Bits of Blue

April in Tampa Taxes

A Monthly Publication of the Tampa PC Users Group, Inc.

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Meeting

Patrick T. Courtney
Voice Recognition

Wednesday, April 9, 2008
6:30 PM
Pepin Distributing Co.
4121 N 50th St
Tampa, Florida

INSIDE THIS ISSUE

Meeting Preview: I bet you had almost forgotten about voice recognition, but it is back at our next meeting, presented by Patrick T. Courtney. Bob LaFave will conduct the Windows SIG at the beginning of the meeting as usual.

Editor's Comments

By William LaMartin, Editor, Tampa PC Users Group
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Old Newsletters
At our web site, you can view newsletters going back to January 1998 in HTML format and back to January 2006 in Adobe Acrobat format. I could have taken the Acrobat version back to December 1995 when I took over doing the newsletter and also saved them in Acrobat format but didn't because at one time disk space was at a premium on our site. Now we have much more space than we can easily use, so I have considered adding more of the old Acrobat newsletters as an historical resource.

Until recently I hadn't consider the still older newsletters going back as far as 1988. The group was formed in 1984, and I am told by Kevan Sheridan that there was some sort of less-structured newsletter published at times between 1984 and 1988. When I took over the newsletter in 1995, then-Editor

May Meeting: To be announced

Friends of the User Group

We acknowledge

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for their support

Minutes of the March Meeting

By Jim Purcell, Secretary, Tampa PC Users Group
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President John Witmer opened the business portion of our meeting at approximately 6:30pm with a discussion of a possible presentation on identity theft by Hewie Poplock. The presentation, "Identity Theft – Protect Yourself", was delivered by Mr. Poplock at the recent FACUG meeting in Zephyrhills. There seemed to be interest in the topic but most of the discussion surrounded Mr. Poplock's request for some assurance that there is interest in purchasing "LifeLock Insurance" from him after the presentation. Interested members were asked to contact Doug Mullis, and, if he is satisfied that there is sufficient interest in the topic and the insurance, he can schedule the presentation. If not, it will be discussed and a decision can be reached at the April meeting.

Microsoft was present to provide another of their interesting and informative presentations. John introduced Blain Barton and Yung Chou of Microsoft. Blain said that their theme for the evening was "New Products". He said that Yung would talk to us about the Windows Server 2008 and that he would talk about Windows Home Server.

Yung stated that his objective was to inform us of the trend of new developments in the Information Technology industry. He also wanted us to better understand the reasons that Microsoft is proceeding in the direction that it is with their new developments. He said that Microsoft has found that IT professionals are spending about 70% of their time on maintenance (putting out fires). This prevents these professionals from using their skills to take advantage of the technological capabilities of the server. He gave a detailed explanation of how Microsoft has included changes in Server 2008 to lessen the maintenance

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Faster Hard Drives
SAS, SATA and 15K drive installation

By Merle Nicholson, Tampa PC Users Group
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I've installed a new type of hard drive – SAS, or Serial Attached SCSI – that has dramatically improved the performance of a new PC. I have a pair of Seagate Cheetah 74GB drives running in RAID 0. They run at 15,000 RPM, and I'm pretty sure they're the fastest available.

I've been building a new PC for a couple of months now for my business use because I do a lot of pretty intensive database work. The faster the machine, the more work I get done. Also my current PC is getting to be about three years old, so I need at the minimum to replace all four hard drives. I don't wait for hard drives to fail, I replace all hard drives as they approach three years.

PROCESSORS
I started with an average-speed processor while I experimented, and have since upgraded to the fastest dual processor AMD makes – an X2 6400+ running at 3.2GHz. The motherboard isn't optimally set up for Phenom (four cores), so I'm waiting for a while on that and for AMD to raise the Phenom processing speed beyond the current 2.3GHz.

