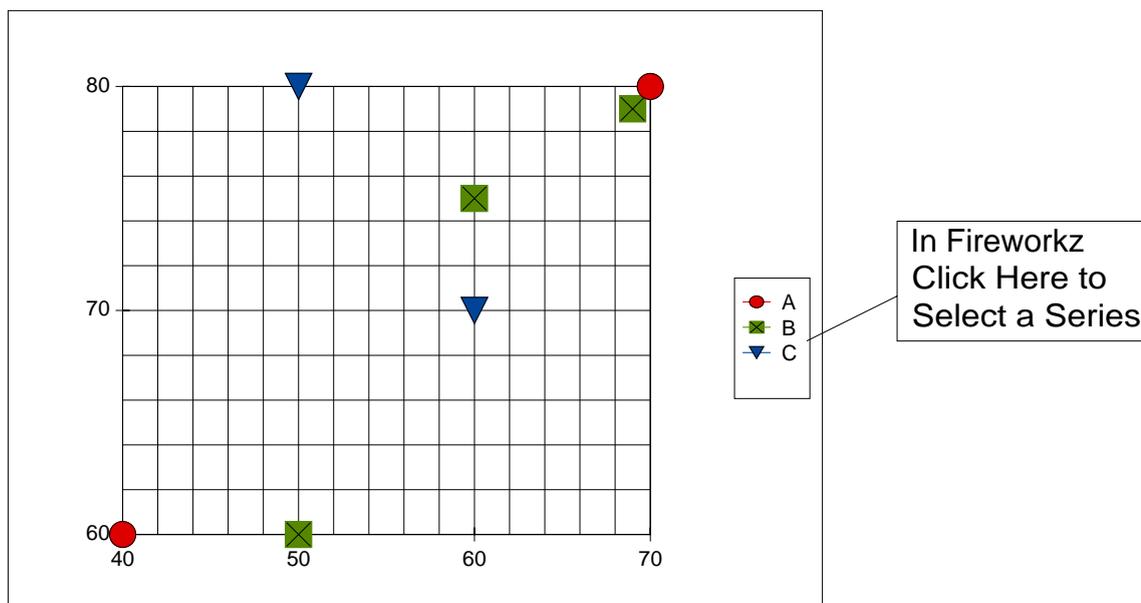# *Gerald's Column*
by Gerald Fitton

Thanks again for all the many interesting letters and emails. You can write to me at the address given in Paul's Fact File for Abacus Training. Please note that my Post Code is changing from SN2 6QA to SN2 7QA; of course either post code will reach me during the change over period. If you have a problem then please do send me an example file rather than a lengthy description. Self addressed sticky labels do help more than you might guess and return postage is more than welcome!

There has been a considerable revival of interest in PipeDream. There are many reasons for this; perhaps the principal one is that it is still receives programming support and hence it is still evolving whereas some other spreadsheet packages don't have this advantage. Another is that a demo version of PipeDream appears on the Archive CD.

Recently there has been a new development, an Internet based list which, in some ways, is similar to David Pilling's Ovation Pro list. The PipeDream list is different; it is more in the nature of a self help user group whereas David Pilling is the author of the Ovation Pro program and runs the list. I am sure that many other RISC OS packages will follow this pattern so, even if your interest is in neither of these lists then you might find it interesting to see how the PipeDream and Ovation lists develop.

Selecting Series in Fireworkz

Before I discuss this latest PipeDream development I must describe an undocumented feature of Fireworkz of which I was not aware. Alan Marshall says "Whilst trying to click on one of the lines (of a Fireworkz chart) I clicked on the name of the line in the Legend (box) and the line was selected." In the the Fireworkz Tetrad Map below, the Legend box shows the names of the three series, A, B and C. If you click on the B or the (green) square just to the left of B then you will find that the second series is selected. This is a much more positive method of selecting a series than trying to click on a line in the graph.

PipeDream charts do not behave this way. If you click on anything in the Legend box then you will select 'Legend' rather than one of the three series of points. In Fireworkz you can not select the Legend box nor can you edit it in any way!

PipeDream's History

The earliest version, thought of as PipeDream 1, was View Professional which ran on the BBC 8-bit computer. In the mid to late 1980s PipeDream was ported to the Z88 laptop and, under the name PC PipeDream, to what was then called the IBM machine. Soon after PC PipeDream was released it was 'ported' to the Archimedes as PipeDream 2.

So, in 1990 we had PC PipeDream which ran (and will still run) in MS-DOS, Z88 PipeDream and, on the Acorn Archimedes, PipeDream 2. Many people had two and some all three of these platforms. PipeDream files could and were exchanged between them. All three platforms had the same PipeDream user interface and file format. All three versions were single tasking.

