

MEMBERS NOTICE BOARD

Please use this Notice Board to benefit other members.



FOR SALE

**External US Robotics Courier Modem
56k/V90**

This top notch modem is available at the
Special Price of £40

Contact:
Roy Hollis
Tel. 611433

FOR SALE

Kitchen Audio Centre is what the current Innovations catalogue calls it.
This is a CD player plus AM/FM Radio unit specially designed to fit under kitchen
cupboards to avoid using bench space. Has 20 preset tuning memories.

Cost from Innovations is £109.99
Special Offer (second hand) - **£10**

Built in stereo speakers.
Made by Bush (no, not the president!).
First come first served
Call **David** on 740421



The Isle of Wight Video Camera Club

**You are invited to a
meeting
when
a selection of videos**

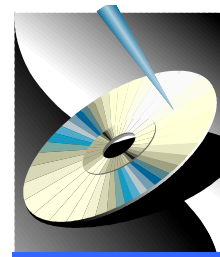
will be shown at the

Wootton Community Centre at 7.30pm on September 23rd 2002

Tea/Coffee and Biscuits will be served.

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 C80 Colour ink jet 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.



HOT KEY

ISLE OF WIGHT PC USER GROUP

www.iwpcug.org

MONTHLY JOURNAL

Issue 130 - September 2002



Members enjoying the Annual Barbecue at Bob Groom's home in Bembridge

Members of IWPCUG, who attended the Annual Barbecue at Bob's place were treated to a sumptuous feast of food and drink to satisfy a multitude. The weather was warm and dry and the setting was peaceful in a vast landscape of trees, greenery and very large lawn at the back of the mansion house. Parking was excellent with enough space for a hundred motor cars. There was plenty to eat and drink including George Wilson's home made fruit punch, which was called the

'Isle of Wight Special'. The food included hamburgers, sausages, chicken, onions and a large selection of salads and bread rolls. The sweets were delicious, which included strawberry pavlova and black forest trifle and Sylvia brought along some sweet and juicy plums from her fruit trees. On behalf of the Committee we would like to thank Bob and David for a very enjoyable evening and appreciate all the hard work and planning involved in this annual event.

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FUTURE MEETINGS

4th September	A Personal Computing History	Jonathan Burt
18th September	Dreamweaver Netsite Builder	Sylvia Farley
2nd October	Council/Corporate Computing	Dennis Linzmaier
16th October	Loading Operating Systems & Software	Dennis Parkes
6th November	Motherboards	Andy Marsh Island Computers
20th November	Simple Database/Mail Merge	Dennis Linzmaier
4th December	External Speaker	To be arranged
18th December	Christmas Party	Riverside Centre

We also have two e-group discussion areas:-
 Yahoo IWPCUsers: iwpcusers@yahoo.com
 and for web designers:
IWPCUG-Web-group@yahoo.com



Doug Barber, Les Burrige, Ken & Dorothy Hughes, Mick Cant and John Lewis at Riverside



BigFix is a utility that runs in the background, monitoring your computer for problems and conflicts. You can be sure that BigFix is working by an icon near the bottom-right corner of your screen (called the system tray). Every day, BigFix automatically gathers information about the latest bugs, security alerts, and updates from BigFix Sites around the Internet. This way, BigFix is always up to speed on the latest problems and is able to automatically fix them, keeping you from crashing.

When you click on the flashing tray icon, the BigFix window will open. At the top of the screen, there is a list of messages called the "Fixlet List". These messages, called "Fixlets", describe problems that BigFix has discovered, and help you fix them automatically.

