

HARD COPY

What's New _____

Is George Campbell psychic? It seems that everytime I listen to one of George's lectures or watch one of his demonstrations, the topic deals with something I have been struggling with the previous month. For example, during the New Members meeting last October, George demonstrated Terminate & Stay Resident software. It just so happened that I had spent the previous two weeks organizing both my home system and work system to take advantage of TSRs. Then at November's meeting, George gave an excellent lecture on computer memory. This was timely because I was having problems getting Ventura Publisher and Windows 3.0 to work under the same CONFIG.SYS file. After hearing George's lecture, I discovered that the EMM386.SYS driver was not required to run VP under windows 3.0 and that the driver was using up memory that could be utilized by Windows. Everything works great now, and I thank George for his invaluable information.

Speaking of the November meeting, George started things off

By John Ewing

by telling us about the different types of memory available to the computer. Included in the list of memory types are System, Extended, Expanded, EMS, EEMS, LIM 3.2, LIM 4.0, High, and Shadow RAM. A diagram of computer memory was drawn on the chalk board that helped to explain what the memory drivers do and where the memory is located.

The New Members's meeting diskette this month contains several utilities that will help you deal with computer memory. I highly recommend reading the file named MEMORY.DOC. The file discusses the different types of memory in detail, as well as upgrading the memory your system currently uses.

The featured speaker for the General Meeting was Paul Doell from Unison World. Paul gave a demonstration of Avagio Publishing System. According to Paul, Avagio is the desk top publisher "for

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DOS Shortcuts

By Jack Cook

Tokyo PCUG

[Reprinted from CTL-ATL-DEL, August 1989]

Here are just a few MS-DOS shortcuts that may make things easier for you. **COPY *.* A:** DOS manuals say this is how to copy all files in the current directory to a floppy disk in Drive A.

COPY . A: Does the same thing as **COPY *.* A:** (except in DOS 2.0 or earlier).

DEL . Deletes all files in the current directory

COPY C:WP A: Use this if you're not logged onto directory WP and want to copy all of its files to A.

DEL WP Deletes all files in directory WP when you are not logged into directory WP. **USE WITH CARE!**

DEL C: Deletes all the files in your root directory. Be very careful with this one! Your **COMMAND.COM**, **CONFIG.SYS** and many of your goodies are in the root directory of Drive C.

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Jake Geller's SpellCode The Spell Checking Specialist for Programmers.

Reviewed by
Rosemary C. Bowker

SpellCode is described as a spell checking utility for programmers and for database and spreadsheet users. Programmers are invited to use SpellCode to check prompts, instructions, help information, error messages, and other display text as well as variable and constant names, program syntax, and database and worksheet structure. Database and spreadsheet users can check the spelling of any text fields.

Since users of spreadsheets and databases as well as programmers are the intended audience, the installation routine should be both more straight forward and more helpful. Both page 1 of the user's guide AND a supplementary errata sheet included with the manual advise the new owner of SpellCode to view the "README" file included on the distribution disk BEFORE proceeding with the installation. Makes sense to me. However, you have to run the installation in order to uncompress SpellCode and all associated files - which includes the README File! Someone familiar with file compression utilities would probably figure this out since the manual does list several files used by SpellCode and a directory of the distribution disk shows only 2 files. The new user might not.

Users will probably want to run SpellCode from within any current directory. However, if the configuration file, SPELL.CFG, is not in the same subdirectory as SpellCode, an environmental variable must be set -- and there are many potential users who probably don't have a clue as to what is meant by an environmental variable. The manual suggests addition of the command SET SPELL=C:\SCODE to the autoexec file. This should be an option offered (and explained!) by the installation routine.

The README file (available AFTER installation of SpellCode) warns WordPerfect users setting up a path that the reference to the directory containing SpellCode files must precede the reference to the directory containing WordPerfect as WordPerfect has a utility called SPELL.

Actual use of SpellCode was disappointing. A directory utility within the program would be a big help for those of us who have trouble remembering the names and locations of files. SpellCode can check worksheets created by Lotus and Quattro Pro but not the original Quattro (despite the fact that Lotus can read files created by the original Quattro).