SSD
I've been looking for an affordable hard drive that will match the performance of the rest of the system. I was very interested in SSDs – Solid State Drives – and found that the fast ones that are large enough for a full Microsoft Operating System, plus Office and a dozen other programs, are simply prohibitively expensive. I think they will get there, but not just yet. I found also that just because they're solid state doesn't mean they're fast. Besides, a couple of recent innovations with hard drives have lowered the prices on all the parts I needed to stick with regular hard drives. More about that further on.

VISTA
The reason I put two months in the project was because I wanted to experiment with Vista and see if I can make it suitable for my business. I thought I was close after I obtained Vista Service Pack 1, but I now have a regular service program failure that I haven't solved. So I give up for now; I'll stick with XP for the foreseeable future. It's too bad, because, except for just a few things I didn't like, Vista was looking pretty good. I managed to find all the Vista device drivers I needed, with the exception of my old scanner.

PATA and SATA INTERFACES
The conventional hard drive interface has, for a good many years, been IDE ATA, sometimes now called PATA, or Parallel ATA. The connection from the motherboard to the hard drive or CD/DVD drive is a 40-wire cable – and now commonly an 80-wire cable of the same width. This is very quickly being replaced with SATA – Serial ATA that uses a narrow cable about 5/16" wide. They have even become predominant in notebooks. There is no longer a price differential in hard drives or motherboards between PATA and SATA. SATA will handle data faster, are easier to route cabling and don't restrict airflow the way PATA cables do. Even CD/DVDs are using SATA now. Virtually all motherboards now have at least four SATA ports. The software that controls the data is largely powered by the CPU. RAID support is also implemented in virtually all these motherboards, and, if you set up a RAID array, the software that runs the RAID also depends on the CPU to handle the data stream. The fastest and most common SATA interfaces run at 3GB/Sec. (Called SATA II). Desktop hard drives are always 7200 RPM. Notebook drives are usually 4500 RPM or 5400 RPM and, rarely, 7200 RPM. The faster they spin, the faster the data goes out.

SCSI and SAS INTERFACES
Until pretty recently, if you wanted a really fast hard drive you had to look at the server world and get a SCSI drive. SCSI drives have always been small – typically 36GB, 74GB and 147GB. And they're expensive – in the neighborhood of $600 apiece. The cable is very wide – 50 wires – and the connector is a monster, and you really have to know a lot of stuff to make it work. You also need a SCSI controller card at a minimum of $150 and up, more typically in the $800-$900 range. Many of these drives, however,

(Hard Drives.......Continued from page 3)
run at 15,000 RPM or, just as often, 10,000 RPM and deliver up data at one-half and two-thirds the time, respectively. There's more to it than that, but that's close enough. But some things have recently changed. Two things, really: One is the PCI Express bus and the other is the adoption of a serial interface to SCSI called SAS – Serial Attached SCSI.

PCI EXPRESS
All new motherboards have adopted PCI Express – a scheme that allows bus cards – and especially video cards – to connect to the main data bus at a much faster rate. They use different connectors, and, indeed, there are several different connectors that may appear on a given motherboard. Mine has two 1x, one 4x and one 16x – the last for video. Each is a different length. But suffice to say that it makes the old PCI bus look pretty slow.

SAS
SAS is to SCSI as SATA is to PATA. It's the implementation of a serial data stream from the old SCSI parallel scheme. It's cheaper and uses small cables that don't restrict air flow. The connectors on SAS drives are very similar to SATA. Actually, they're designed so that you can connect a SAS cable to a SATA drive. But you cannot connect a SATA connector to a SAS drive. This is because the SAS controller cards will also support SATA drives but not vice versa.

THE REASON to use SAS is because SAS interfaces are available on 15K and 10K hard drives at a reasonable cost. Mine were just under $200 each – I needed two for RAID 0, and the controller card was $315 and a $40 cable was necessary. Two 36GB drives would work well for me, but the 74GB drives were cheaper.

