Document Production Column
by Gerald Fitton

Introduction

So, to quote Paul (our editor) "Document Production Column" doesn't do justice to the range of topics I'm expected to cover and Gerald's Column is a bit unimaginative. This may all be true but I expect that more than a few of you aren't at all sure what I shall be covering; a consequence of this uncertainty which has greater potential for complaint is that too many of you will be quite sure that I'll be covering things which I won't!

Paul has said that if you find the best name for this column then you can win a prize. OK, but please write to the Archive editor with your suggestions and not to me!

For my part I have two problems with the expanded specification for this column. The first is that I don't think I know enough detail about enough subjects to satisfy those of you who are looking for a source of infinite knowledge (however, see below under Interdictor 2). The second is that if I include in this Archive column everything from my monthly correspondence of interest then I shall fill more pages than my self imposed limit.

I haven't forgotten that:
(a) I still haven't completed the series on 'future proofing'
(b) I already have a draft of an article about the difference
    between Styles in Fireworkz and Style
(c) I have been asked to write about speeding up printing by using Acorn's own printer
    drivers for background printing (without a turbo driver)—I have an outline for that
    article too! This month I've decided to leave all those topics for now and clear more
    of the backlog of general topics selected from my correspondence.

Anyway, what I'm going to do about the column is to wait and see what sort of feedback I get from you and develop it accordingly. Just to confuse all of you that have made up your minds exactly what this column will contain let me start with something which is most unusual for me and which will definitely not become a habit—we'll start with a game!

Interdictor 2

In the January 1995 issue of Archive I included an example of questions which I didn't feel competent to answer. The question was "Will Interdictor 2 run on the Risc PC?"

I received a letter from Gareth Owen who is the General Manager of Clares Micro Supplies, the authors of Interdictor 2. It only goes to show that you never know who's reading this column (my guess is that Gareth has been reading my column for some time—I'll tell you why I think so a little later in this article).

Anyway, Gareth says that Interdictor 2 runs without any problems on the Risc PC. However (he adds), if you do have a Risc PC you may find that you will be happier with the most recent version since it uses the * key instead of the # key to return to the map when the plane has landed. Why might you want to use the * instead of the #? Well, on the Risc PC there is no # on the numeric keypad!

You can get the new version by returning your master disc together with a stamped self addressed envelope. If you don't send an SAE then you'll be charged £5!

I suggest that if you live abroad you find some kind person over here who'll get it for you and then send it on.

Gareth kindly sent me a copy and (without encroaching on the Games Column) I must say that I like it. It reminds me of Flight Simulator which, when I was somewhat younger (and had more spare time), I used to enjoy for hours on end! If you don't have a copy then you can get one from Clares Micro Supplies at £24.95 inclusive of VAT.

It's confession time. I had a covert objective in choosing the shock tactic of writing about a game (which I have never done before) as my first topic in this column. What I wish to show by example is that, even if I don't know the answer to a question and even if I feel quite incompetent to answer it then, if this column is read widely enough (and gains a good reputation for accuracy and fairness) then there will always be expert help at hand.

My thanks go to Gareth for providing the 'teaching resource' which allows me demonstrate the way in which this column might be able to provide help that I'm incompetent to give.

Draw and Paint

Back to Document Production—well, for a moment at least. I'd like to say a few words about the subject of standardisation. As my example I'm going to use Draw and Paint files but, if your interest is in desk top publishing you might like to think in terms of Rich Text Format (RTF) as a standard which will allow you to transfer text files complete with Styles from one package to another.

If you're going to produce documents then, at some stage or other, you're going to need a drawing package such as Acorn's Draw, Jeremy Turner's DrawPlus, or Vector or Artworks. Drawing packages use what are called vector graphics. The image is specified as lines joining co-ordinates (rather like the lines used when you plot a graph). These lines can enclose an area; if this is the case then the area can be filled with colour. The lines can be open (ie not enclosing an area) so that there is no area to fill with colour.

From the first Archimedes Acorn have devised a standard for vector graphics files. This standard is the DrawFile format. If you want to send me (or another Archive author) a vector graphic file on disc then please make sure that you use an option to save the file in Acorn DrawFile format. That way you'll be sure I'll be able to read it. OK, I know that Computer Concepts' desk top publishing packages (eg Style) will accept files in Artworks format and I do have Style (more of which later) so I can load your Artworks file into my Style and have a look at it. That's not the point. I may want to load your file into PipeDream or into Fireworkz (or even into Schema!) and I can't do that unless it's been standardised by converting it to a DrawFile format. At this stage I have to admit that I don't have Artworks (though, if I'm going to run this new look column properly then I suppose I ought to get it) so I don't know if there is an option to save your drawing in DrawFile format. Anyway, if there isn't such an option then there ought to be and you ought to use it when you send me or another Archive author a vector graphics file you've created in Artworks!

