



John Bownas, Alan Ash and Peter Greenhalgh at the Computer Graphics Talk at Riverside

Bob Groom was up to his usual creative high standard in demonstrating the various aspects of computer graphics. He clearly explained the difference between dpi (dots per inch) and pixels in the composition of images on the computer and showed the various sizes of photographs that were scanned into the computer at 75dpi, 150dpi and 600dpi. He went on to illustrate the difference between scanning in a large photo, a small photo and then a 35mm negative film. After showing various photos that he had taken with a digital camera, Bob explained that it is best to manipulate the image before scanning and how the photo is effected by altering the brightness and contrast by showing the histogram of the final image. After the coffee break, Bob went on to explain the benefits of the graphic tablet and how he composed various paintings, which he passed around for the members to see. Once again Bob invested much work and devotion to his talk, which was enjoyed by an appreciative audience.

In This Issue

Future Meetings	2
Committee Members	3
Pirated Software	4
File Formats	5-7
Editorial	8
Humour	9
Distribution List	10-12
Memturbo	13
Resolution	14
Keyboard Shortcuts	15
Windows Fonts	16-17
Prize Puzzle	18
New Logo	
Notice Board	

FUTURE MEETINGS

6th June	Computer Graphics - Part 2	Bob Groom
20th June	Colossus & The Secret War	Albert Bareham
4th July	Using CD Rewriter & Software	Doug Rankine
18th July	World Online	To be announced
1st August	Video Editing	Peter Le Count
15th August	Barbecue at Denny's Place	20 Queens Road Sandown
5th September	Internet Search Engines	Dennis Linzmaier
19th September	Databases	Tim Bateman
3rd October	Corel Draw\Corel Photo Paint	Ian Capon
17th October	Computability Presentation	Computability Group



Bruce Walker and Rosemary Pears at a recent meeting

ISLE OF WIGHT PC USERGROUP- COMMITTEE MEMBERS**Honorary President:**

Sir Norman Echlin,

**Chairman:**

Dennis Linzmaier,

Vice Chairman/Show Organiser:

David Broughton,

Treasurer:

Bob Groom,

Secretary:

Christine Jenkins

Membership Secretary:

Douglas Rankin

Refreshments:

Dorothy Wolletron

Hot Key Editor:

Brian Sexton

Committee Member:

Maggie Butler

Meetings Reception/Hot Key Distribution:

John Atkin

Committee Member:

Ian Capon

Committee Member:

Marilyn Barrett

New Members Co-ordinator:

Dennis Lambeth

Computabilty Representative:

Cliff Maidment

Disability Resources Co-ordinator:

Helen Edom

IS YOUR SOFTWARE LEGITIMATE?



With the ever-increasing number of homes buying PC's, organised piracy, or software counterfeiting, can be a lucrative business and although it sounds dramatic, organised counterfeiting is the smallest part of software piracy. The biggest problem is casual copying by individuals and businesses, who install more copies of software packages than their licence allows.

Why not copy?

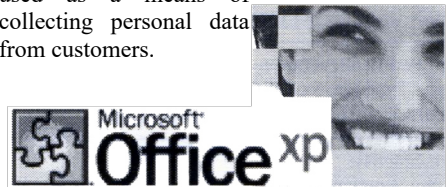
If Bill Gates is the second richest man on the planet, why shouldn't you borrow your friend's Microsoft Office CD? Because in addition to forfeiting rights to consumer protection, support, documentation and low-cost upgrades, knowingly using illegal software, exposes you legally to breach of copyright and trademark. Looking at it from a purely legal perspective, theft of copyright is just as much theft as shoplifting. Speaking of stealing, did you know that it has been estimated that up to 10 copies of a program are pirated for each one that is purchased? Have you ever let your brother borrow a copy of Microsoft Office?

According to a report by accountants Price Waterhouse Coopers, if another four in a hundred people in the UK paid full price for software, it would create another 31,000 jobs and net over £610 million in tax revenue.

If you really object to paying money to Microsoft, buy Lotus SmartSuite instead or Corel's WordPerfect suite. Microsoft has a PID (Product Identification) team, to whom customers can send Microsoft software they suspect of being counterfeit. It's no protection against casual copying by individuals, -but it provides the company with a constant stream of phoney products from organised _ pirates, usually software dealers who have gone over to the dark side, or counterfeiters involved in trading fakes of other branded goods, such as music and videos. The PID team inspects the package and if it's fake, decides whether to

send the customer a legal replacement. Clearly they won't hand out a full copy of Microsoft Office for a gold CD bought for £5 in a car boot sale, but they do replace sophisticated counterfeits which can be supplied with proof of purchase and launch an investigation against the vendor.

Microsoft has introduced a new strategy in "Product Activation" into its software and the first time you open, say the new Microsoft XP package, it prompts you to register online or by phone. It will allow 50 inactivated uses then it locks the product. Product Activation will only be used as a means of collecting personal data from customers.



Online menace

The rise of internet auction sites has greatly increased the opportunities for pirates to sell illegal software. Online auctioneers say it is not their responsibility as they didn't put the products up for sale but BSA (Business Software Alliance) is encouraging auction sites to be more responsible, to police their websites more effectively and warn customers of the potential dangers. When you download an MP3 file off the Internet, you have to take into consideration that the artist is not getting anything for this.

Microsoft say a significant proportion of the products sent to the PID team, which turn out to be counterfeit, have been bought online. "If you see Microsoft Office 97 for sale you can be 99 percent certain that it's counterfeit", says a Microsoft spokesman, "**because we don't even make it anymore.**"

Have you paid for that shareware program, WinZip, you downloaded a year ago and have been using it ever since?

