

Newsletter

Volume 12 Issue 10

October 1999



We will be in the auditorium for the rest of this year's meetings. Thanks for your co-operation in keeping bagels and coffee outside. The new parking pattern makes it a little harder to park far from the door but we'll keep trying.

The program topic is Business Diagrams. Jim Russ will show software called Visio. Even if you're not in business you might see something useful about organization for any area of life.

SEPTEMBER MEETING

The Hunterdon Computer Club held its regular meeting on Saturday, September 24, 1999, in the Hunterdon Medical Center auditorium, Flemington, NJ. President Lon Hosford called the meeting to order at 9:30 A.M. Marlyn Reuter was our solitary new guest, and became our newest member. She is a 20 year veteran of computers, puts out her church's newsletter, teaches at Kingwood, teaches piano, and in her spare

timeJohn Besold didn't sign in as a guest but spoke about photography as a major interest. If John has e-mail, we'd like to have it as some members would like to reply about photography.

Q and A:

The monthly question about hard drive space led to suggestions to delete history and cookie files. History has a file for each web page you look at, not just one for each URL. One way to find these is to click on Start\Settings\Control Panel\Internet\General\Temporary Internet Files\Delete; then below that History\clear. This may slow up your access to favorite Net spots, but it will free HD space. Cookies are the record of any sign in or registration, you have done. You can delete them in Windows Explorer under Windows.

Jim reported a problem with a CD that played samples of the first 9 tracks, only. Installing a new drive didn't help. Cure: Somewhere on the CD setup there is a setting called Preview. Uncheck this. John Warsinski reminded all of the Motto of the Senior Classes: READ THE SCREEN.

In discussion of various versions of Netscape, we learned that you can't install an older version if you have a newer one on your machine.

Treasurer Jac Carroll reported a balance of \$114.23. We are happy to report that this is a positive balance, with the bagels all paid for.

Webmaster Paul Glattstein reported that the club page is up to date and that

this is a good place to check the meeting date when there is a question and the newsletter is late, as was the case last month. There was discussion about the club moving on to have its own domain name. No advantage of this was given.

Membership chair Don Colombo reported 4 successful phone calls about renewals.

Lon again raised the question of putting the membership list on the Net. There were no name tags for September. (The secretary feels that by the time she gets the names all correct to send to the Net or another member, she might as well run the tags, now that she has begun to cope with Access.)

COMPUTER VOLUNTEERS

Secretary Stewart reported that new Senior Classes have just started. The recent coverage of fall classes in 4 newspapers led to another surge in calls and the waiting list for beginners is far over 100. All of the time slots are full, and most have a teacher and a coach, but if someone would like to team with Jean Scharenberg on Monday or Tuesday afternoons, call Dorothy Hartsell at 788 1359 and talk it over. We don't do any arbitrary team or class or level assignments, but the Activities Office is the place to start getting acquainted. The faculty has grown from 1 to 18 in 5 years. 14 teachers or coaches are HCC members.

In new business, Past President Maureen Barron presided over nominations from the floor for the entire slate of officers. The current slate was nominated for the next year, as listed on page 5. All agreed to serve. Further nominations are in order at the October meeting. Election is held in November..



PROGRAM

Home Networking by
Jim Russ

Jim didn't get the applause he deserved when he finished because members were deep in thought. Nancy and Evelyn were pondering connections between upstairs and downstairs computers. Don was wondering about connecting computers in his classroom lab. Paul was thinking about networking his machine to his professional writer wife's machine in separate rooms. Other members immediately gathered around Jim with questions.

Jim carried in two complete systems. He had to connect them with a cable, as there was no available phone, but he was demonstrating software called HomeFree that connects two machines through your existing phone line.

This led to some confusion in terms, because Jim talked about **Ethernet** as an alternative way for two users to be on the **Internet** at the same time, using either an Ethernet setup with cables to a hub, or **Home Free** to create a home **Intranet**, using the existing phone line with no new visible wires between the two machines.