I will cover drawing packages in more detail another time. Let's move on to paint.

Painting packages include Acorn's Paint and Pro Artisan from Clares Micro Supplies. A long time ago I bought Artisan when it ran under the single tasking operating system called Arthur (RISC OS 1). I didn't upgrade so I don't have Pro Artisan (again, perhaps I need it in order to effectively handle the correspondence this column is going to generate—but I can't afford it, yet). However, like you, I do have (and use a lot) Acorn's own Paint package.

Painted pictures use what are called bit mapped graphics. On the Acorn machines these bit mapped graphics are called Sprites. A typical bit mapped graphic consists of a myriad of dots called pixels. Every point on the picture is a pixel and every pixel has a colour.

The Acorn standard format for a bit mapped graphic file is the Sprite format (this format is different from the DrawFile format). The Sprite format has recently undergone development so that more colours (about 16 million instead of only 256) can be specified. I thought that I would be unable to read 32 bit sprite files on my A540, but I was wrong—read on!

My recollection of the original Artisan is that the file format used was the Acorn Sprite format. Whatever the case then I'm sure that Gareth (or one of you) will be writing to me to let me know as soon as this Archive hits your letter box! I must stop digressing too far and get to the point. If you use Pro Artisan to create your bit mapped graphics files then please make sure that when you send them to me or other Archive authors that we can read them. The best way of ensuring that that is the case is to save them in Acorn's Sprite format or, if you can't do that, then convert them to that standard format using a utility such as ChangeFSI. By the way, I notice that the version of ChangeFSI I have (0.95) accepts the file type DE2 (ProArtisan compressed pictures) and will output the Acorn Sprite format. It is my guess that Clares' Pro Artisan will accept Acorn Sprite format files (and if it doesn't then it should) so that you can take a standard Sprite and load it into Pro Artisan.

In an earlier article I raised the matter of exchanging Sprites with other Archimedes users who have different mode utilities from you. My most recent experience (in fact today) is a disc I've received from David Spong (who lives in Hong Kong and is about to move to Australia). He sent me a disc containing a 'deep sprite' (which he'd created on his Risc PC). His complaint was that he couldn't load it into Fireworkz. At first, using Paint, I couldn't see it either and jumped to the conclusion that this was because I didn't have a Risc PC. However, I decided that I would have a go at conversion with ChangeFSI. That did convert the sprite so that my Paint could read it; mind you, I've probably lost some of the subtle shades of colour but at least it appears. This test leads me to say that the latest version of ChangeFSI (V 0.95) will convert some 32 bit sprites into the 'old' 8 bit sprites even though I can't display the new 32 bit modes. If you don't have the latest version of ChangeFSI (and think you need it) then you can obtain it through Norwich Computer Services at the Archive address.

Oh yes! The reason David couldn't load his 'deep sprite' into Fireworkz was because he hadn't got the new TaskX module (see last month's Archive for details of why).

I've sent it on to him.

So here's some advice from me about buying 'future proofed' software packages. Make sure that the package you buy will both import and export files in a format which is accepted as standard. For desk top publishing I suggest that the standard is RTF. If you do insist on the facility to load and save files in standard format then, when you finally upgrade your software (to one with more facilities—eg from Paint to, for example, Pro Artisan) you will be able to take your personal data files with you into the next (better) package. After all, you'll find that those data files are more valuable than the software package because of the time and effort you've put into creating them.

Fireworkz Pro

The next question comes mainly from overseas correspondents but also from some schools and from other long term correspondents of mine. "What's happened to Fireworkz Pro?" they ask. The latest information I have about Fireworkz Pro is that it should be available for the BETT Show in mid January 1995. Demo discs will be available a few weeks after the release of the package. I know that a lot of you with PipeDream are waiting for this version of Fireworkz before spending your cash because you believe that will be cheaper than upgrading in two stages.

Fireworkz Pro for Windows is planned for release a few months after the Archimedes version.

By the way, one of the attractions of Fireworkz is that you can load and save files in RTF format.