The manual states that SpellCode can check the spelling of text surrounded by double quotes in a BASIC program. Changing the filetype to BASIC and the default to check all programs with a .BAS extension resulted in the error message "not an ASCII file" for each of 12 program files in the subdirectory being checked. Selecting the option to quit the spelling check had no effect. (During a normal spelling check, pressing F10 will terminate the process even for a wild card specification.)

SpellCode knows only the full, complete spelling of dBASE keywords. The manual excuses this by saying that use of four character abbreviations decreases program readability. As an experienced dBASE programmer, who makes frequent use of abbreviations for commands, I find this particularly limiting.

The idea of a programmer-spreadsheet-database spelling checker is a good one. However, in comparison to the ease of use of the spelling checkers available within WordPerfect and Microsoft Word, SpellCode did not live up to expectations.

Rosemary Bowker is an Instructional Computing Consultant, Biological Sciences Department, Cal Poly State University, San Luis Obispo.

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AT Batteries

By Derek Watson

United Kingdom PCUG

Reprinted from Vally Computer Club Newsletter, September 1990

The battery in the IBM AT typically has a life of about two years. The battery is used to keep the real time clock ticking and to hold the current equipment configuration. When the battery runs down, the time may be lost and configuration information will be corrupted. This results in a prompt to run your SETUP program and to nontechnical user may look like a machine failure.

Typical symptoms will be loss of the hard disk, "Invalid drive specification" when accessing drive C:, "Invalid media or Track 0 error" when accessing a floppy disk or loss of extra memory. There are other variations on these errors but they all relate to the contents of the CMOS low power memory which your battery is maintaining. To avoid this type of error one should replace the battery every two years prior to failure. (How many people have never changed a battery in their 1984/85 AT! BEWARE! The ice is getting thin.)

When changing the battery, configuration is maintained for a short while by on-board capacitors so if changed fairly promptly, the configuration will not be lost. Despite this, I would recommend running SETUP and taking note of the settings prior to disconnecting the battery. The hard disk TYPE numbers are the most important.

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Definitions Plus
The American Heritage Dictionary

Not just a spell checker
but a full dictionary
List price \$100.00. my price \$50.00.

Jim Bigelow 238- 6335.

UBC ONLINE

By Dana Snow

Reprinted from Utah Computer Society
Newsletter, September 1990

File transfer protocols are the bane of every new communicator. Further confusing the issue, is the term protocol itself and its rather free use in the area of computers and telecommunications. Let's start there.

According to the dictionary, protocol is, "The forms of ceremony and etiquette observed by diplomats." Like many other terms adopted by the computer world, only the underlying concept remains true to the definition. In the electronic sense, protocol refers to "electronic handshaking" and a mutually agreed upon means of transferring information.

At the communication port/modem level, protocol encompasses such things as transmission speed, number of bits, parity and stop bits. These comprise the underlying connection which allows you to interact with the remote machine, to see its output on your screen and to have your keystrokes recognized on the other end. The ASCII codes, digitally representing the alphabet, numbers, other characters and control instructions (like line feed, and backspace), are themselves a protocol.

Most BBS systems require eight bit transmission, no parity and one stop bit at a range of speeds typically falling between 300 and 9600 bps. Most mainframe computers and packet data networks such as Tymnet require, or request, seven bit transmission and odd or even parity. This is usually expressed in the form "bits-parity-stop". Respective to the above, 8-N-1 and 7-E-1 protocols. In most communication programs these protocols are linked to a specific telephone number in the "dialing directory".

A rudimentary handshaking protocol is available at the ASCII level called XON/XOFF. XON/XOFF provides a way to transfer ASCII files and other "text" data while assuring

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Have You Heard This One...

By Bob Ward

SLO Bytes PCUG

* Intel just introduced two new graphics chips, costing less than \$100, which will perform the the same functions at their \$2,000 graphics board. The new technology, which they call digital video interactive (DVI) is being welcomed by both IBM and AT&T computer systems.

* I hear many of you who subscribe to Prodigy, the IBM / Sears joint venture, or is that adventure, are not too happy about the 25 cent charge for E-mail. In fact there were so many public messages in Prodigy criticizing this new fee that the SYSOP's took charge. No longer will Prodigy allow derogatory messages about their system. Several subscribers who were more vocal than others have had their accounts canceled. Now there's democracy in action!