Ethernet was our program topic in **September, 1992**. We met at the Circle diner, where

we had to promise to eat \$50 worth of breakfast to have the room free. Big Bill Powell had us all playing with creamers to represent terminals. He built a star configured network with wires running from each creamer to the center machine, and a ring network, with wires running from creamer to creamer. Bill said, "The point of a home network is to allow use of two machines at once, reducing family friction and increasing capacity. Instead of a 100 MB machine and a 20 MB one, you have two 120's.... In closing he listed hardware needed: Choices are Arcnet, Ethernet and Token Ring. You also choose coaxial or twisted pair wiring. ArcNet Coaxial cable 8 bit \$58.00, 16 bit \$68.00; Arcnet Hub \$20 to 200; Ethernet cable \$105-115; Ethernnet Hub \$300. Token ring with connectors 16 bit 4 MB \$295 16 bit 16 Mb \$575."



ware.

Learning curve: Jim bought this program two weeks ago, and has installed the

cards on two machines and made the system work. The cards can be ISA or APC. ISA cards are white. The manual in the box has 43 pages, but there is a manual on the disk with 159 pages. The APC card has 128 pins and will fit in most computers.

For setup, Jim urges you not to install a password. Each machine must have a name. Each machine must be connected to a phone jack. Both machines must have cards and the network software. Both machines must be turned on. Then they can both access the same files. One with no CD drive can read files from the CD on the other one. Jim likes the idea of upgrading the bigger machine, but in time the smaller machine would lack the memory to run the newer, bigger programs. The machine with no modem can access email and the Net using the modem on the other machine. Two people can use the Internet at the same time. Meanwhile, each machine works by itself the same as ever.

Lon mentioned that he is using **Network Neighborhood**. Asked if there were other similar programs, Jim said **HomeFree** was the first he had seen. (PC MAG 10/19/99, page 73 reviews **WarpLink** from AcerNeWeb, \$100 for each machine.)

And Yes, a virus on one machine spreads to the other.

Thanks to Explorer Jim for leading us into a new area.



THE PRESIDENT'S

COLUMN

One modem and everyone in your house web browsing or emailing at the same time. Seems too good to be true.

Not according to the wise and scholarly computer lecturer Jim "I will try anything electronic including ties" Russ.

Jim presented how a simple out of the box home networking kit can use your home's telephone lines **without interrupting phone service** to connect household webbers to one phone line and share printers, hard drives etc. - like a real network which it is.

It was a real eye opener for several members. Thanks Jim for your continued effort to keep members entertained and informed.

Elections. Nominations for club officers serving 11/99 to 11/00 (no not 99 years in reverse) occur at the September and October meetings.

At the September meeting Maureen Barron presided over the nomination process. The current officers were nominated and accepted the nominations. The November meeting there are no nominations but the election is held and the new officers take over.

And still one more installment of Flash Hosford in "Ask and Ye Shall Receiveth - Oh-Ya-Right!"



Flash may have slipped into a parallel universe after his last visit to the planet Microsoft (bigger than Jupiter). Where ever Flash goes, he gets answers and help when asking for support in his cause for clarity in the universe of computers.

When Flash summons support lines they tell him how many people are in front and provide a countdown update with estimated connect time as he waits.

As he waits, a friendly voice reminds him of music selection choices and options to remove annoying advertising and reminders.

And when Flash gets a support person, he is allowed to state his question before being interrogated for someone's database records.

The support person listens and uses the same words Flash uses without twisting them and feeding back antonyms and tangent-nyms. There is no cost.

Flash is not blamed for his predicament or made to feel he does not deserve to request answers for merely trying to own and use some else's product or service.

There is empathy with Flash's plight, especially when he mentions Ming and the Microsoftian Coneheads.

And finally Flash gets helpful useful answers to solve problems immediately but before the support person hangs up.

Bliss!

Stay tuned next time when Flash is found wandering drunkenly asking bystanders for support in an alley in downtown Toronto. Is Flash crooked? Or perhaps is suffering from severe allergic reactions from the evil computer cooling fan mites invented by Ming? Don't miss when Flash wakes up and smells the fried computer chips.

Lon,

May many happy bits flow your way!