www.bigfix.com



Alan Ash, Hazel and George Wilson and John Bownas at Bembridge Lodge



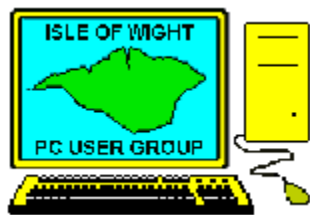
It has been brought to my attention by Choice Peripherals, the suppliers of compatible ink jet cartridges, that one can be short changed by various suppliers of compatible cartridges and one should not be misled by the cheapest prices. There are apparently two types of compatible cartridges, namely pigment based and water based. The better choice is pigment based as the water based cartridges are slower drying and not as vivid in printing. The printing tends to fade after a certain while, especially the magenta, which fades quicker than the other three colours in a CMYK setup, which can lead to green-blue looking prints after a year or so. The same situation arises with the large selection of printing paper, whereby the various makes of paper can vary depending on the thickness of the paper and what is required of that paper. Epson has developed an ink and paper combination that it claims can assure prints will not fade for at least 10 years. When it comes down to printing on glossy paper, it seems to me that it is best if you stick to the original manufacturer of your printer for obtaining the best results in reproducing a quality photograph on glossy paper.

I found myself in an interesting situation when I had to format my hard drive, in that I had accidentally lost all traces of the August Hot Key (I normally back up all my Hot Key editions to my Iomega Zip Disk but for some uncertain reason omitted to do this). Subsequently I had to find the best way to reproduce the August edition for uploading to our website on the Internet. A piece of software from Caere Corporation in the shape of OmniPage 9.0 came to my rescue in that I was able to use OCR (Optical Character Recognition), which worked extremely well and certainly saved me much extra work. I would like to recommend this piece of software to anyone who is interested in reproducing text or mixed mode documents.

Hats off to Pinnacle Systems for the innovative move to allow users of their Studio 7 software to upgrade to version 8.0 free of charge if one has purchased the software from the 1st July 2002 onwards. This is to be applauded and I would certainly like to see more of this from other companies who value their customers.

Interesting Websites

E-MailFun HomePage - Jokes, Games, Mini-Videos, Quotes etc. - <http://e-mailfun.com>
Computer Information Links - <http://members.tripod.com/~fjallen/compinfo.htm>



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 bi-monthly on **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 printed 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 listed on page 3.

Club's Website - <http://www.iwpcug.org/>



- Belkin USB 2.0 4-Port Hub - www.belkin.co.uk



- Belkin USB 2.0 Hi-Speed PCI Card - www.belkin.co.uk

- Iomega Predator USB 2.0 CD rewriter - www.iomega.co.uk



- Sony CRX85 CD rewriter - www.sony.com

- LaCie DVD-RW - www.lacie.com



- Maxtor 3000LE External hard drive - www.maxtor.com

- CanoScan D125OU2F - www.canon.co.uk



Our thanks to PC Magazine for these extracts

A Quicker Connection - USB 2.0



QUESTION: What is USB and USB 2.0?

ANSWER: USB stands for Universal Serial Bus and is a type of port that is found on newer computers. There are two versions of USB available: USB 1.0/1.1 and USB 2.0.

Connection type	Transfer rate (Megabits/second)
Serial port	0.92 Mbps
Standard parallel port	0.92 Mbps
USB 1.0/1.1	12 Mbps
ECP parallel port	24 Mbps
IEEE1394 (Firewire)	400 Mbps
USB 2.0 hi-speed	480 Mbps

Forty times faster than USB 1.1, the new **USB 2.0** standard delivers transfer rates of up to 480Mbps/sec and provides higher bandwidth necessary for high-speed peripherals.

HARDWARE

On the hardware side, one factor aiding the growth of USB 2.0 is backward-compatibility, ensuring that the new standard works equally well with USB 1.1 devices — albeit not at the same speeds.

This time around, the first USB 2.0 hardware to come to market has been from the storage market — both for hard drives and recordable optical media. It's not hard to see why storage devices are going to benefit from faster transfer rates now that external hard drives can be accessed just as quickly as an internal hard drive and in some cases more quickly.

Recordable CD media peripherals have also featured in early announcements. Most of the major CD-R/CD-RW manufacturers now have products in the pipeline and more are on the way. This sector will rapidly standardise on USB 2.0, as it has the potential to cut writing times dramatically and doesn't require a major redesign.