When RISC OS 2 was released with its multi tasking WIMP, PipeDream was developed further to become the version known as PipeDream 3. In PipeDream 4 an excellent charting package was added and PipeDream 4.5 was developed to take advantage of the speed of the StrongArm CPU.

File Compatibility

One feature of all the versions of PipeDream is backward and forward compatibility.

Files created with older versions will always load into newer versions. Files created with View Professional (PipeDream 1), Z88 PipeDream, PC PipeDream, PipeDream 2, PipeDream 3 and PipeDream 4 will always load into PipeDream 4.5 and, for the most part, the files will 'run' successfully. Even the most recent version, V 4.50/22, will load files in View, View Sheet, View Professional and First Word Plus (FWP) format.

As PipeDream and Fireworkz have developed, files created with newer versions always load into older versions with the obvious limitation that new features are not implemented in older versions. As a by-the-way, I notice that files created with the newest version of Ovation Pro will not load into older versions of Ovation Pro. This has implications for those who want to send files to their friends (who might have the older version of Ovation Pro) or who belong to an Ovation Pro user group (where some members will not have the most recent version).

Porting

All PipeDream format files can be converted to Lotus format.

On the Archimedes you Load a utility called !PD123 which converts files in both directions. Even with PC PipeDream and Z88 PipeDream you can select an option to Load and Save Lotus format files as well as the usual CSV and ASCII formats.

Lotus used to be the definitive spreadsheet for the IBM (MS-DOS) machine and a multi tasking version exists for the Windows environment. Lotus format is generally regarded as the Lowest Common Denominator for spreadsheet porting. All the spreadsheets I know of for any platform will Load Lotus files and allow you either to Save in Lotus format or to convert your spreadsheet to Lotus format.

Files of any format can be Loaded into PipeDream as if they are ASCII files. In the early days of the Archimedes many users loaded Wordwise files into PipeDream before editing them to remove the WordWise formatting commands. PipeDream files can be Saved in FWP format as well as ASCII, CSV, 'Paragraph' and many other formats!

Fireworkz

The development of Fireworkz is a story which I shall leave until another day but here is a brief summary. At the BETT Show on the 20th January 1993 Colton Software launched the first of a new set of packages which was to become Fireworkz. Fireworkz exists for both the RISC OS and Windows environments as Fireworkz for RISC OS and Fireworkz for Windows. In the same way that the original combination of PipeDream 2 for RISC OS and PC PipeDream were totally file compatible on the two platforms, so are the two varieties of Fireworkz. At the time Colton Software believed that Fireworkz would replace PipeDream – and many former users of PipeDream have 'upgraded' to Fireworkz. Nevertheless there is still a core of users who prefer PipeDream for the type of work which they do. I use PipeDream for most of my work but I find Fireworkz better for a few jobs.

The usual way of transferring files from the RISC machine to the Windows machine is via an MS-DOS format floppy disc but direct links through either a serial or parallel cable are used and, in a network situation, both RISC OS and Windows machines can exchange files. I have heard of people who upload large sets of Fireworkz files to their web site from their RISC OS machine and then download them to their Windows machine.

!PipeDream to Fireworkz

All PipeDream files, including PC PipeDream files and View Profession files will Load directly into either version of Fireworkz. For the most part they will run without adjustment. However, it will generally smooth the operation if early format PipeDream files such as those from PC PipeDream are loaded first into PipeDream 4.5 and then Saved from V 4.5 before loading into Fireworkz for RISC OS or Fireworkz for Windows.

Rakewell

Rakewell still sell PC PipeDream and the Z88 laptop with spares and accessories. PC PipeDream will run in an MS-DOS window on a Windows machine.

The contact is: Vic Gerhardi, Rakewell Limited, 24 Putnams Drive, Aston Clinton, Aylesbury, Bucks., GB - HP22 5HH, England.
email: vic@rakewell.com   and   rakewell@nildram.co.uk
website: http://www.rakewell.com/
Telephone: (+44) 1296-630617   Fax: (+44) 1296-632491

The PipeDream Self Help Group

An Internet based self help group, run in a manner similar to the Archive-on-Line list and David Pilling's Ovation Pro list, has been formed. The PipeDream list is owned and run by Richard Torrens, a PipeDream enthusiast. Of course I do not have any control over it.

When Richard approached me with this idea I agreed that an on line self help group could only be a good thing for PipeDream users. I rather hoped that it would take some of the problem solving off my shoulders! Both Richard and I hope that those subscribing to the list will include enough experienced users that the list will "run itself" with the more experienced users helping those less experienced.

If you want to join the list then send an email to <PipeDream@4qd.co.uk> with the subject line Subscribe. You will automatically appear on the list. I shall be most interested to see how this list evolves for I'm certain that similar lists will be set up for other packages.

PipeDream 3 Keys

In PipeDream you can change the operation of the function keys with <Ctrl CDF>. You can, if you wish, change the keys by executing this command, one key at a time; indeed you can do this on each occasion that you load PipeDream – but there is an easier way.

