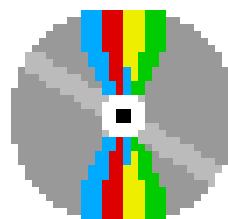
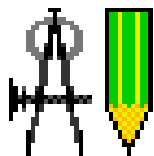
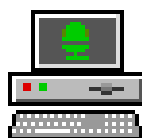
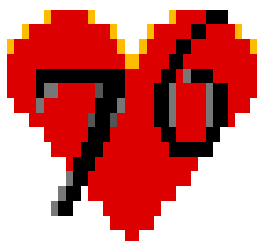


THE
ARM
CLUB



Eureka

The Magazine for Members of The ARM Club
Issue 19 — Summer 1996



digital



StrongARM steals the show

The ARM Club, FREEPOST ND6573, London, N12 0BR
Tel 0171 624 9918 Fax 0181 446 3020

CONTENTS

Eureka 19 — Summer 1996

StrongARM 3
Crystal Rain Forest 2 5
Our New Web Site 8
Writing RISC OS modules 9
Club People and Places 13
Acorn World 15
Networking Your House 16
Arnold's Observations 19
DiagramIt 21
Pocket Book Corner 24
ViVID5000 26
Font Designers' Toolkit 30
My World 32
Bulletin Boards 35

Anagram Genius 36
OmniClient 38
DIY CD-ROMs 41
Well I Never Knew 46
Creating an HTML page 47
DTP CD-ROMs 50
CDtracker 52
Termite Internet 55
The Eureka Disc 62
Bitfolio Clip Art 63
High Speed Serial Port Card 66
HeartBeat 70
Corel Draw 3 73
Spobbleoid 78

Published by The ARM Club, FREEPOST ND6573, London N12 0BR
Fax: 0171 288 3451 Technical Telephone: 0973 891330
Electronic Mail: eureka@armclub.org.uk
Internet: <http://www.armclub.org.uk/>

Chairman: Steve Arnold Secretary: Chris Price
Treasurer: Mark Smith Membership Secretary: Toby Smith
Product Development: Tom Hughes Public Relations: Andi Flower
Events Coordinator: Ralph Sillett PD Librarian: Nick Evans
Committee: John Bancroft, Matthew Cook, Chas Mills.

Editor: Peter Jennings Technical Editor: Simon Burrows

© 1996 The ARM Club, All Rights Reserved

All change

As we all know, nothing in life ever stays the same, not even something as perfectly formed as the ARM Club, and there have been a few changes since our last issue.

First we are delighted to announce that we have a new Secretary. Chris Price has taken over this important job and can be contacted at the Club's Freepost address or, if you have an email account, at Chris@armclub.org.uk.

Simon Burrows, who has been editing this magazine so well for so long, has moved along to take on two new jobs. One of them is the newly created position of the Club's Publications Officer. He gets his chance to comment on a later page.

The name that now appears at the bottom of this column is the new Editor of Eureka and I am pleased to say that Simon has agreed to become the magazine's Technical Editor and keep an expert eye on all the techie stuff that could otherwise slip by unchecked.

Also, the Club has an exciting new World Wide Web site on the Internet, with a new address. Tom Hughes has temporarily taken over as Webmaster from Andi Flower. You can read more about that on page 8.

Editorial

What's new

In this issue of the magazine we have an account from Mark Smith of the jaw-dropping impact which StrongARM made when it was shown in public for the first time at the Wakefield show and our Cambridge open day.

The Internet is featured prominently. As well as the details of our new WWW site, there are articles on Termite, the Atomwide Serial Port Card and making your own Web pages. There are also details of how to set up your own network at home and a look at OmniClient.

If you are interested in graphics you can read about using Corel Draw with the PC card, and owners of pre-Risc PC machines can consider the possibilities offered by ViVID5000, which is reviewed. Collections of clip art on discs and CD-ROMs also come under scrutiny.