* If you are thinking of buying a 486 you might wait awhile. Intel Corporation will introduce a more powerful 486 chip in 1991 with the next generation 586 on the boards in 1992. With current 486 chips running between 25 and 33 Mhz, expect the new 486 to run at 50 Mhz!

* Buttonware, best known for PC-FILE began shipping PC-TYPE 4.0 last month. Improvements include 40 new printing and formatting features. Also look for a much easier user interface when merging PC-TYPE text with PC-FILE records.

* Just getting settled down with Windows 3.0. Expect Windows 3.1 the first half of 1991. Microsoft will implement True Type scalable fonts and improve their network and printing capabilities. With Adobe scalable fonts being entrenched in Desk Top Publishing a double standard might set DTP back in time.

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For What It Is Worth - Internal Commands

By Al Gerber

Palm Beach Users Group Newsletter,
September 1989

This list of internal commands had appeared in past newsletters, but I feel they are worth repeating.

Our members use various versions of DOS. They may use DOS 2.1, 3.1, 3.2, or 3.3.

The following is a list of internal DOS commands for all four of the above versions of DOS, some of which are not available for all four.

COPY: Makes copies of disk files

.DATE: Displays and sets DOS's record of date.

DEL: Deletes (erases) disk files.

DIR: List the files on a disk.

ERASE: Erases (deletes) disk files.

REN: Renames files; i.e. changes file names.

TIME: Displays and sets DOS's record of time.

TYPE: Displays the contents of an ASCII disk file on the display screen.

BREAK: Controls how often DOS checks for break, Control-C.

CHDIR: Changes which directory is the current one on each disk.

CLS: Clears the display screen.

CTTY: Puts DOS into remote control by redirecting the console.

MKDIR: Creates a new subdirectory on a disk.

PATH: Tells DOS where to search for external commands.

PROMPT: Customizes the DOS system prompt. [Not for 2.1]

PWD: Displays the current working directory name. [For 2.1 only]

RMDIR: Removes a subdirectory.

SET: Sets or shows the system environment. [Not for 2.1]

VER: Displays the version number. [Not for 2.1]

VERIFY: Sets/shows disk verification. [Not for 2.1]

VOL: Displays the volume label. [Not for 2.1]

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LIM/EMS 4.0 Confusion for Consumers, Part II

By Randy Brook

Pacific Northwest PCUG

Turbo EMS Emulated Expanded Memory

Many AT-clone computer owners have only the original 1-meg of RAM, or have memory cards that provide extended memory only. They would like to have the advantages of expanded memory without spending \$400 or more for the new memory card. Enter the software solution, a program that uses extended memory to emulate expanded memory. Turbo EMS, \$75 from Lantana Technology, Inc., San Diego, CA, is one of these expanded memory emulators. Above Disk and V-EMM are two others I have not tested. (PC Magazine reported on older versions of those programs in its 12/31/87 issue.)

Make no mistake, expanded memory emulators on AT-clones ("286 machines"), as opposed to those on 80386 PCs are "kludges," or inelegant but workable solutions to a difficult problem. They don't work with all programs, and they are much slower than true expanded memory. PC Magazine reported that the best emulator took 80 times as long in a Lotus macro routine as an expanded memory board. My tests with Excel and Turbo EMS were not quite as bad. Also, you cannot multi-task with an EMS emulator. Nonetheless, for some purposes they are a cheap and effective product.

On my Wyse 2108, an AT-clone with one megabyte of RAM, I have only about 123k of regular DOS memory available for Excel spreadsheets once I load the program. By using an expanded memory emulator with my 384k of extended memory, I can increase the maximum spreadsheet size to nearly 500k. The tradeoff

Comdex 1990... a review

By Bob Ward

SLO Bytes PCUG

Comdex 1990 is over! The displays are being removed and the tired representatives of the 1600+ various computer companies have returned to their respective homes for a well deserved weekend rest.

Emphasis this year falls into several categories. Of course, Windows stole the show. In the back of my mind while traveling the many miles of showroom floors was that Macintosh is in deep trouble. They have nothing unique over the PC environment now that Windows has taken a firm hold as the graphic interface.