Antipiracy Body

Fast (Federation Against Software Theft)
www.copyright-info.org

Demystifying Graphic - File Formats



When an image is saved to a specific file format, you are telling your applications how to write the image's information to disk. The specific file

format you choose depends on the graphics software application you are using (for example, Paintshop Pro, Photo Impact and Adobe Photoshop) and how and where you will use your image (e.g., the Web or a print publication). Graphic file formats can be broadly categorized into bitmapped formats and vector formats.

Bitmapped formats This format is a representation, consisting of rows and columns of dots, of a graphics image in computer memory. This is sometimes called raster graphics. The value of each dot, whether it is filled or not, is stored in one or more bits of data. The density of the dots, known as the resolution, determines how sharply the image is represented. This is often expressed in dots per inch (dpi), or simply by the number of rows and columns, such as 640 by 480. To display a bitmapped image on a monitor or to print in a printer, the computer translates the bit map into pixels for monitor screens, or ink dots for printer. Programs that manipulate bitmapped images are called paint programs. Following are descriptions of some commonly used bitmapped file formats:

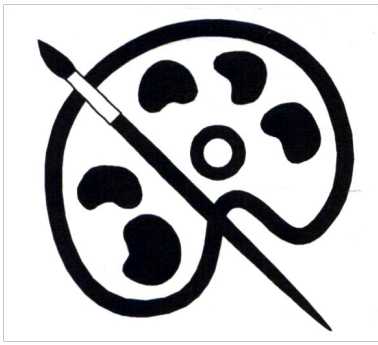
BMP: The Bitmap file format is used for bitmap graphics on the Windows platform only. Unlike other file formats, which store image data from top to bottom and pixels in red/green/blue order, the BMP format stores image data from bottom to top and pixels in blue/green/red order. This means that if memory is tight, BMP graphics will sometimes appear drawn from bottom to top. Compression of BMP files is not supported, so they are usually very large. When saving a file to the BMP format, add the ".bmp" file extension to the end of its file name.

GIF: The Graphics Interchange Format was originally developed by CompuServe in 1987. It is one of the most popular file formats for Web graphics and for exchanging graphics files between computers. It is most commonly used for bitmap images composed of line drawings or blocks of a few distinct colours. The GIF format supports 8 bits of colour information or less. In addition, the GIF89 file format supports transparency, allowing you to make a colour in your image transparent. (Please note: CompuServe GIF87 does not support transparency.) This feature makes GIF a particularly popular format for Web images. It reduces an image's file size by removing bits of colour information during the conversion process. The GIF format supports 256 colours or less. When creating images for the Web, be aware that only 216 colours are shared between Macintosh and Windows monitors. These colours, called the "Web palette," should be used when creating GIFs for the Web because colours that are not in this palette display differently on Macintosh and Windows monitors. When saving an image to the GIF format, add the ".gif" file extension to the end of its file name.

PCX: Originally developed by ZSOFT for its PC Paintbrush program, PCX is a common graphics file format supported by many graphics programs, as well as most optical scanners and fax modems. When saving an image to the PCX format, add the ".pcx" file extension to the end of its file name.

TIFF: Tagged Image File Format is a standard file format for storing images as bit maps. It is used especially for scanned images because it can support any size, resolution, and colour depth. When saving an image to the TIFF format, add the ".tif" file extension to the end of its file name.

JPEG: Like GIF, the Joint Photographic Experts Group format is one of the most popular formats for Web graphics. It supports 24 bits of colour information, and is most commonly used for photographs and similar continuous tone bitmap images. The JPEG file format stores all of the colour information in an RGB image, then reduces the file size by



compressing it, or saving only the colour information that is essential to the image. Most imaging applications and plugins let you determine the amount of compression used when saving a graphic in the JPEG format. Unlike GIF, JPEG does not support transparency. Use JPEG for scanned photographs and naturalistic artwork with highlights, shaded areas, and shadows. The more complex and subtly rendered the image is, the more likely it is that the image should be converted to JPEG. JPEG uses a “lossy” compression technique, which changes the original image by removing colour information during the conversion process. The JPEG file format supports millions of colours. In theory, JPEG was designed so that changes made to the original image during conversion to JPEG would not be visible to the human eye. Most imaging applications let the user control the amount of lossy compression performed on an image, so you can trade off image quality for smaller file size and vice versa. Be aware that the chances of image degradation when converting to JPEG increase proportionally with the amount of compression you use. When saving a file in the JPEG format, add the *.jpg file extension to the end of its file name. Use the JPEG file format for images with only a few distinct colours, such as illustrations, cartoons, and images with blocks of colour, such as icons, buttons, and horizontal rules.

Vector Graphics

The other method for representing images is known as vector graphics (or object oriented graphics.) With vector graphics, images are represented as mathematical formulas that define all the shapes in the image. Vector

graphics are more flexible than bitmapped graphics because they look the same even when they are scaled to different sizes. In contrast, bitmapped graphics become ragged when they are shrunk or enlarged. Programs that enable the user to create and manipulate vector graphics are called draw programs. Images stored as vectors look better on monitors and printers with higher resolution (bitmapped images always appear the same regardless of a device's resolution).

Another advantage is that images in vector graphics often require less memory than bitmapped images. Almost all sophisticated graphics systems, including CADD systems and animation software, use vector graphics. Following are descriptions of some commonly used vector graphics file formats:

EPS: The Encapsulated PostScript file format is a metafile format; it can be used for vector images or bitmap images. The EPS file format can be used on a variety of platforms, including Macintosh and Windows. When you place an EPS image into a document, you can scale it up or down without information loss. This format contains PostScript information and should be used when printing to a PostScript output device. The PostScript language, which was developed by Adobe, is the industry standard for desktop publishing software and hardware. EPS files can be graphics or images of whole pages that include text, font, graphics, and page layout information.