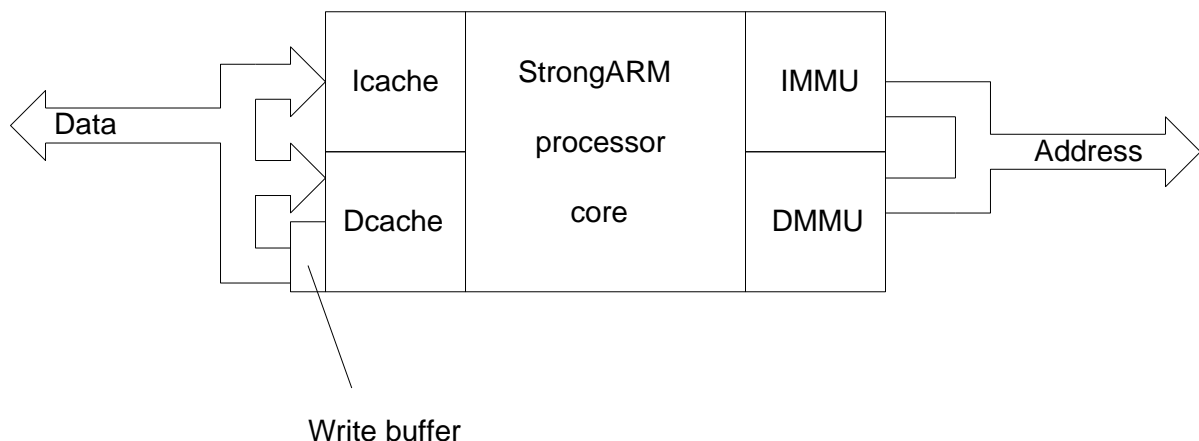
Add in the regulars and it all adds up to another varied selection reflecting the wide interests of Club members.

Peter Jennings
Editor, Eureka

At the Wakefield show at the end of May and again at our Cambridge open day a week later, prototype versions of ART's new StrongARM card were demonstrated to the public for the first time. A good few jaws were dropping as people saw slide shows of JPEG images being "tumbled" (spun) onto the screen with the preceding image in the background at around five times the speed at which a Risc PC 700 was doing the same thing. The speed up was also demonstrated with

same fabrication lines as Digital's world-beating Alpha processors. This has enabled the designers to come up with a device that can be clocked at up to 200MHz, 5 times the clock speed utilised by ART on their ARM710 cards.

In addition, a number of major changes have been to the way that StrongARM works. Instead of having one cache to hold and speed up access to frequently used data and ARM instructions, there



the Artworks Viewer and Draw all performing at many times their ARM710 speed.

So how have ART been able to produce a card that runs software so much faster on a bog standard Risc PC? The key is the new StrongARM 110 processor jointly designed by ARM and Digital. The processors are manufactured using the same 0.35 micron process and on the

are now two separate ones - one for data and one for instructions. In jargon terms, this represents a movement from Von Neumann to Harvard architecture. At 16K, each cache is twice the size of the combined cache on an ARM710 and four times that of an ARM610. In addition, the data cache is "write-back", i.e. it can hold stored data without it having to be written back to slower main memory until such time as the space in

the cache is required for something else.

To further enhance performance, a number of instructions that used to require a number of clock cycles to complete are now executed much more quickly. This particularly applies to integer multiplies which will execute up to 20 times faster than on a 40MHz ARM710 and should make quite a difference to the speed at which calculations are performed using the floating point emulator.

Compatibility Issues

The downside to this vast performance improvement is that some software will cease to work. At the time of writing, third party applications are now only beginning to be tested, but it is already known that some major software, including ArtWorks, will need minor updates.

The main problem is down to the separate instruction and data caches and ARM code which is modified or created "on the fly". The reasons are quite complicated, so the following is only for the technically minded but may be of interest to programmers.