Mass storage was another area emphasized at Comdex. Small 3.5" hard disks with 15 to 16 millisecond access times were everywhere. Imagine holding a small half height hard disk in your hand that can store 380 megabytes... awesome! Large capacity "floppital" disks were displayed by at least two companies. Here's a 3.5" half height floppy drive that reads and writes to 20 megabyte floppy disks! No, that's not a typo, I said twenty megabytes... and it's downward compatible. This drive will read and write to 720K 3.5" floppy disks as well.

Multimedia and video capture was also prevalent at Comdex. Several companies displayed video capture boards running off video cameras that gave you TV quality pictures on a computer screen. Not just still pictures but full motion video displays.

George and I walked most of the display floors for 5 days and here are a few interesting and unique products we were privileged to see:

- Edsun has developed a new video chip first to be featured in Everex computers and soon to be found on many other VGA video boards. The chip divides each pixel on a VGA screen into several parts, giving different colors to each sub pixel. It eliminates the stairstep and jaggie effect found in diagonal or curved lines. With this chip computer

monitors will have many times greater resolution and color capabilities than seen on even the highest resolution VGA monitors of today.

- CAT company has added a new capability to many handscanners. Besides having great OCR software they have devised a way of scanning color pictures with a black and white hand scanner and producing COLOR pictures on your screen; all done using color filters. They also have software which will produce scanned images with 64 shades of gray scale. I hope to demonstrate their products within the next 3 months.
- Speaking of handscanners, Logitech's new 256 Grayscale handscanner is HOT! Using their new Ansel software, scanned pictures look as good as any flatbed produced picture. And for all those with the older Logitech handscanners, Ansel software will work to a lesser degree, taking a scanned picture and transforming it into 32 shades of gray. If you own a Logitech handscanner, look for a software update in the mail.

Heard This One...

* Are you satisfied with the company that sold you your PC? A new survey by Dataquest Inc., a San Jose based research firm, asked over 1200 users to rank 25 PC computer brands. Here's the results of the top 8 companies: 1. CompuAdd, 2. Hewlett-Packard, 3. Dell Computer, 4. Tandy, 5. AST Research, 6. Everex, 7. IBM and 8. Apple. CompuAdd commands less than 1 percent of the PC sales with Hewlett-Packard showing only 1.8 percent. IBM was listed with 14 percent of the market and Apple 10.7 percent.

Bob Ward is the Secretary of SLO Bytes PCUG and past editor of Hard Copy. He hopes to make "Have You Heard This..." a regular feature of Hard Copy. ed.

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LIM/EMS 4.0

is a speed penalty. A moderate sized spreadsheet on the Wyse takes many times as long to recalculate as the same sheet on a machine with true EMS memory of any type. But if all you have is that extra 384k of extended memory, the cost of a program like Turbo EMS ("TEMS") is far less than an expanded memory card. It does the job with Excel or Lotus 1-2-3, though it is not very fast.

TEMS is a well-designed program. Installation is automated and very simple. You can do it without the (very good) instruction book and without any technical knowledge of memory usage. The smooth Install program goes through your various choices, such as whether you are going to run a Windows-based program. Each option has its own help screen that appears automatically to guide you. You have control over the drives and subdirectory name TEMS uses, a lack that is extremely annoying with some other programs.

To run TEMS, you need a device driver in your CONFIG.SYS file. You may load the driver with various parameters, or wait until you actually start the program. Most important and unusual, you can change any part of the TEMS configuration without rebooting. This is a real advantage when you have several programs that want differently set up EMS. You can also temporarily suspend TEMS if you need to run an incompatible program. (Some programs will crash any EMS emulator.) There is a default location in memory for the program. You can easily choose alternative tailored to specific programs. Depending on where I load it, TEMS leaves 503k or 569k of lower memory for programs on my Wyse.

I compared TEMS to the expanded memory emulator supplied by Wyse with my 2108 AT-clone computer. The Wyse EMS emulator can only be started as part of the CONFIG.SYS file. To remove the Wyse emulator, you have to change the CONFIG.SYS file

and reboot. It also takes a large chunk of lower memory, leaving a maximum 470k for programs. However, its use of total memory is only about 14k greater than TEMS. It leaves less lower memory but more emulated expanded memory.