Schema

Oh yes! Earlier I suggested that Gareth Owen might have been reading this column for some time now. The reason is that one of Clares' products is Schema. Schema is a spreadsheet and so it is a competitor of PipeDream and Fireworkz. If I were Gareth then certainly I'd have been reading everything written about PipeDream and Fireworkz in Archive.

I remember reading some long time ago that someone was proposing to write a column for Archive similar to the PipeLine column but for users of Schema. I don't think that SchemaLine exists so, although I don't have Schema, if you have a general spreadsheet problem then please feel free to write to me and I'll see what I can do. Better still, if you are willing to entertain the idea of providing a help line for users of Schema then let me know and I'll make sure you get the letters!

Style and Impression

It has been some time now since I upgraded from Impression II to Publisher. I get on fairly well with Publisher but I decided that I'd better find out more about Style so that I could write about it from first hand knowledge. The consequence is that I've bought Style from Norwich Computer Services and installed it on my A540 machine. I've installed Publisher on my old A440. One fringe benefit which arises from 'downgrading' my A540 is that I now I don't have a dongle on the A540 (more about this later).

I expect that it's my imagination but since I downgraded I think that my printing speed has improved and I certainly don't get the printer hangups I used to get (albeit infrequently) when I did something unusual such as cancelling (aborting) a printing operation.

Unless I hear anything to the contrary from those of my readers who are into these things more deeply than I am, then my advice to you has to be to buy Style rather than Publisher unless you really need the extras which you get in Publisher.

If you feel that you have benefited from buying Publisher rather than Style then please drop me a line and tell me which Publisher features you use that are not available in Style and I'll pass the information on.

David Crossley tells me that the current version of Publisher is V 4.04 and that this cures a bug which sometimes causes the lock to page grid option to corrupt a document. I got this problem with the lock tp page grid so I turned it off. To get the new version free of charge you must send Computer Concepts your number 1 master disc (and you must have registered your copy of Publisher with them). I think I have the latest version of Style, V 3.04 (or NCS is dumping out of date stock). If you have a later version then please let me know.

Dongles, turbo printer drivers etc

Under this heading I must be careful to say exactly what I mean otherwise I might find myself (or Archive) with law suit on my hands.

So as to balance the critical remarks which follow, let me start with more positive comments by saying that I have received some letters about dongles and turbo drivers which go along the lines of (a) "I have never had a problem with a dongle. They penalise only the unscrupulous. They are a cost effective and efficient method of eliminating software piracy" and (b) "I could never get my work done in time without the printing speed of my turbo driver".

However, such positive comments are rare. Here is a critical comment which (in slightly varied form) occurs quite often. "I had problems such as the printer hanging up and machine crashes which occurred only when I had the dongle in the printer lead. I sent my dongle back to Computer Concepts. They said that there was nothing wrong with it but that they were replacing it anyway. Since then the frequency of such problems has decreased dramatically".

There is always a 'worst case' and I must quote it. One of my correspondents had a three dongle system plus a special turbo driver lead. The dongles were for Impression II, Artworks and WorraCad. He says that the turbo driver lead is special (ie non standard) because there are a couple of the connections swapped over deliberately. He was getting a very high frequency of hang up and crash type problems. This is serious for him because he uses his Archimedes for his business. Apart from quoting the cliche "Time is money" he claimed that the sheer frustration of these stoppages was reducing his ability to concentrate; it was destroying his creativity and hence his productivity. When he wrote to me he was asking me to approve of his decision to ditch the Archimedes in favour of a PC!

Let me be very careful to say exactly what I mean to say next.

He came to me for advice and my reaction was that his problem could be anywhere, for example he might have a faulty piece of RAM. I suggested that what we had to do was to isolate the problem by not using various things (hardware and software) until there was an improvement. Anyway, amongst the other suggestions I made, one was that, simply as a trial to try to isolate the problems, he should remove all his dongles and his special turbo lead and then see what happened.

Of course, you've guessed the gist of what I'm going to say but you won't have guessed the detail. Eventually he upgraded from Impression II to Style getting rid of one dongle. He downgraded from Artworks to DrawPlus getting rid of a second. He got a version of WorraCad which didn't need the last dongle. Finally he reverted to using Acorn's (non turbo) printer drivers so getting rid of the (non standard) special turbo lead.

His comment is that his overall productivity has improved, the frequency of hangups and crashes has dropped to a negligible rate. He attributes the improvement to the removal of the dongles and the (non standard) turbo lead. Of course, he may be mistaken and he just might have inadvertently cured something such as a bad connection—but he doesn't think so.