If an area of memory is read into the instruction cache and then subsequently modified, the copy in the instruction cache will not be modified to match. If the processor is then made to execute those modifications as code, the original contents of the memory will be executed,

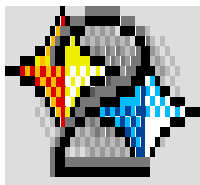
not the new code. In addition, when data is stored, it may reside in the data cache and then the write buffer for a while before being written back to memory, so code modifications may never even reach memory before an attempt is made to execute them.

The solution to the problem is a new SWI "OS_SynchroniseCodeAreas" that will be present in the version of RISC OS that ART supply with the cards. If this is called between modifying/creating the code and running it, all should be fine. This will flush everything out of the instruction cache, force write-back on the data cache and drain everything in the write buffer, so all modifications will be in memory from where they will be read when execution commences. Obviously, this will have an effect on performance, so should be used only where absolutely necessary!

Availability

Availability of the first cards is scheduled for September and will cost £249+VAT which includes a ROM upgrade and replacements for some of the standard hard disc software. ART were also planning to produce ARM810 cards which, although significantly slower, would be cheaper and more compatible with existing software but these may not appear now that Xemplar has decided to adopt StrongARM .

Mark Smith



Crystal Rain Forest 2

Susan Bancroft revisits the Crystal Rain Forest on a new mission to find a secret hideaway

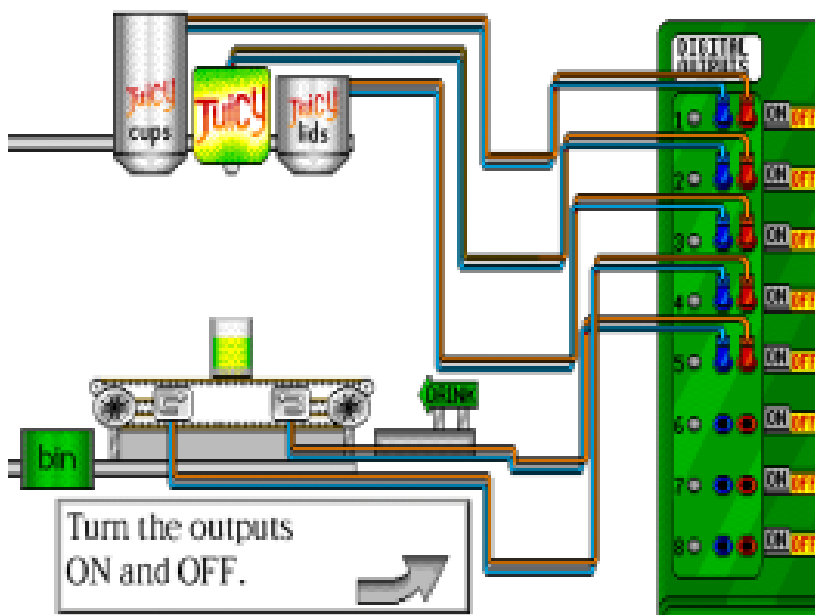
I came to know the original Crystal Rain Forest package very well as a mother helper at our local Primary School. Courtesy of the Tesco voucher campaign, the Year Two classroom has a shiny Acorn computer. The Headmaster had chosen the Sherston package, realising it might be a challenge for 6 - 7 year olds. He asked if I would sit with small groups of children and test out the software.

Everyone was very enthusiastic. Many children were more familiar with games machines, with their sophisticated graphics and a break-neck speed of action. However, they settled quickly to the slower demands of performing set tasks, in order to complete a story. These tasks included sorting shapes, steering a boat using angles and writing a short program to build a rope bridge. The most taxing problem was left to the end, where they had to devise a program to create crystal shapes.

The children were so involved in the story, helping two children save the rain forest and the poisoned king, that they

were learning without even knowing it. The bright colours and the short animated sequences also held their attention.