PICT: The Picture file format is for use primarily on the Macintosh platform; it is the default format for Macintosh image files. The PICT format is most commonly used for bitmap images, but can be used for vector images as well. Avoid using PICT images for print publishing. The PICT format is “lossless,” meaning it does not remove information from the original image during the file format conversion process. Because the PICT format supports only limited compression on Macintoshes with QuickTime installed, PICT files are usually large. When saving an image as a PICT, add the file extension “.pct” to the end of its file name. Use the PICT format for images used in video editing, animation, desktop computer presentations, and multimedia authoring.

PNG: The Portable Network Graphics format will likely be the successor to the GIF file format. PNG is not yet widely supported by most Web browsers. Netscape versions 4.04 and later, and Internet Explorer version 4.01 and later, currently support this file format. However, PNG is expected to become a mainstream format for Web images and could replace GIF entirely. It is platform independent and should be used for single images only (not animation.) Compared with GIF, PNG offers greater color support and better compression, gamma correction for brightness control across platforms, better support for transparency, and a better method for displaying progressive images. When saving an image to the PNG format, add the file extension “.png” to the end of its file name.

CGM: The Computer Graphics Metafile is a format developed by several standards organizations. CGM is supported by many PC Software products. When saving an image to the CGM format, add the file

extension *.cgm” to the end of its file name.
PIC This is a relatively simple file format developed by Lotus for representing graphs generated by Lotus 123. PIC is supported by a wide variety of PC applications.

WMF: The Windows file format is used for exchanging graphics between Microsoft Windows applications. WMEF files can also hold bitmapped images. The debate over which format is better still surfaces once in a while. My opinion is that each format has its place, just as the native format of the various paint and draw programs. One format may be better than others in terms of quality: at other times, another format may be better in terms of size. Best way is to take the time to view and store your images in different formats and select the one optimum for your needs, storage capability, and ease of use.

By Ben Luna -

Coastal Area Users Group, Corpus Christi.

<http://www.ppcugnj.org>

Windows Help Tips

Turn on Uppercase Filenames -

Tired of having Win98 changing filenames that contain all capital letters to filenames that have the first letter capitalized, the rest small? Turn off this a switched casing. Open a folder and select **View/Folder Options**. On the multi-tabbed dialog box that follows, select the **View** tab. Under **Files and Folders**, check **Allow all uppercase names**. Click the **Like Current Folder** button if desired - it will change all folder settings to the ones of the current folder.

Keystrokes and Message Boxes -

Save yourself some mouse movement: when a message box appears on the screen asking you to click on **OK** to continue, just make sure the current window is the active one and press the **ENTER** key. If it is asking for a click to **CANCEL**, press the **ESCAPE** key.

Our thanks to Andrew Malek - <http://www.malektips.com>

EDITORIAL

Well it is good to back with you all after a month's absence, after my very enjoyable holiday in South Africa. Unfortunately I was not able to get back in time to publish the May edition, so I have added a few pages to this June edition to make up for the missing Hot Key.



I took with me on holiday a friend's Analogue Sony Hi8 Camcorder and recorded a few hours of tape and as you know sometimes these things grow on you, so I have decided I would like to edit my tapes on the computer. This has led me to buying, from Simply Computers, a capture card in the form of Hauppauge WinTV Go, which only costs £33.99 +vat and a 10GB Hard Drive which is a Quantum Plus 8.5ms/7200, using the Windows Movie Maker software in Windows Millennium. I am only at the beginning stages of this new venture but it looks like I will have to purchase a suitable camcorder from Jessops, as my friend is looking for the return of his Sony camera. Seeing that I have four Hi8 Super HME Sony 90 tapes, I have decided to go for a Sony DCR- TRV320 digital camcorder as I can use the recorded tapes in this Digital 8 camera. The TRV320 camcorder has a 4Mb memory stick with an ILLINK DV interface (IEEE 1394) and a 25x optical/450 digital Zoom, plus a night shot infrared system and a swivel LCD colour screen. So it might well be that I could use this camcorder for future IWPCUG events.

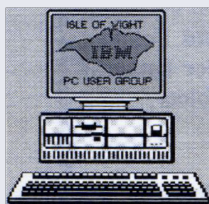
Incidentally, if there is anyone is interested in digital video, there is a very informative article in the July, 2001 edition of Personal Computer World Magazine. This is an in depth 18 page article with workshops that will help you to produce better quality videos.

On the software side, I have taken the plunge and opted for the, new to be released, Serif PagePlus 7, which is faster, smoother, smarter and better than Microsoft Publisher 2000. Well that is what the salesman told me! I intend using this new software to publish future Hot Keys as there appears to be many new facets to Serif PagePlus 7. So there could be a new look to Hot Key in the coming months.

Interesting Websites:-

<http://www.streetmap.co.uk>

<http://www.tweakfiles.com/allinone/>



The Isle of Wight PC User Group

welcomes all owners
and users of
IBM Compatible
Personal Computers.

It is a group which
seeks to exchange ideas and seek new
information.

Our meetings are informal on the **first and third Wednesdays of each month at The Riverside Centre, Newport, 7.30-9.30 pm.**

The first Wednesday has usually a formal talk whilst the third Wednesday is more informal, geared to the new user and aims to help out members with specific problems.

Membership is £12 per year.

Visitors are welcome.