SAS CONTROLLER CARDS
These run between $175 and, well, you don't want to know. The inexpensive ones handle four drives and depend on the computer's CPU to move the data, just as board-implemented SATA does. As the price goes up, they add on-board

processors and memory, and they support more drives – typically eight. The one I got after much research does four drives, has an on-board PowerPC processor (remember those?) and 128MB DDR2 memory. So it's a computer on a card for $315. It comes with a cable for SATA drives for some reason, so I bought a SAS cable for $40. Researching the cable to buy was harder than all the other components put together.

THE RESULTS
To briefly describe what I have: Two Seagate Cheetah 74GB, 15,000 RPM hard drives that are controlled by the card with its own computer on board. It's configured for RAID 0, meaning that it combines the two drives to look as one, adds the capacity for 147 GB and divides the workload between two interfaces. A failure of one drive disables data in both; there is no data redundancy. Believe me, I have backups and can recover data to a spare hard drive in fifteen minutes.

I did some subjective testing, comparing some common things I do using a standard 80GB SATA drive compared to the new SAS setup. It turns out that starting up the PC from cold is about the same as it

To the right of the controller card is the new 15K Seagate Cheetah, a Hitachi 80G SATA drive and a new Seagate 160G ATA (or PATA).

(Hard Drives..........Continued from page 4)

was before. That's because adding in the controller card itself slows the system boot by about 15 seconds. The controller card has a boot of its own to perform. That it doesn't take longer overall to boot is satisfactory, since we're talking about one minute, 15 seconds. Starting up Word 2003 takes about 3.5 seconds vs 6.5 seconds before. This document, now on its third page, loading from a drive on the LAN, is virtually instantaneous. Shutdown remains the same at about 17 seconds.

Compared to my previous machine, which has a couple of 10K drives in RAID 0 and a similar processor, but at a 25% reduction in processor speed, the Access database queries round off at about a 20% improvement. Not a great deal, but every bit counts, and I certainly learned a lot in the process. ◆
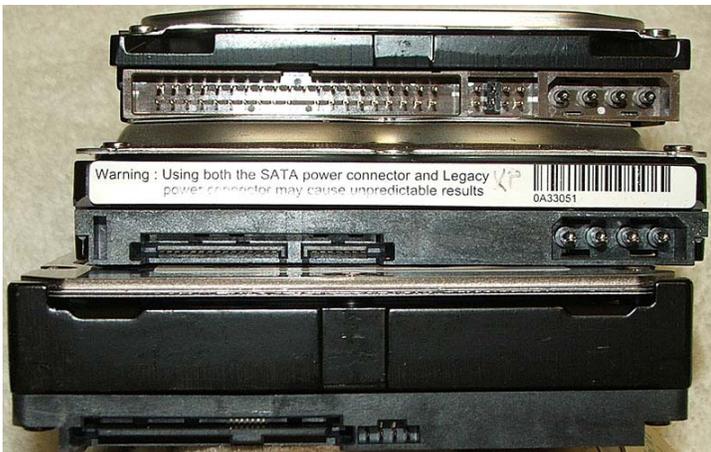
Looking at the ends from the bottom are the SAS drive, a SATA drive and the top one is the PATA drive. There is a considerable difference in the thickness of each drive, considering the capacity at 74GB, 80GB and 160GB. The SAS 74GB is thickest and heaviest by far – I suppose to handle the stress of the high speed.

Internet Picture of the Month
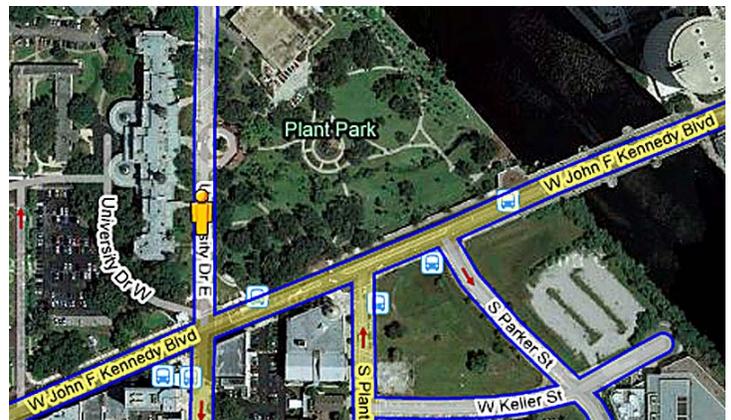
Tampa has been Googled

Google Maps has now added Tampa to the cities where its maps and aerial images have a street level view, in which you can travel along any city street and view both sides of the street as if you were in a car.