The sequel, Mission Control, promised more of the same good things. My first impression was to note an improvement in the packaging. Maps and work sheets have been reduced in size, so they do not need folding and the printed card was much thicker. Nothing can be totally child-proofed, but materials are



First problem — work out how to use the controls to pour yourself a drink

now less likely to become torn. The four discs sit in separate compartments within the plastic folder.



A user guide is much more comprehensive. We are given a detailed synopsis of the story and the seven tasks that must be completed. Not every parent or teacher is computer confident, and this information serves as a useful reference when the cry comes, ‘What do I do next?’ I noticed that there are several levels of difficulty for most of the problems that have to be solved. This will obviously increase the life of the software.

The program is easily installed on to the hard disc. Just one disc needs to be inserted each time to run the program. Child's play in fact.

Old friends

We meet again our old friends — Professor Roberts, the boy and girl (strangely un-named), but a new villain. Gomez, a notorious criminal, is poisoning the rain forest with his

chemical plant, aided by a sinister army of robots. His secret hideaway has to be discovered and neutralised.

The story feels much more pacy, as there is a great sense that you are racing against time. In fact, you are often told to perform a task quickly — although in reality there is no set time limit. Children will find this adds to the

excitement. It would be difficult to prise any child away from the computer, especially when the stowaway robot is cutting his way into the hoverheli using a laser gun.

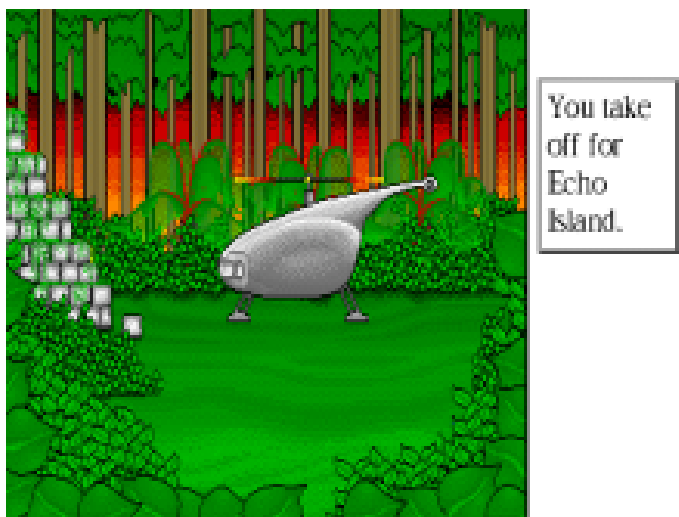
Quicker progress

Players can zip from one location to another using the hoverheli. In Crystal Rain Forest 1, you moved by plotting angles and counting paces forwards or backwards. Here, it is just a matter of clicking on boxes that select North, South, East or West and numbers 1 to 3. Progress seems much quicker and less cumbersome.

The set tasks are a different matter entirely. These often involve activating a broken machine. Wiring has to be connected to the input, output and motor. A brief program must be written to get everything moving, which many children will find rather daunting. It is made all

the more difficult because the screen moves away from the task in hand to a blank screen for writing the program. A split screen would be more helpful, as you could study the diagram to work out the chain of command. There is a help option to repeat the instructions, and information will flash up if you are struggling. I can imagine children becoming frustrated and so, realistically, adult guidance will be necessary here.

The learning curve will feel much more apparent in this sequel, Mission Control. Still, the objectives are worthy enough. Children are being taught the most basic principles of sequencing and programming. My favourite task is the first — getting a drink out of the Professor's broken juicy drinks machine. There are three storage units containing cups, juice and lids, above a conveyor belt. The child has to switch the containers and conveyor belt carefully on and off to produce a drink in a cup with a lid. This is a most effective lesson in logic and sequencing, with hilarious results if the commands are not accurate.