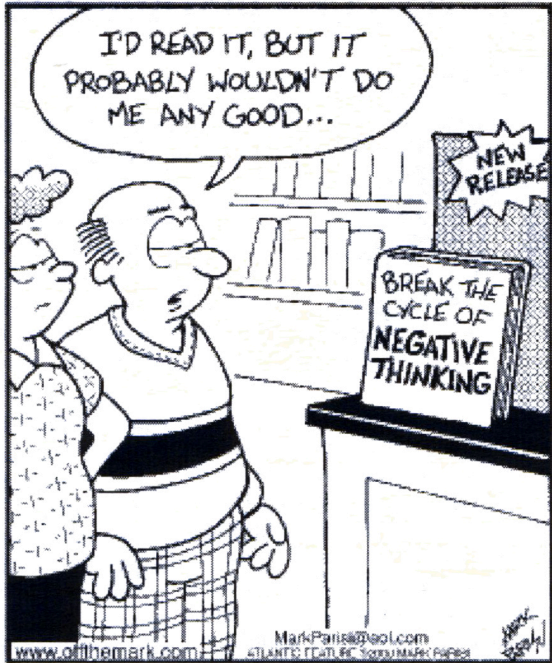
This journal, **HOTKEY**, is produced every month.

If you would like to know more about us, either come along to one of our meetings or contact one of our Committee Members on one of the numbers on page 3.

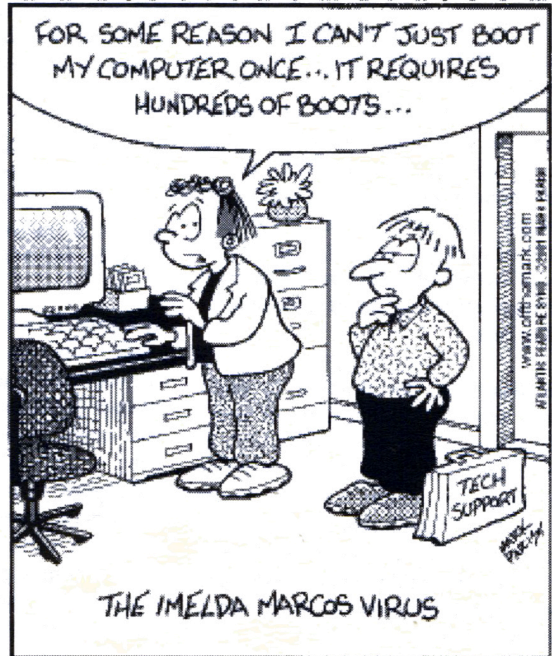
We're on the web :- <http://www.ddina.demon.co.uk/iwpcug/>

H U M O U R

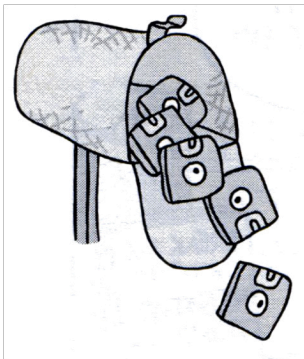
off the mark by Mark Parisi
www.offthemark.com



off the mark by Mark Parisi
www.offthemark.com



SETTING UP A DISTRIBUTION LIST



A distribution list is Microsoft speak for a mailing list. I don't propose here to go into detail about mailing lists as my colleague, David Broughton eruditely described them in his article in the March edition of Hotkey. Distribution lists are used for sending out one email to many people or organisations at the same time. They are particularly useful for business purposes, making announcements, calling people to a meeting, or notifying employees of a "Dear John" notice en masse.

Distribution lists can also be used by home computer enthusiasts or voluntary organisations for such things as notifying colleagues of a change of address, or sending out notices of upcoming events, such as agendas or minutes of meetings, or of changes of venue or presenters, which are too late to be put into their club magazine. Our computer club takes full advantage of the fact that many of our members are on the Internet and have registered their email addresses in the club database.

They are also good for sending to one's friends and relatives, notification of some great event such as a wedding or the birth of a child or even for calling off that summer barbecue when the weather forecasts a wet summers day! A distribution list is another of those powerful tools that looks easy to use, and it is, but like everything in computers and their associated software, there can be many pitfalls for the unwary.

INSTRUCTIONS ON HOW TO CREATE A DISTRIBUTION LIST

Introduction.

I am basing the instructions given here for

use with Outlook Express, and with Outlook, but all good email software, including those that are accessed online such as AOL, should have this facility.

Some Guidelines.

You will need to have a copy of all of the proposed recipients in your list in your address book, or in the "Contacts" section in your email software. It is always a good idea to put the full names, addresses, towns (in capital letters) including postcodes, telephone numbers and email addresses and birthdays and anniversaries of your friends and colleagues into your address book. Remember too, to avoid the temptation of putting punctuation marks such as commas, full stops and inverted commas after the names and addresses as this causes confusion if you decide to export them to another piece of software via a c.s.v. (comma separated value) file. This makes setting such things up as distribution lists or mail merge lists a lot easier. Always try to be accurate, particularly with the email addresses, as mistakes in this area will mean that the Internet Service Provider will bounce them back to you.

1. Open Your Address Book

Open Outlook Express or your email software and then select the icon for your address book and click it. The address book will open up and there you should have a copy of all your contacts, your friends and colleagues, including all of those members of the iwpcug if you have managed to install the c.s.v. file correctly! On the left hand side there will be a pane with a contacts folder in it and on the right hand side, all the contacts will be sitting there in alphabetical order.



N.B. For Outlook Users, it is much easier; you just go to <Tools> and select <distribution list> follow the instructions in the dialogue box and it will set it up for you, putting the finished product into your Contacts folder.

To create a distribution list, the first thing you must have is a name for it. Let us call it <Friends>. Select <contacts> with your mouse, right click it and select <new> and then <new group>. A dialogue box will open up and you will be asked to put the name of your group into the white rectangular box at the top. Enter <Friends> then go to the tab, which says <select members>, and click on that. Another dialogue box will open up with all the members of your main contact list in it. Select the members you want to place in your

distribution list and move them over from the left pane to the right pane, by clicking the <arrow in the middle (the > arrow allows you to undo mistakes). When you have selected all the members of your group, click OK. Bingo! You have now created a new group called Friends and it contains all those people that you selected. When you go back to <Contacts> you will see that there is a sub-folder with 2 little heads on it and it is called <Friends>. You have now set up your Distribution List.