The TEMS manual and READ.ME file on the disk describe various situations that may need special treatment. One that does not is VDISK.SYS. TEMS coexists with VDISK without conflict, according to the manual. I didn't test this. A much more complex match would be with the most recent versions of Windows. You would need to look long and hard at the Windows manual as well as the TEMS manual to avoid conflicts.

According to the TEMS manual, it should be possible to have Windows use the SMARTDRIVE for swapping to extended memory, while programs running under Windows can still use TEMS' emulated expanded memory for data. Again, I didn't test this. I should note that the Excel manual section on memory usage is long and complex. It is not easy to choose the best setup for Excel, a Windows-based program, even when you have true EEMS or hardware based EMS 4.0 memory available. I think I would use the simplest installation possible when also using TEMS.

Another feature of TEMS is the ability to swap to disk rather than to extended memory. This would be useful if you had an application that needed more memory than you had, or if you had no extended memory at all. For example, you could set aside 10 megabytes on your disk to emulate expanded memory for a gigantic spreadsheet. Of course, using a disk as memory can be incredibly slow. I tested an Excel spreadsheet that used 42k of memory and had fairly simple formulas. Copying the sheet once (that is, doubling it) and recalculating took 21 seconds in TEMS emulated expanded memory and more than 5 minutes with EMS memory emulated on disk by TEMS.

I also test TEMS with WordPerfect 5.0. WP can cache (store) part of its

code in expanded memory. It can also use expanded memory to speed sorts and large document handling. Unfortunately, I couldn't test the code caching. WP needs a minimum of 385k to do it, too much for a "1-meg" AT-clone. (TEMS gives about 370k in emulated EMS memory from the total 384k of extended memory available.) I could test sorting, however. As a speed test, I took a document with 2,734 lines and sorted alphabetically on the first word of each line. Without TEMS the sort took 2:34 minutes. With TEMS it took 1:46.

A general limitation on emulated expanded memory is compatibility. Programs use expanded memory differently, and the better emulators are compatible with the most programs. TEMS appears to be one of the better ones. In fact, with all its features and ease of use, I'd call it an excellent EMS emulator. Unfortunately, it is not as good as Lantana's promotional materials imply.

Lantana claims TEMS is compatible with DesqView ("DV"). Not sure what this claim meant, I called Lantana and told them it sounded to good to be true. I phrased my questions carefully, to be sure we were both talking about multi-tasking with DV on a 286 machine. That's about the only reason for using DV on a 286 machine. The rep assured me that the company had actually demonstrated the program at Comdex with DV. I ordered an evaluation copy. It took only a few minutes to learn that I had been right: It was too good to be true.

In a literal sense, TEMS is compatible with DV. Unlike the EMS emulator from Wyse, TEMS won't crash DV. TEMS just does not, and cannot, multi-task with DV or any other program. In fact, many memory boards can't multi-task either. All these boards and TEMS can do is allow DV to use the emulated or actual expanded memory as a place to swap programs out of memory. Only one program runs at a time. This is an incredibly inefficient use of DV. Loading DV plus

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UBC Online

that the receiver won't be overrun with more data than it can process. XON/XOFF allows either computer to signal the other and say "stop sending" (XOFF) or "start sending" (XON). XON/XOFF is normally enabled by default in most communication programs and its operation is seldom obvious to the user. The exception to this is when spurious signals or noise on the telephone line cause either system to receive an XOFF by mistake. This same noise can cause unwanted characters to appear on the screen or in a file being transferred. The solution to the noise problem and corrupted files lies in transfer protocols.

The primary purpose of all file transfer protocols is to make certain that an exact copy of the original file is received on the other end. Requisite to this is the ability to transmit binary files, such as programs, and word processing files that contain characters with special meanings at the ASCII level (the XON/XOFF codes, for example).

To accomplish error-free transmission, the file to be sent is broken into blocks or packets. Each packet is analyzed and verification information is added to the packet. When the packet is received, the data is again analyzed and the verification information is compared to that sent with the packet. If the packet is intact, an acknowledgement is sent. If there is a discrepancy, the receiving program requests that the packet be sent again. Every protocol defines its own packet size, verification scheme and "handshake".