New members and other changes

Marlyn Reuter 267 Federal Twist Road Stockton, NJ 08559 Phone 908 996 2851 e-mail mreuter@ptdprolog.net

Nancy Utter 285 Stonehenge Dr Phillipsburg NJ 08865 908 454 4971 e-mail jnuts@rcn.com
Akiko Lauron 145 Broad St. Flemington 08822 908 782 2654

Akiko has taken several Senior classes, has used one of the Senior lending machines for years, and is ready to

buy a new machine.

Tom and Alvina Sassano Box 202 Three Bridges 08887 908 782 6142

New e-mail

John O'Donnell jfodon-nell@netscape.net

John reports greatly improved connections and service with this change. He had MSN before.



earn something every day department

On the bottom line of icons in 98 and in 95, there are two minuscule computers. If you click on them you immediately get a window with the disconnect option which saves quite a long series of clicks.



Secret Guide 26th Edition

This time Russ waited until the book was ready to mail before he advertised it. Copies will be available at the October meeting. The club price has gone up from \$6. To \$7. This gives the club 40¢ profit on each copy and saves the secretary from making change at meetings. The new edition has 639 pages, "over 5000 improvements", looks at Linux, Windows 2000, Office 2000, WordPerfect Office 2000, and of course web pages, Internet Explorer 4 and 5, Netscape Navigator 4.6. People who own the current edition are welcome to call the author any time with questions. This works. Russ has a web site now, very plain, www.secretfun.com



DISK FRAGMENTATION

Paul Glattstein shared the following article as a follow up to an HMC front porch SIG discussion, with John Warsinski.

Continuing our discussion on Saturday, see the article below which clarifies the difference between Disk Defragmentation and Disk Optimization.

Windows NT™ Tips & Tricks
23 July 1997
The Optimization Myth

Disk optimization is an attempt to speed up file access by forcing certain files to be permanently located in certain positions on the disk. The concept of disk optimization supposedly accelerates file access even when all the files are contiguous and all the free space is grouped together. The theory goes that if you put the most frequently accessed files in the middle of the disk, the disk heads will generally have to travel a shorter distance than if these files were located randomly around the disk.

There are some major holes in this theory.

Hole number one: Extensive analysis of real-world computer sites shows that it is not commonplace for entire files to be accessed all at once. It is far more common for only a few blocks of a file to be accessed at a time. Consider a database application, for example. User applications rarely, if ever, search or update the entire database. They access only the particular records desired. Thus locating the entire database in the middle of a disk is wasteful at best and possibly destructive as far as performance is concerned. Further, on an NTFS device, the smallest files are stored entirely

within the MFT; instead of a pointer to the file, the file itself is present. There is no way they can be optimized or even moved.

Hole number two: Consider the typical server environment. Dozens or even hundreds of interactive users might be accessing the served disks at any moment, running who knows what applications, accessing innumerable files willy-nilly in every conceivable part of a disk. How can one even hope to guess where the disk's read-write head might be at any given time? With this extremely random mode of operation, how can a disk optimizer state flatly that positioning such-and-such a file at such-and-such an exact location will reduce disk access times? It seems to me that file positioning is equally as likely to worsen system performance as to improve it. Even if the two conditions balance out at zero, the overhead involved gives you a net loss.

Hole number three: When you force a file to a specific position on the disk by specifying exact logical cluster numbers, how do you know where it really is? You have to take into account the difference between logical cluster numbers (LCNs) and physical cluster numbers (PCNs). These two are not the same thing. LCNs are assigned to PCNs by the disk's controller.

Disks often have more physical clusters than logical clusters. The LCNs are assigned to most of the physical clusters and the remainder are used as spares and for maintenance purposes. You see, magnetic disks are far from perfect and disk clusters sometimes "go bad." In fact, it is a rarity for a magnetic disk to leave the manufacturer without some bad clusters. When the disk is formatted, the bad clusters are detected and "revectoring" to spares. Revectoring means that the LCN assigned to that

physical cluster is reassigned to some other physical cluster. Windows NT will also do this revectoring on the fly while your disk is in use. The new cluster after revectoring might be on the same track and physically close to the original, but then again it might not. Thus, not all LCNs correspond to the physical cluster of the same number, and two consecutive LCNs may actually be widely separated on the disk.