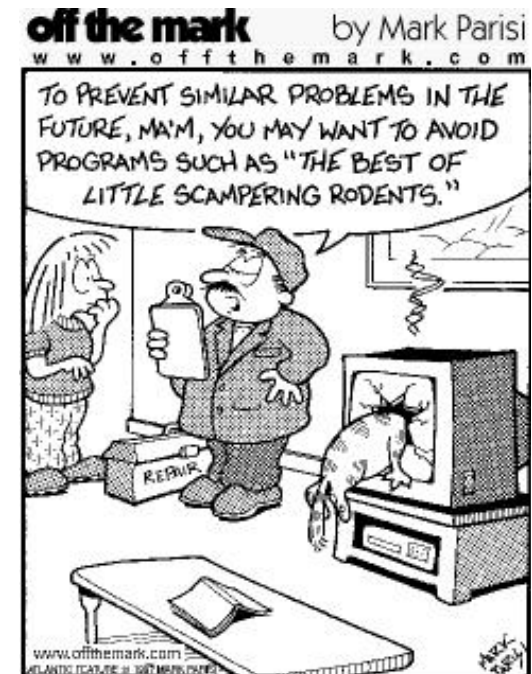
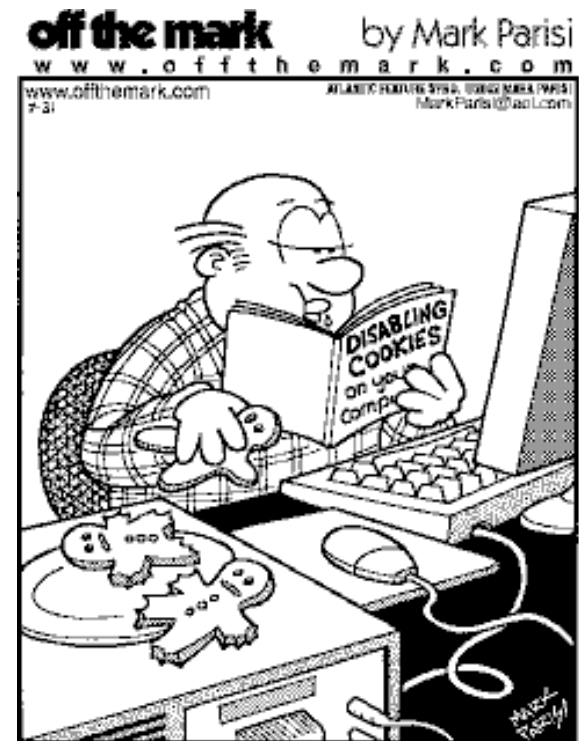
Motherboards with the new standard were first seen in December 2001, but they won't be used in volume until later this year. Intel will release its 845G and 845GL chipsets with an embedded USB 2.0 host controller in the next few months. Major manufacturers also announced they'd shortly be offering USB 2.0 PCs.

Scanner manufacturers have been slow off the mark, with only one or two of them offering suitably equipped hardware and then only in higher-end models. The reason for the reluctance stems from some manufacturers, who still have a considerable number of SCSI users who see no reason to change. However, USB 2.0 should become the standard for scanners very soon.

Iain Thompson of PC Magazine has said *"For those of you considering the move to USB 2.0, I'd suggest waiting. While there's no harm in being an early adopter, it's going to save you a lot of time and effort to wait until the software and hardware is freely available and all the little kinks are ironed out. However, those who are quite happy with their PS/2 serial, parallel and SCSI connectors are in trouble. USB 2.0 does provide a better alternative and you'll be relegated to using second-rate hardware if you want to sit Canute-like against the prevailing trend. There's very little that the existing standards can do better than USB 2.0 and most do the job a lot worse. Get over your nostalgia and embrace USB 2.0 — it's the future of peripherals"*.