Using a transfer protocol is easy. You must simply remember a few basic rules. The same protocol must be used on both ends for the transfer to take place. Both computers must be specifically told to send and receive (respectively) and which protocol to use. More than one person has complained to me, "I told it to send me the file and nothing happened." The answer is simple, after you tell the BBS (or other service) to

send you a file, you must tell your communication program to receive it. Your program must have the requested protocol available and you, in turn, must learn how to tell your program to invoke it.

Part of the confusion surrounding transfer protocols is undoubtedly due to the number of protocols and the similarity in their names. One reason for the range of protocols is personal choice, the other is to support the wide range of computers and programs in use--many of which are less than contemporary. As for the similarity in names, perhaps a bit of history and an overview of the more common protocols will be enlightening.

With the advent of personal computer communications, Xmodem was developed using 128 byte data packets and a "checksum" method for packet verification. Faster modems, more susceptible to noise, and a desire for increased transfer accuracy caused Xmodem to be upgraded to use CRC verification. Since the verification information must be transmitted along with each packet, someone decided that larger packets would speed up file transfers. Voila! 1K-Xmodem, using CRC for verification and 1028 byte packets, was born.

Similar to 1K-Xmodem, Ymodem was faster and sent the file name, date and size along with the file itself. This eliminated the need to "name" files on the receiving end, as one still must do with Xmodem in its various incarnations. Current versions of Ymodem offer "batch" file transfer capability, providing efficient transmission of multiple files.

Zmodem takes a "streaming" approach to transmission. That is, it sends each packet, one after another, without waiting for the receiving end to acknowledge receipt of the previous packet. When the receiver signals an error, the corrupted packet is resent. Like Ymodem, it provides "batch" transfer capability. Since extremely noisy lines can cause transfer failure, Zmodem will fall back to shorter and

LIM/EMS 4.0

TEMS leaves only about 350k for running programs, regardless of how much extra memory you have. In contrast, DV with a fully compatible EMS memory board can run several programs simultaneously, with each using over 500k. The number of programs depends on how much extra memory you have.

So, what's the bottom line? If you have only extended memory on a 286-machine, and an application like 1-2-3 or Excel for which you need more data space but don't need maximum speed, Turbo EMS may be the cheapest way to go. If you want to swap programs quickly use a program like Software Carousel which takes up very little memory. If speed counts, or you want multi-tasking, look for a memory board with full EEMS or hardware-based EMS 4.0 support. And pay a lot more.

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DOS Shortcuts

DIR .EXE Lists all files with an .EXE extension.

DIR *. Displays all the files without a file extension. Since most files have, or should have, extensions, and most directories and subdirectories don't -although they can-, the DIR *. command is a good way to list only the subdirectories in a given directory.

DIR S* Displays all the files that begin with the letter "s".

CD.. Moves up one level from your present location. The double dot (..) is shorthand for the name of the parent directory.

CD..\.. Moves up two levels from your present location.

CD..\LETTERS Moves up one level and then down one level to a directory named LETTERS.

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shorter packet sizes. Additionally, Zmodem offers file compression for those files which can benefit from it.

The Kermit protocol, developed under the auspices of Columbia University, has been, and remains, widely used in mainframe communications. Kermit offers many advanced features and is generally the protocol of choice for PC to mainframe transfer.

There are many other protocols in use. Some are proprietary and available only in specific programs, some are very specialized, and still others are waiting to pass (or have failed) the test of use and time. Perhaps in a future article we'll delve into a few.

At one time Xmodem was about the only transfer protocol universally supported by the majority of communication programs. Today 1K-Xmodem, Ymodem and Zmodem are common enough that I heartily suggest their use. My personal preference is Zmodem, but few programs support it internally and adding it as an "external" protocol can be somewhat difficult for first time users. If your program lacks Zmodem (which it most likely does), I suggest using Ymodem or, fail-

ing that, 1K-Xmodem. If your connection is extremely noisy, you might use Xmodem/CRC just to try to get the file through.

If you are willing to learn to install an external file transfer protocol and your communication program supports them (most contemporary ones do), then I strongly recommend using Zmodem. Without doubt the best and most reliable way to implement Zmodem is to use DSZ.COM, written by the creator of the Zmodem protocol. The latest version of DSZ is available on the UBC BBS, most other bulletin board systems and from the group library. I'm happy to note that, with his last release, the documentation has been made much more readable and understandable. In the past, poor documentation was the only failing of an otherwise superior program. DSZ is shareware and the \$20 lifetime registration fee (all future versions) makes it one of the best communication deals around.