Above is the street level view of the Tampa Bay Hotel, now the main building of the University of Tampa, and below it the aerial view, with the yellow man you click on to go to street level.

April's Interesting World Wide Web Locations

Tampa PC Users Group (that's us)	http://www.tpcug.org/
Astrophotography by Noel Carboni	http://ncarboni.home.att.net/Astrophotography.html
Google Street view of Tampa	http://maps.google.com/maps?hl=en&tab=wl
Photos of Venice, Italy	http://www.phototravels.net/venice/
Adobe Photoshop Express (Beta)	http://www.adobe.com/products/photoshopexpress/?promoid=CBTVM
Book scanning with a camera	http://www.wired.com/entertainment/theweb/multimedia/2008/03/gallery_internet_archive?slide=1&slideView=5

demands and to thus greatly improve the ability to utilize both the old and the vastly-improved new technology.

Blain began his presentation by telling us that, within about five hours after he contacted Microsoft corporate to gather information for his presentation on Microsoft Home Server, they had shipped him a 500 GB HP MediaSmart Home Server, pictured below. He said that he was able to hook it up and have it running within about 20 minutes after taking it out of the box. He emphasized the increasing need for a home server based on the number of computers that we own, the value of the data stored and the ever-present possibility of equipment failure. He explained that this would not be a domain controller, so it would not violate the rules normally established by a provider like Verizon. The server provides backup across all home PCs, password synchronization, health details and notification on all connected PCs and also provides better security. You can have 10 user accounts and one guest account. It is also easy to add and remove drives, and the system sees all drives on the server as one space. The server adds and decreases this total space as drives are added and removed. It also allows remote access to all PCs and allows media sharing. Blain followed with a detailed demonstration and a question and answer session to demonstrate the functions.

There was no Windows SIG, so John asked for any questions. Merle Nicholson reminded everyone that their UPS batteries should be replaced if they are more than two years old. John announced that there will be a raffle at the April meeting. The items will include two evaluation copies of Microsoft Home Server software thanks to Blain and Yung, and several other items.

The meeting ended at 8:10pm. ◆

Marylee Bruneau gave me a box of old newsletters. Later, member Ed Buzza gave me another box when he was cleaning out his home. From those two collections I have a pretty complete collection from March of 1990 on and spotty for 1988 and 1989. An email routed to me by Kevan from a daughter, living in Houston, of a former member in the early days of the group revived my interest in those old newsletters. She had found references to her now-deceased father, Vern Semrad, and his interest in BBSs which also mentioned Kevan Sheridan. She wrote to Kevan: "*I found your name on an article posted about BBS, and it mentioned my father, Vern Semrad. I was wondering if you were still around, and if you remember anything about my father. He passed away many years ago, and I have so few memories of him.*"

Well, she can now read several years' worth of newsletters (Feb. 1989 - March 1991) where her father was a considerable contributor to the content of the newsletter and was also listed as the membership officer for the group in 1989 and 1990. She can do this online at our site because her query prompted me to restart a long-stalled project of scanning in these old newsletters. Quite a few years back, I had scanned in about ten of them but had done no Optical Character Recognition (OCR) on them. So I went back and did the OCR on those already scanned and then scanned in some additional ones and did the OCR. All of this was done using Adobe Acrobat 8 Professional and my Epson Perfection 3200 Photo scanner, scanning at 150 dpi resolution, best quality and 8-bit gray-scale.