The technology behind USB 2.0 is sound, there's good software and hardware support and PC manufacturers are also getting behind the standard. Moreover, given the timescales involved, if you're considering adopting the new technology, then it would be less expensive to upgrade at the end of the year, rather than immediately.

H U M O U R



QUESTION AND ANSWERS

A suggestion has been made by one of our members that in addition to the occasional Question & Answer sessions we have at meetings (sometimes as a fill-in, sometimes as a planned event), that members might like to ask written questions, hoping for a written answer and publication in Hot Key.

We already have, of course, a means where members can ask written questions -- in our e-mail discussion group "iwpcusers". But only half the members actually subscribe to that means of communication, which is a pity. The e-mail discussion group is a valuable medium for making important news announcements. (The club's web site (www.iwpcug.org) also has news announcements but statistics show that this resource is very much under used.)

The Committee have considered the idea for handling written questions and as a preliminary arrangement members are invited to hand in such questions at the start of regular meetings, either to the Chairman or person on the reception desk. The Chairman of the meeting will then seek out someone who may be able to answer the question, or it may be appropriate to delay the answer until a detailed answer can be sought. Hopefully, a written answer may emerge! The reason why written answers are valuable is that very often a lot of the information in a verbal answer is not given due to lack of opportunity to research the details.

It might be a good idea to set the ball rolling that members think up questions that have been asked previously at meetings but where a more detailed written answer would be welcome.

This notice will be published on the web site, to the "iwpcusers" e-mail group and to all members with an e-mail address who do not subscribe to "iwpcusers" (who are invited to join up! -- details of how to do it are on the web site).

-- David Broughton

COMPUTER QUIP

A computer consultant was called in to repair a faulty machine. He studied it carefully and then struck it a resounding blow with a large hammer. The computer sprang to life at once. His bill was thousands. As he explained later. "The huge bill was not for hitting the machine with a hammer. It was knowing where to hit!"

Edward Phillips

To make this a little easier to understand, let's look at a simple example. You have two hard drives and the following partitions on each of the two hard drives:

Drive 1:

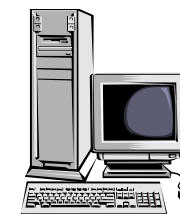
C: partition (Contains your Operating System)
D: partition (A backup partition)

Drive 2:

E: partition (Contains your Application Programs)
F: partition (Contains your Data Files)
G: partition (A backup partition)

Using Drive Image, create an image file of your entire C: partition and all of its contents on your G: backup partition. Then, using Drive Image, create an image file of your E: and F: partitions on your D: backup partition. These image files represent the entire partition and all of their active content. These image files can be condensed by 40-50% to save room on your backup partition. Notice that we save the images from one hard drive to the other hard drive's backup partition and visa-versa. Hence, we call this the cross backup approach.

Once a month, you'd repeat this cross backup approach from one drive to the other until you fill up the backup partition. Then you'd delete the oldest image file to make room for the new image file to be stored in your backup partition. If either of your hard drives should fail on you, all you have to do is to remove the failed drive and place an empty new drive in its place. Then using Drive Image, you find the latest condensed image of the partitions on the failed drive on the other drive's backup partition and restore that image to recreate the partitions and all of their content on the empty drive. This lets you be back up and running your computer in a matter of minutes instead of days or weeks rebuilding your system. If



the drive that failed was your first drive containing your operating system, that is no problem. You can boot Drive Image from a DOS diskette and quickly rebuild your operating system partitions from the second drive's backup partition.

What if both hard drives fail together: While it is rare, it is possible for both of your hard drives to fail at the same time, thus leaving you without either of your backup partitions to use to rebuild the other hard drive. For example, your computer could be burned in a fire or taken by a thief. In these cases, you'd lose not only your main drive, but your backup images as well. So, you need to make some special provisions to guard against these situations. I'd recommend that every 3 months, after you have backed up your partitions using the cross backup approach, you use Drive Image's ImageExplorer to split your condensed image file into multiple segments that will fit on blank CDs. Drive Image will burn these image segments on multiple CDs for you or you can use the CD burning utility that came with your CD-R/RW drive. While this may take a while to do, it will give you an inexpensive removable backup of your entire hard drive that you can store away from your computer. I would repeat this process of creating backup CDs of your entire hard drive every 3 months or so.