Since each protocol is, in essence, a set of "rules", error recovery is dependent on how well the rules are followed. Protocol compatibility and transfer speed can vary from program to program.

A chart summarizing the various protocols can be found later in the newsletter.

Internal Commands

Internal commands used for batch files only.

ECHO: Turns command echoing on and off and displays messages.

FOR: Used in advanced batch files to work through a list of files.

GOTO: Used in advanced batch files for looping and skipping.

IF: Used in advanced batch files to test for logical conditions.

PAUSE: Used in batch files to stop and display messages.

REM: Used in batch files to display messages.

What's New

the rest of us". Avagio is a powerful DTP package that has a menu driven interface, WYSIWYG display, selectable menu windows, mouse support, variable fonts and the list goes on and on. One unique feature stands out in Avagio, and that is Mingle. Mingle creates special effects by superimposing graphics over text or text over graphics.

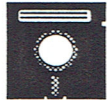
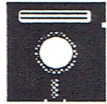
The retail price for Avagio is \$299.95. For a limited time, Unison World is offering a User Group Special. You can buy Avagio for \$99.95 if you turn in the cover page from any DTP product. Avagio without the cover costs \$199.95. The offer expires on November 30th, 1990, so act soon if you want to take advantage of this offer. Contact Paul at Unison World, 1321 Harbor Bay Parkway, Alameda, Ca 94501 (415) 748-6670.

Make sure you attend December's general meeting. George and Bob Ward will be giving away some of the goodies they picked up at Comdex this year. We will also hold election of officers for the up-coming year.

File Transfer Protocols Summary of features:

Transfer Protocol	Block Size	File Names	Batch Transfer	Com-pression	Error Recovery
ASCII Xon/off	none	no	no	no	none
Xmodem	128	no	no	no	fair
Xmodem/CRC	128	no	no	no	fair
1K-Xmodem	1024	no	no	no	fair
Ymodem	1024	yes	yes	no	good
Zmodem	1024	yes	yes	yes	excellent
Kermit	93	yes	yes	yes	good

SLO Bytes Library



There's always more software than disks to put it on. We have had several requests for accounting programs so if size in any indication of quality then Online Accounting should keep the mathematicians happy. Try the 3 disk set, numbers 395, 396, and 397. Look at the other disks we have to offer this month. A little something for everyone.

#396-398 Online Accounting - accounts receivable, accounts payable, general ledger entry, etc.

#399 - Potpourri of utilities:
FD401 - find duplicate files, **FWAIT** - create nice "wait" messages in batch files, **LPTX** - redirect printer output to file, **MPMPRINT** - print upper ASCII on any Epson printer, **PCAT21** - disk cataloging system, **PIBCAT17** - another disk cataloging system, **PCP** - print control program, **PMAP202** - map those TSR programs, **POR2LAND** - convert any HP softfont from portrait to landscape, **PORTFND2** - display ports and corresponding addresses.

#400 - Graphics:
PMGR567 & GRMINI - clipart for PrintMaster, **WP-ART** - import these graphics directly into WordPerfect.

#401 - More graphics:
BUNY - let bugs bunny tell your time, **DAZZLE** - parks your heads and puts

on a dazzling screen display. **FACES** - little bouncing faces on your screen. Harmless. **GIFPUB** - graphics exchange program.

Updates:

#002 - COMIC2, the Mario Brothers look-a-like updated to version 3.

#165 - AUTOMENU updated from 4.5 to 4.7 Demo Programs:

#157 dbms/Copy by Conceptual Software

#173 Keynotes Electronic Library by Digital Learning Systems



Welcome to the following individuals who joined our club this past month.

Wally Haas	549-0345
Donald Schlotterbeck	549-9723
Eric Wright	546-8981

Getting ready for the holidays. Before you spend all your money on the wife and kids how about sending SLO Bytes \$18 if you wish to renew your membership. On January 1st it's gonna cost you a \$20 bill.