The files produced above are considerably larger than those you get when the Acrobat document is created directly from the program used to create the newsletter, Microsoft Publisher. An additional problem was that these old newsletters were all printed entirely on blue paper (think *Bits of Blue*). That adds a complication to the scanning. The files can be accessed at our site under the Newsletter link or directly at http://www.tpcug.org/OldAcrobatNewsletter.aspx. The articles in these old publications will probably bring back memories of computer things that you have probably forgotten.

Microsoft Silverlight

Special Interest Groups

Microsoft Access SIG

This SIG meets the **first Tuesday** of the month at 6:30 PM. The meeting location varies. For information, contact William LaMartin at *lamartin@tampabay.rr.com,* or Merle Nicholson at *merle@merlenicholson.com.*

Digital Imaging SIG—Cancelled until further notice

Visual Basic for Applications SIG

This SIG meets the **third Wednesday** of the month at 6:30 PM. The meeting location varies. For information, contact William LaMartin at *lamartin@tampabay.rr.com.*

Windows SIG

This SIG occupies the first 30 minutes of our monthly, regular meeting and is devoted to a general Windows and computing discussion. Bob LaFave moderates the discussion.

TPCUG STATEMENT OF INCOME, EXPENSES AND BANK BALANCE FOR 2007

INCOME

MEMBERSHIPS (43@ $25 + 2@ $10)	$1095.00
DOOR PRIZES	$136.00
AMAZON & MISC.	$220.17
TOTAL INCOME	**$1451.17**

EXPENSES

NEWSLETTER POSTAG	$292.10
NEWSLETTER PAPER	$66.29
FACUG CONF. REGISTRATIONS	$95.00
FACUG DUES	$25.00
APCUG DUES	$50.00
FLORIDA INCORPORATION FEE	$61.25
WEB SITE HOSTING FEE	$129.40
PO BOX RENTAL	$56.00
DOOR PRIZES	$60.00
CHRISTMAS PARTY	$234.08
PAYPAL FEES – 9 PAYMENTS	$9.27
MISC. (INK, CHECK CHARGES)	$37.20
TOTAL EXPENSES	**$1115.59**

NET INCOME FOR 2007	**$335.58**
CASH BALANCE PER BOOKS – BEGINNING OF 2007	$5156.37
CASH BALANCE PER BOOKS – END OF 2007	**$5491.95**

RECONCILIATION OF BANK STATEMENT TO BOOK BALANCE

Balance per Bank Statement on 12/31/07	$5517.98
Deduct outstanding checks written as of 12/31/07	
CK# 791 APCUG-12/29/07	$(50.00)
Add: PayPal dues deposit in transit J Rivera	$23.97
Balance per BOOKS at 12/31/07 is this amount	**$5491.95**

Submitted by Doug Mullis, Treasurer

Tampa PC Users Group, Inc.
P. O. Box 3492
Tampa, FL 33601-3492

☐ *Member: Your membership is up for renewal*
☐ *Vendor: Your product was reviewed on page* ___

Silverlight is Microsoft's answer to Adobe Flash. It is a method of supplying a richer visual experience to web pages (and capturing some of the money now going to Adobe for displaying such content).

Silverlight 1 is now out, version 2 is in Beta. To view the Silverlight content on a web page, you will be prompted to download the Silverlight browser plug-in when you visit that page – just like you were asked to download the Flash browser plug-in many years in the past.

What I like about Silverlight is that it is programmable with Microsoft Visual Studio 2008. You can view my first attempts with it at http://www.lamartin.com/Silverlight/. I am using Silverlight 2.0 Beta. To see more impressive examples than mine, go to http://silverlight.net/Showcase/ and when you receive the browser notification about pop-ups, allow them. ◆

to I-275

Hillsborough Ave

56th Street

TPCUG Meeting Site
Pepin Distributing Co.
4121 N 50th Street

Harney Road

I-4

Martin Luther King Blvd

50th Street

to Tampa

N

Columbus Ave