Summary: If you follow the suggestions in this article, then you will have a comprehensive backup plan that will protect both your important data files as well as your entire hard drive. You must make sure that you follow the time intervals suggested so that your backups are current enough to be usable. PowerQuest's Drive Image product, a second hard drive, and a CD-R/RW drive are all the software and hardware you need to run this backup plan.

Our thanks to the Tulsa Computer Society



It will backup these files to any device having a standard drive letter, such as a special backup partition on a hard drive or a removable cartridge drive. If you create your data file backups on a hard drive, try to place them on another hard drive than the one the original data files are stored on. Also, you should copy these backup files to a blank CD every month so that you will have some removable media that you can store away from your computer.

One of the best features of DataKeeper is its ability to monitor the import data files that you select and to automatically backup a file as soon as it changes. Using this monitoring approach, you never have to think about backing up your data files since this is done for you automatically. It also assures that you have a backup of these important files that is current to the last minute or so. This is a powerful feature of DataKeeper and one that I would highly recommend using.

Backing up your entire hard drive: The second most important part of your backup plan is to backup your entire hard drive at least once a month. Having this backup in place will protect you from a major failure of your entire hard drive. Using PowerQuest's Drive Image to backup your entire hard drive you have two approaches to select from. Let's look at each of these approaches separately.

The first full-drive backup approach is to use Drive Image to copy all of the partitions from your main hard drive to a backup hard drive. Both hard drives must be installed on the same computer system to do this approach. Using Drive Image's Disk-to-Disk Copying facility, you copy the partitions from your main drive to the backup drive, one at a time. When Drive Image copies a partition, it

creates a new partition on the backup drive, so the drive can be empty of partitions before you start the process. Also, copying a partition copies not only the partition, but also all of the hidden files, system files, and other files contained in the partition to the backup hard drive. So, when you finish copying all of the partitions from your main drive to the backup drive, you have an exact duplicate of your main drive that could be used if your main drive failed.

After copying all of the partitions to your backup hard drive, you need to disconnect the backup drive and remove it from your computer system. You should store the drive away from your computer, so that if anything happens to your computer, your backup drive will not be affected, too. Once a month, you'll need to retrieve this backup hard drive and insert and connect it back into your computer and repeat the backing up of all of your partitions, then remove it again from your computer. If something should happen to your main hard drive, simply get your backup hard drive and replace your main hard drive with the backup drive, setting it as a master drive, and you should be able to immediately start your computer and have it run. To simplify the frequent removal and replacement of your backup hard drive, you can purchase a hard drive rack mounting system from your computer store for about £12 that will let you remove and insert the drive without removing the covers of your computer.

The second full-drive backup approach is to use Drive Image to cross backup one hard drive to another. With this approach, you install and leave both hard drives in your computer all the time. For this approach to work, you'll need to setup a large backup partition at the end of each of the two hard drives. PowerQuest's PartitionMagic utility is the best way to create these backup partitions on your hard drives. Once the two drives are in place with a large backup partition on each of them, you can use Drive Image to create condensed image files of entire partitions and store them on the backup partition of the other hard drive.

Question - What are the differences between CRT monitors and LCD monitors? What is the difference between digital and analogue screens?