2. Sending an email using a Distribution List.

Open a new email in the normal way, type in your subject head in the subject box and then type your main message in the body of the email. You can also send greetings cards by this method if you go to <Tools> then select <options> and then select the tab marked

<send> you will find boxes marked html or plain text. You will need to select html to put a card, photograph or clip art into the body of the email, you can even insert something from “Publisher” which you have designed yourself. If you then go back to <tools> you will find that you have a number of choices of backgrounds for the body of your email. If you would rather send the email using an attachment then you can tick the <plain t e x t> option. I will deal with attachments a little later on in this article.

3. Inserting the Distribution List in an email.

There are various ways of doing this; the main question to ask yourself is “What do I want to achieve?”

a) Using the To: box

If you want everyone on your list to receive all the email addresses on your Distribution list and know who else you have sent them to, then go to the little icon next to the To: box and double click it. Your address book will open up and you then select the <Friends> group and click it. This will automatically insert <Friends> into the To: box and it will contain all the addresses on your list. All you will see is the word Friends. The problem with this option is when the recipient receives the email, they will also receive a copy of all the other email addresses on your list and when they come to print it out, a great deal of the body of the email will be taken up by this.

b) Using the Cc: box

This is used when you wish to inform others that you have sent an email, usually in reply to a query, to the sender. It is a courtesy used mostly by businesses when they are informing employees and managers that a certain task has been or is being attended to and with which they are involved. If you put your <Friends> group in to this box, it will have the same effect as putting the group in the To: box, i.e. everyone on the list will receive a copy of all the email addresses on the list, and it will create a long list in the body of the email if printed out.

Continued on page 12



c) Using the Bcc Box

If you wish to send out a mailing to your friends or colleagues, without divulging whoever else is on your list, then this is the box to use. This creates what is called a “blind copy” and the recipient receives the email as if it was to them personally. There are no other addresses in the body of the email. It is called a blind copy because the recipient isn’t informed who the others on the list are, and they will receive it as if it were addressed only to them. One of the best ways I have found for using this option, is to put my own email address in the To: box and then put the Friends name in the Bec: box. When I send out the email, I will then receive a copy back and it will let me know that my Internet Service Provider has received it, (even if no one else has!)

Sending an attachment with a Distribution List

To send an attachment out with your distribution list, like a little song, or a photograph, or a film clip, or some other composition, go to <Insert> on the email and select the appropriate category, <picture>, <file> or <clip art>. This will open up a dialogue box, which will allow you to go to <My Documents>, or <c:> and select the file that you wish to import into the email. You then click <insert> and OK and the attachment will be attached to your email.

PROBLEMS

i. Quantity of emails.

There may be limitations on the number of email recipients to whom you can send out in this manner. These are set by your Internet Service Provider and may be as little as 50. If you have a problem with this, you can always break up the distribution list into two.

ii. Wrongly addressed.

If you have entered a wrong email address, or the Internet Service Provider belonging to the recipient doesn’t recognise the email address, it will “bounce” back to you. This doesn’t mean that the whole distribution list bounces back, it only means that the email to that particular person hasn’t been delivered. You will have to check out the email address, to make sure it is correct, and send it again.

iii. Attachments & HTML.

Remember that attachments can take up considerable amounts of storage space and take some time to download from the Internet, so it is advisable to ask the recipient for permission to send them. Use the most efficient form of enclosing an attachment and one that is recognised by most software (e.g. as a jpeg file). If you don’t the recipient might not be able to open it. Remember too, that as a recipient there is always the danger of a virus being part of an attachment, and if you are not familiar with it, then save it to disk and run it through your virus checker first.

Duggz the buggz

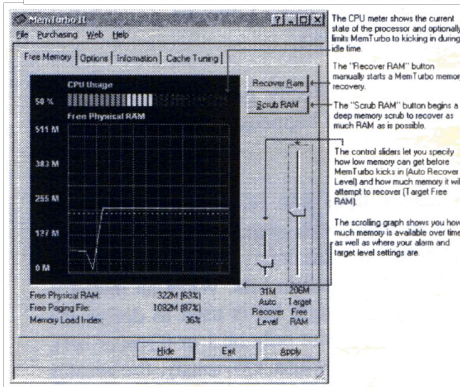
PALTALK

One of our members, John Atkin, has drawn my attention to a useful piece of software in the form of Paltalk, which enables you to converse with your family and friends over the Internet. The new features in version 3.1 are:-

- ◆ Voice conferencing - Simply click “Groups” to join existing conferences.
- ◆ Video conferencing - See who you are talking to, as well as speaking with them.
- ◆ Voice Mail - Double click an offline pal to record a voice email.
- ◆ Enhanced Privacy - Set your preferences for privacy.

<http://www.paltalk.com>

MemTurbo has also received the highest possible 5/5 Ranking at:
SoftSeek, ZDNet (PCMagazine), Shareware Viking, DownloadPlanet



which are not always useable by programs. This low or fragmented memory can make Windows unstable or cause Windows to use virtual memory. Virtual memory is your hard drive, which is much slower than RAM. So what do you do?

Memturbo by Silicon Prairie is an inexpensive program, only \$19.95. It can be ordered on CD or downloaded. There is a free trial version at <http://www.memturbo.com>. This program has been working very well on my machines for many months. A little button in your tray tells you how much memory you have. You can set the amount you want to have as a minimum before auto recovery, or use a timed auto recovery. You can quickly recover memory with a simple key combination, similar to saving in word processing. You can tell it how high to go in recovery. This program watches your CPU usage and doesn't activate when your CPU is very high (unless you want it to). When it recovers memory it also defragments your memory, making it useable by your programs. You can see a difference in performance after a recovery.