Let me know how you've got on with dongles and turbo drivers. I'll be most interested. In the meantime my general advice is that, before buying some specialist piece of hardware or software which has a non standard element you must ask yourself whether the benefits of using something which is non standard outweighs the potential difficulties which might (or might not) arise.

For my own part I am pleased to have got rid of my Publisher dongle and I don't feel the need for a turbo printer driver since I print to a disc file and then print from the disc file to the printer in background using only Acorn's standard facilities. I don't have the space this month to explain how I do this so you will have to wait for it to appear in a later article.

Memory Management

Another question which has been put to me is "Is Impression Selfish?". Let me explain what my correspondent means by this. Many packages such as PipeDream (V 4.13) and Fireworkz (V 1.07) use only RAM; they can't use disc space as an alternative to RAM. With nearly all the packages that work this way there is no problem since it is unusual to be working on large files with these packages. However, with a desk top publisher package such as Style, quite often you will find yourself with huge files of many megabytes. If your available RAM is not big enough then Style will treat your hard disc as an alternative to RAM. However, up to the point where there is no RAM memory left in your machine Style keeps grabbing memory as if no other application exists.

I'm sure that up to now you'll be following me and generally agreeing with the strategy used by the writers of Style. Now let me explain the problem by making up a typical example. You have a largish file in Style, in it is a DrawFile and you want to alter the DrawFile. Simple! Hold down <ctrl> and double click on the graphic. What should happen (and does happen most of the time) is that Acorn's Draw loads and the graphic loads into Draw—isn't Object Linking and Embedding (OLE) wonderful? You change the graphic and save it back directly into Style. The problem is that sometimes, because Style has grabbed all the memory, there isn't enough left for Draw to load. What's the answer?

Another made up but typical example. You have a file in, say, PipeDream format which you wish to load first into PipeDream, edit it a bit, and then copy it across into your Style document. At the crucial moment PipeDream won't load because there's no memory left. Style has grabbed it all and won't relinquish any to PipeDream (even though it could give some up and transfer part of it's own document to disc).

Well, there are at least two ways of tackling this problem. The first is to use Style's minimise memory option. I can't get this to work properly with the types of file I use. I get a message saying that Style can't minimise memory if the document is in single file format—perhaps I ought to use the old application format rather than the new ImpDoc format. Suggestions will be welcome.

The second is to make sure that you first load all the packages and utilities (such as Draw, Paint and don't forget your Printers) which you think you might need before loading your big file into Style. I find that loading a large dummy file into PipeDream before loading my large Style document is a good way of reserving space for an alternative PipeDream file.

Back to the question of selfishness. I don't think that Fireworkz gives up unwanted memory as generously as PipeDream does and I think that Style doesn't give up any memory at all once it's grabbed it! That's what my questioner means when she asks whether Impression is selfish.

There is no doubt that printing is faster if you have a lot of spare memory. In my A540 I have 8Mb of RAM—many of you have only 4Mb so you'll have problems before I do. let me describe (in outline at least) my own method for printing big Style files quickly. Before trying to print a big Style file I quit Style from the icon bar so that all the memory Style has grabbed is released. I reload the file by double clicking on it and then Print. What seems to happen is that when I've been editing the Style file the memory used by Style has grown but never shrunk. By quitting and reloading I've released some memory. As I have said, Print uses all available memory (and, the more free memory available the faster it works) so that, if you want to print quickly then you need as much memory available as possible for printing.

The Acorn Printers utility does release memory once it's finished printing.

The Sale of Goods Act

Oh dear! I wish I hadn't mentioned that one of my correspondents wrote to me saying: "Software containing bugs contravene the Trade Descriptions Act and must be upgraded free of charge at the earliest opportunity". I said that I wouldn't go that far but it seems that many of you wish that someone would take a software supplier to court (but you wouldn't want to be the one to do it!) and so encourage the speedier distribution of bug free versions.

Of the many letters I received on this topic the longest was from Brian Edwards (two pages of detail). Brian makes the point that a bug fix is not an upgrade and that I have too often referred to a new version of a package as an upgrade when I shouldn't. A bug fix does not add extra features but makes the software work in the way it should.

An upgrade adds new features. Brian echoes many other correspondents in saying that bug fixes should be carried out as quickly as possible and not await the next (feature adding) upgrade. He, like so many of you, is willing to pay for upgrades which are not bug fixes (provided that he has a use for the extra facilities made available by the upgrade); at least he has the option of paying for extra facilities or doing without them.