Answer - Although CRT monitors are heavier, bulkier and less attractive, there are several reasons why you might choose one over an LCD screen. Firstly there is price; LCD screens typically cost three times as much as equivalent-sized monitors. A further limitation of an LCD is resolution. CRT monitors are capable of displaying a wide range of resolutions, often up to a maximum of 1,600x1,200. For a 15" LCD screen the native resolution is 1,024x768; for a 17" LCD screen 1,280x1,024 and 640x480. An LCD screen still functions outside its native resolution, but its picture quality is noticeably less sharp. An LCD's limited resolution is not a problem for most purposes but if you use applications that rely on very high resolutions or you regularly switch resolutions, an LCD screen is not the best option. In addition, LCD screens are less competent at displaying video and moving images than CRT's. The reason for this is due to uniformity and positioning of the pixels that make up the screen. Instead of displaying smooth diagonals, the resultant lines appear to be jagged. Many screens compensate for this to some degree but generally only enough to display smooth, still, diagonal lines. As soon as the lines or edges of an object move, the jaggedness is evident. This is less noticeable if you sit back from the screen, but it may affect gaming and viewing movies.

As for digital and analogue LCD screens, the difference lies in the way you connect the screen to your PC. Monitors have traditionally been analogue, so graphics cards have been designed with an analogue output. Some early LCD screens came with their own proprietary digital-output graphics cards, but when demand increased LCD screens were designed to accept a standard analogue signal since the cost of ownership was less than buying a screen and a new graphics card. As the image displayed on all LCD panels is the result of a digital signal, an analogue LCD screen is fitted with an analogue-to-digital converter (ADC). The analogue signal from a standard graphics card has already been converted from a digital signal via a digital-to-analogue converter (DAC) in the card itself. So before a signal is displayed on an analogue LCD's screen it's been through a DAC, a cable and an ADC. This convoluted way of displaying a digital signal results in some signal degradation and can require analogue LCD users to 'tweak' their screen settings to get a stable or sharp signal. Digital LCD's don't require signal converters and take the unaltered digital signal direct from a graphics card. This means reduced signal degradation and a sharper image. In order to use a digital LCD, however, you'll need a graphics card with a digital-video interface (DVI) port. If you're upgrading from, say a 17" CRT, this is likely to mean additional expenditure but a good option would be to go for an LCD screen that has both digital and analogue inputs. This way, you can run the screen on your current system and keep it if you ever switch to a system or graphics card with a DVI port.

(Thanks to Computer Shopper Magazine)

Question - Epson advise that you use genuine Epson cartridges in their printers and to replace the cartridges when the software informs you that the cartridge is empty and also to switch off the printer when you have finished printing. Are these instructions really necessary?

Answer -

1. Printer manufacturers appear to be giving away their printers so as to make a profit on the original cartridges that are much more expensive than the compatible cartridges.
2. Epson admits that the 'empty' warning comes up before the cartridge is really empty. It says that if the ink is allowed to run out it could cause damage to the head.
3. It is not necessary to switch off your printer every time as this practice does waste ink because of the cleaning/priming cycle that occurs each time you switch your printer on.

Backing up your hard drive

by Gene Barlow



Your computer hard drive is very important: Your hard drive is the heart of your computer system. It contains your Windows operating system, which is the master control program of your computer. It also contains all of your application programs that help you do productive things with your computer. But, most importantly, it contains all the data files that you create using your application programs. These data files are the most valuable part of your computer and the hardest to replace if something should happen to your hard drive.

Yes, your hard drive will fail on you someday: Your hard drive is a mechanical device that spins constantly and is certain to wear out. The life of a hard drive is only 2-3 years. If you are lucky, your drive may last you 4 or 5 years, but it could go out in just 6 months. It is not a question of if your hard drive will fail, but it's a question of when it will fail. All you can do is to be ready when it does fail by having a copy of all of the files on your hard drive saved away from your computer. Then you can replace the failed drive with an empty new drive and put all of the files on the new hard drive. This gets you back up and running in a matter of minutes instead of days or weeks rebuilding your drive. This process is called backing up and restoring your hard drive and is the topic of this article.

What files should you backup: One of the first decisions you must make is what files need to be backed up to adequately protect

you. I consider your data files as the most important ones to backup. Your data files are those files that you create using your application programs. If you use Quicken, then the data file that needs to be backed up contains all of your financial records entered into Quicken. If you research your genealogy, then the database of your ancestors that you've collected for years is the important data file that must be backed up. If you correspond extensively using E-mail, then the folders of your E-mail correspondence needs to be backed up. You should plan on backing up your data files at least daily.