Memturbo is a program that you, as a Windows user, need and you may not even know it. Memory management was critical with DOS and it was common to run out of memory with Windows 3.x. Programs would take a piece of memory when they started and either would not release it when they closed or it would not be seen again by Windows. The only cure was to restart Windows. That was, of course, solved when Windows 95 came along. Well, not really. Win 9X is better but it still uses many programs that are very similar to their 16 bit (Win 3.x) versions. For example; it can take several minutes after MS Word is closed before all the memory is returned for use.

Memturbo works with Windows 95, 98 (SE and ME), NT 4, and 2000. Of course there are some features for Win 9X that NT, with its different architecture doesn't use. Memturbo doesn't necessarily recover more RAM than other RAM recovery programs, but it does its recovery without removing needed files such as dlls and kernel files. Your machine is more stable and often faster than it was before.

When you start Windows, you probably have a number of programs that start automatically. Even with cheap memory and larger than ever amounts of memory you can run out. Although I have 128MB of RAM (this was considered a huge amount) my machine can be down to 15 or 20 MB after boot up. You could go to the taskbar and close some programs, but you want those programs open for use later. Also, even when the memory stabilizes, it can be in a non-contiguous or fragmented state. Plain English, you have bits of memory in small pieces,

Memturbo is available at:-
<http://memturbo.com>
\$19.95 for download.

It is a small program and easy to download.

RESOLUTION

Whether it's on-screen pixels or tiny dots of ink on paper, resolution is measured by the amount of individual points of information an image contains. A good example is a newspaper. If you look closely with a magnifying glass at a black and white photo in a newspaper, you will see that it is a collection of dots in varying shades of grey. Next time you are near a colour billboard poster take a close look and you will see the dots.

A digital photo might look perfectly good to you on your monitor but have a look at what happens when you enlarge a section.

There is more to images than just resolution though and resolution goes hand in hand with something called **colour depth**. Colour depth refers to how many colours are used to display an image and it's measured in **bits**. When an image is displayed as a 1-bit colour, a single bit is used to define the colour of each pixel. Since a bit can only be 1 or 0 (on or off), this effectively means black and white. Obviously, the greater the colour depth, the more bits are used to represent each pixel's colour and so the bigger the file used to store the image is. To give you an idea:

- ◆ A 640x480 pixel image contains 307,200 pixels or 37.5Kb (8 bits in a byte, 1024 bytes in a kilobyte).
- ◆ In a 8-bit colour (256 possible colours), the image would take up 2,457,600 bits or 300Kb.
- ◆ A 6x4in. Photo scanned at a resolution of 300dpi will contain 2,160,000 pixels. If it's scanned in 42-bit colour, the resulting file will be almost 11Mb.

For a scanner the important figure is the "optical" resolution - the resolution the scanner can physically scan at. Most scanners use a technique called "interpolation" to mathematically increase the resolution of an image.

For a printer, resolution alone is no longer a good measure of how well an inkjet printer performs, since many models can vary the size of their ink droplets and actually mix ink on the page. This allows them to produce smooth images that a high resolution printer may not be capable of.

With scanners and printers the points of information are called pixels and the picture size is the number of horizontal pixels by the number of vertical pixels in the whole image. The points are called dots and the resolution is the number of dots in each square inch of image - shortened to dpi. Scanners convert each square inch of what's being scanned into dots; printers convert an image into square inches containing dots of ink and 300dpi actually means 300x300dpi - 300 horizontal rows of dots and 300 vertical ones. Unfortunately the more dots used to represent an image, the bigger its file size, making the graphic slower to download from the Internet.



The Handy Four: Using the Keyboard for Editing



They've been around since DOS. They can make your work a whole lot easier. Yet, they are largely ignored. Computer users have become so addicted to the mouse that they frequently ignore using the keyboard. I'm referring, of course, to "keyboard shortcuts" -keystrokes that will accomplish common editing functions (and more). Let's revisit the most common. The "Handy Four" are the four keys just to right of the left-hand shift key. The functions they accomplish are among the most common and frequently used.

<CTRL>+Z - Undo. This is actually a "Break" key. Old-timers may remember it as the escape from "ED", the original ASCII text editor. It accomplishes from within Windows applications the same thing as that funny looking left-hook button on the toolbar.

<CTRL>+X - Cut. Why didn't they use Control and C? Well, then what would you use for Copy? Next best choice is X - when you "X" something out you are deleting it. And besides, the X looks a little bit like an open pair of scissors.

<CTRL>+C - Copy. All right!!! We finally got one that is logical.

<CTRL>+V -Paste. V = Paste? Well, aside from the fact that it is in a group next to the previous three shortcuts, you can think of it as an inverted caret or a wedge. Thus, the combination will insert whatever has been placed on the clipboard (copied or cut) into the application at the location of the cursor.

So why do I use these keystrokes in deference to the mouse? Actually, I use them in concert with the mouse. If I select text with the mouse, I can easily cut or copy with my left hand using the shortcuts. I then reposition

the insertion point with the mouse, and paste back in using the shortcut keys via my left hand. (OK, so you "lefties" have got a problem - but you've probably already given up and started using the mouse with your right hand, anyhow).

I use the technique a lot in capturing information from e-mail messages and pasting it into my address book or a database. Then, too, there are a lot of applications out there whose authors have carelessly neglected to include undo, cut, copy, and paste on their menus. Or maybe you have the toolbars turned off at the moment? Or perhaps the application window is scrolled up where you cannot see the toolbar on the screen? If you forget the "Handy Four", just click "Edit" on the menu bar of almost any Windows application - from that drop-down, you can quickly refresh your memory of Ctrl-Z, Ctrl-X, Ctrl-C, and Ctrl-V. And while I'm at it, let me throw in two more handy key combination that while not part of the "Handy Four", they will help you work faster. (After a recount there are three extras.)