I would highly recommend the program. The Crystal Rainforest also makes a vital environmental statement. In this scheme of things, Gomez the villain comes to a sticky end. There is a separate booklet full of educational ideas to develop the various themes. However, teachers and parents must be prepared to give guidance with the more difficult tasks. My eight-year-old son Jonathan needed help the first time around. He is so enthralled with the program, he is now working his way through on his own. Could there be a better recommendation for a piece of educational software than that?

Susan Bancroft

Mission: Control — Crystal Rain Forest 2 costs £44.95 (£67.43 for a primary site licence) +VAT.

A Rain Forest resource book, with 100 photo-copiable activities for children of eight to 11 years, is £13.95 (No VAT).

Sherston Software Ltd are at Angel House, Sherston, Malmesbury, Wiltshire, SN16 0LH.

Tel 01666 840433. Fax 01666 840048.



Those readers who are on the Internet may well be aware that the Club has had a web site for some time now, hosted at Brunel University and maintained by the Club's PR officer, Andi Flower. With Andi having graduated, the Club has moved it's web pages to a new address, and I have temporarily taken over as the webmaster.

The new address for the Club's web pages is <http://www.armclub.org.uk/>, and there are already several new features to the web site — the PD library catalogue can now be searched online, enabling you to locate the discs that you want, as can the Game On! compatability database.

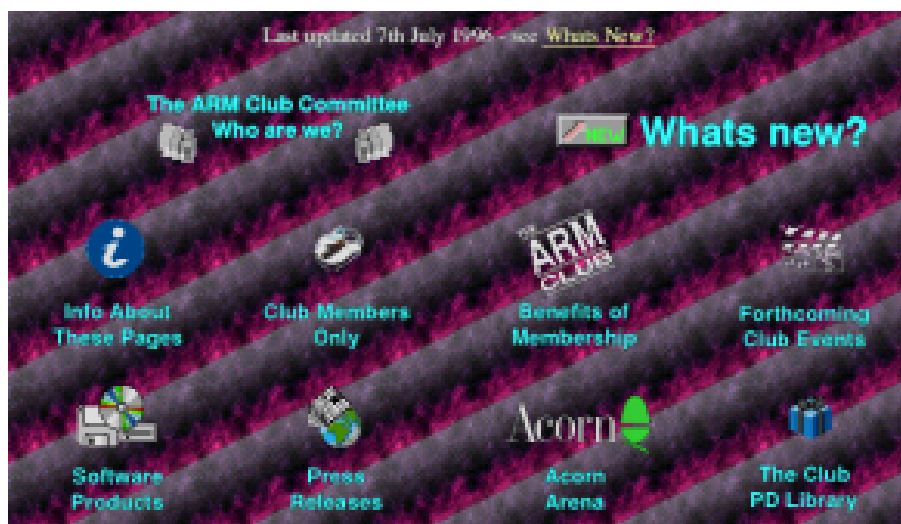
The pages have also been bought up to date with all the latest changes — the list of committee members now includes

all the new members, and the positions held by each member have been updated.

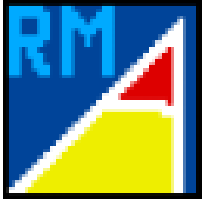
By the time you read this, more changes will probably have occurred, and I hope to be able to continue improving and extending the pages as time goes on. An online membership form is among the list of things I would like to add to the pages.

Hopefully, club members will find these pages useful. Anyone who has any comments on the existing material or suggestions for changes they would like to see should contact the webmaster by email to webmaster@armclub.org.uk.

Equally, any member who would like their web site to be added to the list on the club site should contact the webmaster at the above address. I would also encourage members to link to the Club's pages at the above address. Anyone who is already linking to the old address should change their link, as the old pages will be deleted soon.



Tom Hughes



Writing RISC OS Modules Part 4

In his continuing series, Mark Smith explains how to use RISC OS service calls to keep your module informed of what is happening.