In Brian's penultimate paragraph he writes "I feel the software suppliers are doing their best to confuse the two (bug fixes and upgrades) in order to make unjustified charges . . . . (you must) ensure that this confusion (in the minds of purchasers) does not occur".

I accept that I do use the word upgrade when I should use the phrase new version. From now on I shall try to reserve the word upgrade for a new version which adds features.

Rounding

Up to now I've received only one solution to Colin Singleton's puzzle—and that solution is in BASIC whereas I hoped for one using a spreadsheet! Eric Ayers' solution is on the monthly disc.

On the same subject Ian Copestake has written to me saying that he has found the Fireworkz function round(slotref,integer) useful for rounding numbers.

Seeing Applications

I've had many letters on this subject. What you all agree is that it is a good idea to let your System see all your Applications before you start but many have pointed out that you don't need them to be in the root directory of your hard disc in order to achieve this. Some of you use the new features of the Risc PC to look at all the Applications, many of you load the Applications to the pinboard. Danny Fagandini uses a utility called !SuperBD (a Super back Drop utility?) because the icons are smaller than those of the pinboard.

The preference seems to be to keep Applications out of the root directory but in a sub directory (such as Applications) or many sub directories and to use some method of running all the boot files during the boot up procedure.

Monitors SyQuest SCSI etc

Perhaps I've been lucky. All the feedback I've had on these topics is positive. By this I mean that those who have done anything other than that which I advised (eg you bought a 14" monitor rather than the 17" one I recommended) have written to say how they have changed their minds (before reading my article) and now have a 17" monitor, or a SyQuest SCSI drive, etc. Nobody has written to me suggesting anything different (well, not yet)! So I'm pleased with the way those two articles have been received. I do promise to get on to the next one soon.

The Efficiency of Acorn Applications

Was it only last month I said something like "If you want to run PC Applications and PC hardware then buy a proper PC". Anyway, one of the comments I've had from several correspondents is that PC packages seem to use up a lot more hard disk space than similar specification packages designed to run on an Archimedes. I don't think I know enough about this to make anything I say worth while—but I'd like to hear from you.

Clan Acorn

This month I was going to say much more about Clan Acorn than I have room for. I have referred in a past article to Acorn Enthusiasts. Members of Clan Acorn and what I referred to as an Acorn Enthusiast are one and the same. At present one of the big advantages of joining Clan Acorn is that you can buy a Risc PC without buying the Acorn monitor. As I said in an earlier article I think that Acorn should encourage a mix-and-match policy for the Risc PC as a way of keeping the more scrupulous hardware suppliers in business (in competition with the box shifters who compete only on price and not on service).

In this context I have had letters from people who have had bad experiences with box shifters and have vowed never use them again. They agree with me that whilst NCS do charge more than box shifters for standard packages, if something goes wrong then they finish up spending a lot more than they would have spent with NCS. Please take this advice from me and those who have written to me. Unless you know that you have the expertise to fix anything which goes wrong yourself then don't buy from the cheapest supplier but buy from one whose profit margin is sufficient for them to be able to afford to provide good service.

Back to being an Enthusiast, let me persuade you to join Clan Acorn and then write to them suggesting that they should allow reputable suppliers (such as NCS) to advise on and then supply non standard mix-and-match packages. Clan Acorn Life Membership costs £15; membership forms are available from the Archive office.

Correspondence

Once again it must be time that I reminded you that my address is that of Abacus Training; you'll find it on the back inside cover of Archive. It is much quicker to write to me direct than to write via the Archive office.

I notice that many Archive authors are asking for a copy of correspondence to be on disc. My personal preference is that you send me a disc containing the bulk of your correspondence (together with example files if appropriate) but that you enclose a short written note outlining the nature of what is on the disc. This allows me to quickly determine what priority to give to your correspondence. After all, if it's a contribution then you probably don't need a reply as urgently as someone requesting help. Please write your name and address on paper somewhere just in case there is something wrong with the disc.

Return postage and a self addressed sticky label does help more than you might imagine. It is the time saved which is more important than the stamp money.

I can not read 1.6Mb format discs so please send me files on discs formatted to 800Kb.

Finally

Thanks for all your most interesting letters and for the many kind words you have written about my articles. Not only do I find them interesting but also very useful. Please keep them cominrd)