

Ever wonder what your computer was really made of? There are plenty of ways to find that out, but Paul Witheridge of Sarnia Computer Users Group gave me this little program that will capture your interest. Best part of all, it can run from a floppy. Download it at [http://www.aida32.hu/aida-download.php]. Also see [http://www.aida32.hu/aida-features.php?bit=32] (left column) for a description. Then unzip it to put it to the test. In fact, I did put it on a floppy and, although it runs a bit slow, it works gathering so much information about your machine that you will be astounded. When browsing the information, it even takes you to the Web sites. Best of all, its freeware. Be prepared to spend a lot of time to interpret stuff the first time you run it. Actually, I understood little of the information, but you might.

That's it for this month.

Meet me here again next month if your editor permits. This column is written to make user group members aware of special offers I have found or arranged, and my comments should not be interpreted to encourage, or discourage, the purchase of products, no matter how enthused I might sound.

WOW -- WOODY's OFFICE WATCH

If you were unfortunate enough to install Producer 1.0 for PowerPoint - Microsoft's PowerPoint add-in that adds limited audio and video capabilities to PowerPoint presentations viewed on the Web - I sure hope you didn't "upgrade" to Windows Media Player 9.

If you did, chances are pretty good that you're pulling your hair out by now, with crashes galore. Quoth the WMP 9 readme file: "If Windows Media Player 9 Series is installed on the same computer as Microsoft Producer for PowerPoint® 2002 version 1.0 and you attempt to preview your presentations by using Microsoft Producer, you will receive Microsoft ActiveX® control alerts and will not be able to preview the presentation using the Preview Presentations tab. You will also receive ActiveX control alerts when you attempt to access the presentation templates in Microsoft Producer. To prevent these alerts from appearing, upgrade to Microsoft Producer for PowerPoint 2002 version 1.1."

Producer 1.1 is available at

http://office.microsoft.com/downloads/ 2002/producer.aspx

WOW -- WOODY's OFFICE WATCH

<<=Microsoft Office advice and news from Woody Leonhard

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