Glenn Britton
 Dennie Chandler
 Bruce Gulliver
 Patrick Mackie
 Ernest Werbel

FLOPPY DISKS 4-SALE at the meeting

Royale Grey DSDD 360K
 Unformatted Floppy Disks
 with labels, tabs, and sleeves
 70 Cents Each

MEI DSDD 360K
 Unformatted Floppy Disks
 with labels, tabs, and sleeves
 50 Cents Each

High Density Disks 1.2 MEG.
 90 Cents Each

Sony 3.5" 720K
 Unformatted Floppy Disks
 90 Cents Each

New Library Disks
 90 Cents Each

All Disks fully guaranteed against defects.

Calendar

December 2nd Poquet cancelled!
 French Morgan from our club will give a brief demonstration on 2 products: DeskLink from Traveling Software and Carbon Copy Plus from Microcom. Both programs involve interfacing between two computers. Also our end of the year "blow-out"; Swap-meet, door prizes and the biggest prize of all.... election of officers!

January 6th Softview will show MacInTax For Windows. Here's an appropriate program to see so close to tax time.

Club Information

The SLO BYTES Newsletter is a monthly publication of SLO BYTES PC User's Group located in San Luis Obispo, California. Information in this Newsletter is derived from both our own membership and other PC User Group Newsletters. The purpose of this publication is to inform our members of meetings and provide information related to the use of IBM PC's and compatible computers.

Membership: Dues are \$18 per year. Newsletter only is \$10 per year. Full membership entitles you to our monthly newsletter, full use of the public domain software library and discounts at local computer stores.

Article Submission: Deadline for submission of articles is the 15th of each month. Articles should be provided in ASCII format without any type of formatting from your wordprocessor including tabs, indents, extra spaces, or highlighting. We prefer articles on disk but will accept hardcopies if necessary.

Disclaimer: Neither SLO BYTES PC User's Group, its officers, editor, or contributors to this newsletter assume liability for damages arising out of this publication of any article, including but not limited to the listing of programming code, batch files and other helpful hints.

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Advertising: Commercial advertisers, request ad packet from Bob Ward. Members may advertise personal computer equipment or software for free. Submit your ad to Bob Ward.

Direct all correspondence to Bob Ward, 2100 Andre Ave., Los Osos, CA. 93402. Call (805)756-2164 M-F 7:30am - 5pm and (805)528-0121 all other times.

Treasurer: Teri Sorgatz, 832 S. 7th Street, Grover City, CA. 93433 Phone 489-2516

Meeting Times

General meetings are held the 1st Sunday of every month, unless noted otherwise in the newsletter calendar, at 2:30 pm in the Cal Poly University Biology Department, Fisher Hall 286. Special Interest Groups (SIGS) meet at 1:30 - 2:15 pm.

New User's SIG - F.H. 286

Our Public Domain Library is in Fisher Hall 292. Hours 12 Noon till closing.

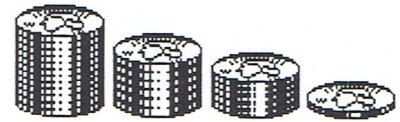
SLO BYTES BULLETIN BOARD

(805) 528-3753 2400/8/N/1

PC Files & Message Section

SYSOP: George Campbell

All Welcome - 24 Hours



Treasurer's Report

SLO Bytes PCUG
Expenditures November, 1990

Beginning Balance:	+ 1794.53
Expenses:	
Newsletter 9/29/90	- 98.60
ATI - Teach Me DOS 3.3	- 21.25
Stamps	- 6.00
Hard disk for BBS	- 730.00
	=====
	-855.85
Deposit 11/05/90	+ 462.90
	=====
	+ 462.90
Balance 11/05/90	+ 1401.58

DISCOUNTS

Star Computers 855 Morro Bay Blvd. Morro Bay 772-7827	5%	Any software in stock.
Computer Logic 973 Foothill Blvd. #4 San Luis Obispo 544-8347	10%	Paper, ribbons, cables, and other supplies.
WITCO Computers 3563 Sueldo, Bld. B San Luis Obsipo 549-0811	10%	Off list - all computers, software, computer peripherals, and products. Contact Bruce, Paul or Dave for discount.
	5%	Off complete systems, peripherals, supplies but not including software.
	5%	Off computers alone.



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