<ALT>+F4 - This combination will exit an application. I use it frequently in the classroom for closing programs that students have carelessly left open at the end of a class period. It does the same thing as selecting File, and then exit or clicking the "X" button on the program title bar.

F2 - The F2 key is an universal edit key. If you have selected a filename in Explorer, a cell in Excel or perhaps field data in Access, striking the F2 key places you into the edit mode.

F5 - The F5 key is an update key. If you find that your desktop icons or MS Office shortcut bar buttons are incorrectly displayed, striking the F5 key will frequently re-scan and correct the problem. Likewise, if you have recently created a file and it appears at the bottom of the directory, F5 will rescan and display the filenames alphabetically.

Use your keyboard. It may not always be the best choice, but frequently it can be.

*By Jim Gaffney Tri-County Computer Club,
Orville, OH
www.tricountyc.org*

Windows Fonts



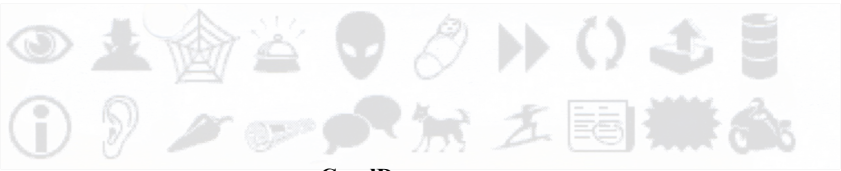
Different Windows Programs have different font requirements.

NB: Do Not Delete The Following Fonts In Win. 9X—

Arial (TrueType)	Arial Bold (TrueType)	Arial Bold Italic (TrueType)
Arial Italic (TrueType)		Avante Garde - Corel Draw
Claren - Print Artist		Courier 10,12,15 (VGA res)
Courier New (TrueType)		Courier New Bold (TrueType)
Courier New Bold Italic (TrueType)		Courier New Italic (TrueType)
Modern (Plotter)		MS Sans Serif 8,10,12,14,18,24 (VGA res)
MS Serif 8,10,12,14,18,24 (VGA res)		Palisade - Print Artist
Roman (Plotter)		Script (Plotter)
small fonts (VGA res)		Symbol (TrueType)
Symbol 8,10,12,14,18,24 (VGA res)		Times New Roman (TrueType) -Times
New Roman Bold (TrueType)		Times New Roman Bold Italic (TrueType)
Times New Roman Italic (TrueType)		Wingdings (TrueType)
Marlett		

Fonts which displays the red A and begins with the letters MS should be left on the system.

Micrografx Draw 6 needs Swiss921 BT
Creatacard needs Swiss721
PrintShop uses Marlett
MSIE needs Webdings
Office 97 (including Outlook 98) needs Tahoma
Quickbooks uses four fonts that all start with "Quicktype"
MS Bookshelf uses 3 months called Bookshelf Symbols 1-3
MS Publisher - Times New Roman MS Works - Times New Roman
Microsoft Bookshelf has three fonts called Bookshelf Symbol 1, 2, & 3.
Write - Arial
Wordperfect - Times Roman
Web Browsers - Webdings
MS Word - Times New Roman, Tahoma
Picture It - Comic Sans and Comic BD



CorelDraw: uses —

Avant Garde Book BT (TrueType) Avant Garde Oblique BT (TrueType)
Avant Garde Medium BT (TrueType) Avant Garde Medium Oblique BT (TrueType)
CommonBullets (TrueType) FuturaMedcondBT
(Corel's # TT0201M.TTF)

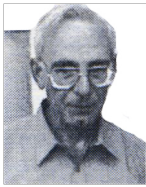
Hallmark CardStudio uses —

AD lib BT
Balloon
Dom Casual Bt
Goudy range

Windows 98 uses —

All files should be dated 5-11-98 and have a time stamp of 8:01p.

8514fix.fon Fixedsys for the IBM 8514 8514sys.fon System
85140em.fon Terminal Font for the IBM 8514 Arialbd.ttf Arial Bold
Arial.ttf Arial Ariali.ttf Arial Italic
Arialbi.ttf Arial Bold Italic Bkant.ttf Book Antiqua
Ariblk.ttf Arial Black Coprgtb.ttf
Calist.ttf Calisto MT Copretb.ttf Copperplate Gothic Light
Copperplate Gothic Bold Courbd.ttf Courier New Bold
Cour.ttf Courier New Coure.fon Courier 10,12,15
Courbi.ttf Courier New Bold Italic Couri.ttf Courier New Italic
Cours.fon Courier 10,12,15 Gothic.ttf Century Gothic
Dosapp.fon MS-DOS CP 437 Gothicbi.ttf Century Gothic Bold Italic
Gothicb.ttf Century Gothic Bold Impact.ttf Impact
Gothici.ttf Century Gothic Italic Lsansi.ttf Lucida Sans Italic
Lhandw.ttf Lucida Handwriting Italic Lucon.ttf Lucida Conole
Lsansuni.ttf Lucida Sans Unicode Matisse_.ttf Matisse ITC
Marlett.ttf Marlett Nwethe.ttf News Gothic MT
Modern.fon Modern Nwegthci.ttf News Gothic MT Italic
Nwethcb.ttf News Gothic MT Bold Serife.fon MS Serif 8,10,12,14,18,24
Ocraxext.ttf OCR A Extended Smalle.fon Small Fonts
Seriff.fon MS Serif 8,10,12,14,18,24 Sserife.fon
Smallf.fon Small Fonts Sseriff.fon
MS Sans Serif 8,10,12,14,18,24 Symbol.ttf Symbol
MS Sans Serif 8,10,12,14,18,24 Symbolf.fon Symbol 8,10,12,14,18,24
Symbole.fon Symbol 8,10,12,14,18,24 Times.ttf Times New Roman
Temptsitc.ttf Tempus Sans ITC Timesi.ttf Times New Roman Italic
Timesbd.ttf Times New Roman Verdanaab.ttf Verdana Bold Verda
Verdana.ttf Verdana Verdanz.ttf Verdana Bold Italic
Verdanai.ttf, Verdana Italic Vgaoem.fon Terminal
Vgafix.fon Fixedsys Westm.ttf Westminster
Webdings.ttf Webdings
Wingding.ttf Wingdings