Hole number four: What if you have more than one partition on a disk? If users are accessing both partitions, optimizing them will almost *guarantee* more head motion.

Hole number five: With regular defragmentation, a defragmenter such as Diskeeper needs to relocate only a tiny percentage of the files on a disk; perhaps even less than one percent. "Optimization" requires moving virtually all the files on the disk, every time you optimize. Moving 100 times as many files gives you 100 times the opportunity for error and 100 times the overhead. Is the result worth the risk and the cost?

Hole number six: What exactly is the cost of optimizing a disk and what do you get for it? The costs of fragmentation are enormous. A file fragmented into two pieces can take twice as long to access as a contiguous file. A three-piece file can take three times as long, and so on. Some files fragment into hundreds of pieces in a few days' use. Imagine the performance cost of 100 disk accesses where only one would do! Defragmentation can return a very substantial portion of your system to productive use.



Now consider optimization. Suppose, for the sake of argument, that disk data block sequencing really did correspond to physical block locations and you really could determine which files are .

accessed most frequently and you really knew the exact sequence of head movement from file to file. By carefully analyzing the entire disk and rearranging all the files on the disk, you could theoretically reduce the head travel time.

The theoretical maximum reduction in average travel time is one-quarter the average head movement time, after subtracting the time it takes to start and stop the head. If the average access time is 10 milliseconds and 8 milliseconds of this is head travel time, the best you can hope for is a 2 millisecond reduction for each file that is optimized. On a faster disk, the potential for reduction is proportionately less. And taking rotational latency into account, your savings may be even less.

Each defragmented file, on the other hand, saves potentially one disk access (10 milliseconds) per fragment. That's five times the optimization savings, even with the bare minimum level of fragmentation. With badly fragmented files, the difference is astounding.

On top of all that, what do you suppose it costs your system to analyze and reposition every file on your disk? When you subtract that from the theoretical optimization savings, it is probably costing you performance to "optimize" the files.

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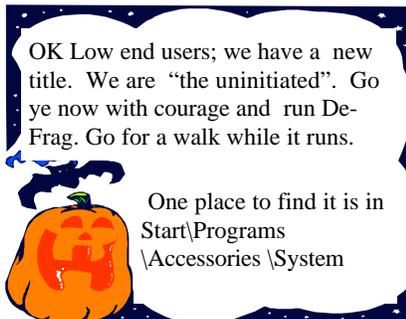
The fact is that it takes only a tiny amount of fragmentation, perhaps only one day's normal use of your system, to undo the theoretical benefits of optimizing file locations. While "optimization" is an elegant concept to the uninitiated, it is no substitute for defragmentation, it is unlikely to improve the performance of your system at all, and it is more than likely to actually worsen performance in a large

number of cases.

In summary, file placement for purposes of optimizing disk performance is a red herring. It is not technologically difficult to do. It is just a waste of time.

This article was excerpted from Chapter 6 of the book *"Fragmentation -the Condition, the Cause, the Cure"* by Craig Jensen, CEO Executive Software. It has been modified for application to Windows NT. The complete text of the book is available at www.execsoft.com.

Lance Jensen
Technical Support
Executive Software International



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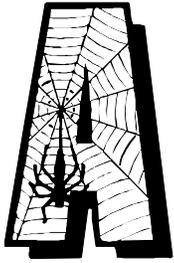
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Useful Notice

From: **Gertrude B Ewing**

gertcarmel@juno.com

Get the Internet just the way you want it.

Free software, free e-mail, and free Internet access for a month!

Try Juno Web: <http://dl.www.juno.com/dynoget/tagj>.

More Linux and more virus

At www.suse.com you can find out about a Linux version 6.0. You might get a free disk or you could buy it for \$49.95 and get a 450page manual and 900 software programs.