The second most important thing to backup is your entire hard drive and all of the files on it. This includes your Windows operating system as well as all of your application programs. By backing up the entire hard drive, you will not have to rebuild your system from scratch, but will be able to quickly get your system back up and running again. Some would suggest that you really don't need to backup your operating system and application programs because you can always reload them from the CDs they came on. While this is mostly true, you need to consider how much time this will take you to reinstall the operating system and all of the applications you own. Then, how long will it take you to download all of the software patches and add-ons that you have added to your system. Finally, how long will it take you to enter all of the special settings that you must do to have your system work exactly as you like it to. To this lengthy time, consider how you can recover the many programs and files for which you do not have a CD. I think when you consider all of these factors, you'll agree that having a backup of your entire hard drive is a wise investment of your time. You should plan on backing up your entire hard drive on a monthly basis.



What media is best for backup: The next question you need to consider is what is the best media to backup your files from your hard drive. A few years ago, tape backup systems were the most popular backup media. The only problem with these tape systems was that they were very slow. Backing up a 1-2GB hard drive in a couple of hours was reasonable, but backing up today's 40GB hard drives to tape would take too long. You would not do it often enough to be usable. The next popular backup media to come along were the removable disk cartridge drives. These were much faster than tape, but the cartridges tended to be expensive. For example, a 40GB hard drive would need 10-20 Jazz (2GB) cartridges to backup the entire drive. Writing to blank CDs promises to be one of the best backup media today, but even the fastest drives are slow and it takes many blank CDs to backup a large hard drive.

So, what is the best media to backup a 40GB hard drive today? Another 40GB hard drive! Hard drives are much faster than tape and are even faster than the disk cartridge systems. You can backup an entire 40GB hard drive in less than an hour or so. Since it is fast, you'll tend to backup your system more often and this means better protection for you. Hard drives are also very inexpensive to purchase. I would plan on having an extra hard drive for backup purposes for each hard drive that you save data on.

What type of backup software is available: There are two very different backup utilities on the market today -- File backup utilities and Partition backup utilities. File backup utilities are by far the most common. These utilities backup individual files one at a time. They can also be used to restore individual files to your hard drive. A good feature of File backup utilities is that they can select individual files from all parts of your hard drive. This is great

for picking and choosing your important data files to backup. On the other hand, File backup utilities tend to be quite slow in backing up your entire hard drive and you would need to make many extra steps in rebuilding your hard drive partitions in case of a total failure. That is where Partition backup utilities have the advantage. Partition backup utilities backup entire partitions and all the files contained in them. Some of these Partition backup utilities work at the lowest hardware level and are very fast. Restoring a partition to an empty hard drive using a partition backup utility will create and format partitions as it restores the partition file.

PowerQuest Corporation has an excellent backup software package, called **Drive Image**, that contains both a File backup utility and a Partition backup utility combined in one product. The File backup utility in this product is called **DataKeeper** and is designed to backup your individual data files on a frequent basis. The Partition backup utility in the product is called Drive Image and is designed to backup your entire hard drive every month or so. Let's take a look at how these two utilities can be used to backup your system.

Using PowerQuest's DataKeeper utility, you can select all of your important data files from various part of your hard drive. If you have spent a little preparation in organizing your hard drive, you may already have all of your data files collected together in the same partition. This makes it easier to identify and backup these important data files. DataKeeper will let you backup all of your data files or backup only those that have changed since the last backup. You can also compress the backup files to about half their original size when you save them to conserve space. You can backup an individual file up to 99 times without replacing an earlier backup copy of that file. This gives you the ability to keep multiple backup versions of a data file as it is being developed. If you need to see the file, as it was several versions ago, you can do so with DataKeeper.

Continued on page 10 and 11