PRIZE PUZZLE FOR JUNE 2001
by David Broughton



A bag contains a single ball which is coloured black or white. No other information is known about it. A white ball of identical shape and size is placed in the bag and the bag is shaken. One ball is then taken out of the bag. It is white. What is the probability that the ball in the bag is white?

Please send your answer to me, David Broughton (see page 3) by 4th July.

Answer to ENIGMA3

The puzzle for March was the computer program puzzle ENIGMA3. This was a "black box" situation where you put numbers in and got numbers out and you had to deduce the output when the input was the specific number 12345. There were two mechanisms going on inside the "black box". One was to multiply by 3 and add 2. That was the simple bit and on its own would be too easy. It converted 4 into 14 and 5 into 17 for example. The nasty bit was that the symbols used for the digits of value 2 and 3 were reversed both on input and output. So '3' was really the value 2 and would give an output of 8, and 6 on input would be calculated as $6 \times 3 + 2 = 20$ but the '2' in 20 was converted to '3' so it looked like 30. Not surprisingly no one got to discover the true goings-on inside the black box. Nevertheless, there were other ways one could solve the puzzle by inspecting other numbers, for example, 12344 and 12346 and then 344. 345. 346. The result could then be guessed correctly as 29727. The "correct" way would be to first convert 12345 into 13245, then multiply by 3 and add 2 giving 39737 and swapping 2 and 3 again to give 29727.

Sorry it was so difficult, but four of our regular solvers succeeded. They were Peter Wollerton, Rosemary West, Clem Robertson and Ken Cameron. Rosemary West won the draw and a £5 book token.

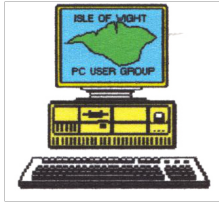
Congratulations to all four.

ANSWER TO THE PROVERB IN THE BOX (April Hot Key)

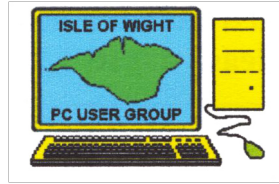
The proverb was "PROCRASTINATION IS THE THIEF OF TIME" for which I received four correct answers from: John Underwood (who gave me the answer the same evening that the puzzle was published), Peter Woollerton, John Bownas and Ken Cameron. Peter Woollerton won the draw and a £5 book token.

Congratulations Peter and better luck next time to the others.

A NEW LOGO?



The Old Logo



The suggested New Logo

Our current logo, shown above left, is looking tired, representing an old fashioned computer with floppy disks and a keyboard, very much a DOS-based machine and not very common these days. A suggestion was made at a recent meeting that we need an updated version. An invitation was made to design a new logo and submit it for general approval and maybe criticism. So far, David Broughton has been the only one to make a new logo for appraisal. This is shown above on the right. What do you think? Comments are welcome. Please send them to the editor.

If there is more than one entry, a vote will be taken to choose what the membership regards as the best, so now is the opportunity to have a go with Paintbrush or any other graphics program. They should be in GIF format of not more than 240 pixels wide by 180 high. (The current logo is 187 x 180.) Send your artwork by e-mail or floppy disk to David Broughton for display on the club's web site.

The Editor



Doug Rankin captured in a good frame of mind as he presents a prize to Ian Capon

MEMBERS NOTICE BOARD

This Board is FREE to members
Please use it!



WANTED

INTEL MMX 233 Processor

Please contact:-

Ian Capon

Tel:

or

Email - idjcapon@****co.uk

FOR SALE

SHARP FONTWRITER

Model FW 600

An electronic typewriter with a built in 3.5" disk drive and wordprocessor with spell checker. It has two ribbons, one new and one almost new. Also included is a manual, built in screen and a carry handle, plus a dictionary on floppy disk, which can be loaded as needed.

Hardly used

£50

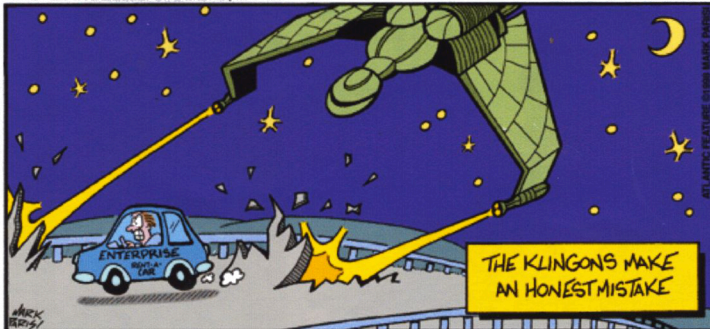
Contact:- John Atkin

Tel:

off the mark

by Mark Parisi

www.offthemark.com



Hot Key is published on the first Wednesday of every month. This edition was compiled using Microsoft Publisher 2000 and reproduced on an Epson Stylus 880 Colour inkjet printer and a Brother HL-1250 laser printer.

The views and opinions expressed here are those of the contributors alone. No responsibility can be accepted with respect to advice or suggestions made in this journal.