(Ref. PC Mag

5/25/99 p. 89 John Dvorak)



Improve those email photos

By *Peter Czerwinski*

After a chat at the meeting about ordinary people getting their ordinary snapshots delivered on a floppy or a CD. Peter went on, by e-mail:

... by going through a few steps with a free or inexpensive photo editor, digital photos can be greatly improved, as well as made easier to send and easier for the recipient to download. I have collected some of these "photo improvement steps" in a web page at -

<http://www.eclipse.net/~pczerwin/webimage.htm> . Some of the

computer club's members may find this information useful. I have been revising and adding to this Improve Those Email Photos web page, so be sure you have the latest version.

Passkeeper

If you are interested in a program to keep track of your passwords for all the different things you have signed onto, here it is.

<http://www.isys.hu/staff/brad/psk3212.zip>

phone: you dial, it goes to a switching center then to the party you dialed.

Here's Walter's forwarded Message

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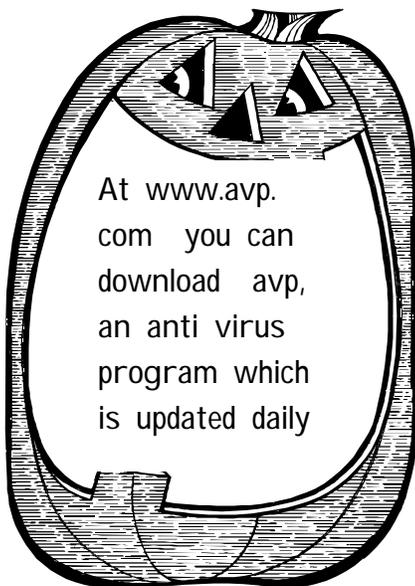
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At www.avp.com you can download avp, an anti virus program which is updated daily



MEDIARING TALK

Walter Bordens has used this program for several months and recommends it with enthusiasm. Both parties must have each other's phone number. It works just like your regular



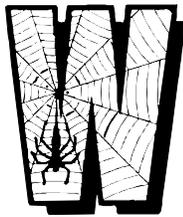
Subject: Elbow Grease - Fontasia!

Eyesaw: <http://www.antidot.de/eyesaw/>

Chank Diesel: <http://www.chank.com/>

The Hoefler Type Foundry: <http://www.typography.com/>

Forwarded by : *Liz Dunbar*
edunbar@telephonet.com



From: Web-monkey
<wiredmail-info@lists.wired.com>



REE RADIO

El-bow Grease - the Webmonkey newsletter

<http://www.webmonkey.com/>

(from the Editor's e-mail – not tested)

As I installed the 10,000th font on my computer at home this weekend, I realized it was time for a celebration. Over the years, friends and family have expressed concern over my excessive lust for fonts, but I've learned to tune them out and just listen to the sweet, sweet tones of a hearty Hoefler or a mind-blowing Chank. Helvetica Bold never ditched me on prom night - what promised to be the most important and sensational night of my life!

Go to this site:

<http://radio.www.com/?sourceid=00109198660271608281>

Anyway, font sites are some of the most entertaining and well-designed sites out there, and sometimes I go there just to feel better about humanity. Here are some of my favorites:

You can download (FREE) a "radio" player. Then after you install it and go back to the website, you can customize your "radio" (it's not really a radio.... plays continuous music without commercials or chat). You can customize up to 7 buttons on your radio with the kinds of music you like to listen to HUNDREDS of different types of music!).

dincTYPE: <http://www.girlswhowearglasses.com/>

Andreas Lindkvist: <http://www.lindkvist.com/>

There's lots of cool stuff about this radio program....but just go to the website and download it yourself and give it a try. I put mine on my laptop computer this morning, and have been listening to background music all day while I work on my computer. It's REALLY cool! And FREE!

Rotodesign: <http://www.rotodesign.com/>

Hunterdon Computer Club

Next Meeting Saturday, October 16, 1999
Hunterdon Medical Center
Rt 31 Flemington NJ

8:30 A.M. To Noon
Program: Jim Russ presents Flowchart Software

Guests Welcome – all ages all levels

HCC NEWSLETTER

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