The command file called [PD3Keys] (on the Archive monthly disc) will change the operation of all the function keys so that they do the things they did in PipeDream 3. If you place a copy of [PDKeys] in your !PipeDream.User directory but with the name [Key] so that the the pathname of the file is [!PipeDream.User.Key] then this command file will be executed whenever PipeDream starts up. PipeDream automatically runs this [Key] file.

For good measure I have also included on the monthly disc a command file which converts the Copy/End key to a 'forward delete'. The file is called [CopyDelete]. It reads:

\Cdf|i "Copy" |i "\G|M" |m   Define function key

Of course you can double click on the [CopyDelete] file after loading PipeDream to the icon bar but something you might not have considered is to add this command to the end of your [Key] file so that it is executed every time PipeDream is loaded.

This brings me to a question I am often asked. "How can I run a Command file every time I load PipeDream to the icon bar?" The answer is to name the command file [Key] or add it to whatever commands you already have in your [Key] file. The [Key] file must be in the !PipeDream.User or !PipeDream.Resource directory in order for it to run automatically.

Interaction with BASIC

PipeDream 3 has the facility to interact with BASIC built into it as do later versions.

PipeDream 3, unlike PipeDream 4, did not have its own graphics package. By this I mean that you couldn't use it to generate charts from data. The programmers solution to this was

to hot link PipeDream to an existing graphics package, Minerva's GraphBox. By 'hot link' I mean that if you change the data in PipeDream then the chart in GraphBox changes to match the new set of data.

This hot link facility still exists within PipeDream 4.5 and it will still hot link to Minerva's GraphBox if you have it! However, that is not all that you can do with PipeDream's hot link. For example you can access this facility and use it to export the content of the cells in a PipeDream document to a BASIC program. Of course, writing multi tasking BASIC programs is not as easy as it was when the the operating system was single tasking – but there are packages available now which can produce a 'shell' into which you plug your own BASIC procedures.

Derek McCulloch has written a BASIC hot link program which I have included on the monthly disc. In operation you mark a block in the PipeDream document (mark the block [Demo]A5A7) and then activate the hot link from a dialogue box called up by the !HotLink BASIC program by clicking on the 'Get block' box.

From then on, whenever you change the content of any cell within the block which you marked, the BASIC program will 'grab' the PipeDream data and run whatever you want the BASIC program to do with that data. In Derek's demo the BASIC program simply displays the PipeDream data. You will find the PipeDream data in the third column of the window called DMc Hotlink test.

A cell in the marked block of the PipeDream document can contain a number or it can contain a string. Although Derek's demo only displays the PipeDream data, using BASIC you can do much more. For example the string in the PipeDream document can be a textual form of an OSCLI command which the BASIC program executes. In its present form PipeDream does not have a facility to execute an OSCLI command directly and some users have said that that facility would be useful. What do you think? Anyway, until such a facility is added the HotLink is a 'workaround'.

A long time ago (I think it was in 1990) Francis Aries wrote a BASIC program which 'pushed' data obtained by running BASIC into a 'live' PipeDream document. Since then many other writers have done similar things. One of the simpler techniques is to use BASIC to create a PipeDream command file and then Run the command file to modify the PipeDream document. Derek has used the command file approach to push data from his BASIC program back into his [Demo] PipeDream document.

User's Wishes

Over the ten years I have been running the PipeLine (now GoldLine) User Group I have found that PipeDream has many lightly hidden or briefly documented facilities which can be called upon. Sometimes the things that users ask for already exist. Sometimes their wishes are easy to grant, sometimes they are beyond me but not beyond the skills of other more expert members of the GoldLine User Group. In very few cases an upgrade of the program is the only solution. Fortunately for PipeDream users programming support continues. It is paid for out of User Group revenues rather than sales to new customers.

The PipeDream market is fairly well saturated; by this I mean that nearly everyone who wants PipeDream already has it. However, there may be a few who chose one of the other spreadsheets for which support has evaporated. If you are in that category then perhaps you might consider trying PipeDream.

Conclusion

A new awareness of PipeDream's versatility is contributing to a revival of interest in this package. I hope that the new Internet List will contain many useful ideas and solutions. Certainly such a list is a means of providing a rapid response to the simpler questions.

I believe that the most efficient way of dealing with more complex questions will still be by the provision of an example file—these can be sent to me as an email attachment rather than on a floppy disc. If you do send an email attachment then please wrap it up in a zip format archive. David Pilling's SparkFS can be used to create and unzip such an archive.

Even if your interest is not in PipeDream nor in Ovation Pro you might find it interesting to follow the way these lists develop. I have no doubt there will soon be lists for all major packages. I am already receiving requests for a list for Fireworkz users! Any volunteers?