Service calls

Service calls are passed round to each module whenever an event occurs or is about to occur that a module may be interested in. In some cases, modules may claim service calls to prevent an action from being performed and stop the notification being passed to further modules. For example:

`Service_PreModeChange (&4D)`

On entry: R1 = &4D

R2 = Selected mode number

There are a number of things that a module can do when it receives this service call.

1) It can preserve R1 and R2, allowing the mode change to take place.

2) It can claim the service call by setting R1 to 0 which will prevent it from being passed to any further modules and stop the mode change taking place. If the service handler returns with R0 containing a value other than 0, it is taken as the pointer to an error block which will be reported.

3) It can change R2 to an alternative

mode number that it wants to be used instead.

To react to any service calls, your module must have a service call handler. The address of this code is held in the module header. It is entered with R1 identifying the service call (e.g. &4D for `Service_PreModeChange`) and possibly other registers holding data dependent on the service call.

Example 6 — ResourceFS File module

ResourceFS is the read only filing system provided by RISC OS 3 so that modules, both in ROM and softloaded, may make files available for their own use, the use of other applications, or the user.

For example, all the message files (which provide the text for many messages displayed to the users) required by RISC OS ROM modules are held as ResourceFS files. To set up the computer for non English speaking users, all you need to do in theory is create appropriate versions of the Messages files and create a module to lodge the replacements in ResourceFS.

In addition, in RISC OS 3.1 and 3.6, applications such as !Edit, !Paint and !Draw are all held in ResourceFS for rapid access (and it saves RAM as well since the applications actually run from a module in ROM rather than being loaded into application memory).

Example 6 shows how a module can lodge files in ResourceFS.

The example module uses SWI ‘ResourceFS_RegisterFiles’ and SWI ‘ResourceFS_DeregisterFiles’ in the initialisation and finalisation routines respectively to register files when the module is loaded and deregister them again just before it is removed from memory. The lowest significant bit of the module’s private word is used to indicate whether or not ResourceFS is currently available and the files are currently registered.

ResourceFS_Deregister files is only called on finalisation if the files are currently registered.

The module also makes use of two service calls which are made by ResourceFS when starting and dying: Service_ResourceFSStarting and Service_ResourceFSDying respectively. When ResourceFS starts, the module attempts to register the files with it by jumping to the module initialisation code. When it dies it marks the files as unregistered by clearing the lowest significant bit of the private word.

Finally the actual data for the files provided by the module are presented in the following format:

Offset	Size (bytes)	Meaning
0	4	Offset from here to the start of the next file’s data
4	4	Load address of file (or &FFFtttdd where ttt is the filetype and dd is the top 8 bits of the datestamp).
8	4	Execute address of the file or the bottom 32 bits of the datestamp).
12	4	Length of the file.
16	4	File attributes.
20	n	Null terminated pathname from Resources:\$
Aligned 4	m	Length of the file + 4. File data.

The file attributes are as follows:

Bit	Meaning
0	Has private read access
1	Has private write access
3	Is locked against deletion
4	Has public read access
5	Has public write access

All but bit 0 are meaningless while the file is in ResourceFS since it is a read only filing system, but if the file is copied onto another filing system, the attributes will be preserved.

The above data is followed by the next file and so on for all files to be registered.

The list is terminated by a 0 in place of an offset to the start of the next file's data.

The example module lodges one small text file as Resources:\$.Sample.Sample1. With the module loaded, you can view this file by clicking menu over the Apps icon on the icon bar, then double clicking on Sample and then Sample1.

Mark Smith

Example 6 **Also on the Eureka disc**

```
10 REM >Example6
20
30 REM By Mark Smith, June 1996
40 REM May be freely copied and used.
50
60 filename1$="Sample.Sample1"
70 loadaddr1%=&FFFFFF00
80 execaddr1%=&00000000
90 attributes1%=&11
100
110 Service_ResourceFSDying=&5A
120 Service_ResourceFSStarting=&60
130
140 DIM space% 512
150 start=0:init=0:final=0:service=0:table=0
160
170 FOR A%=4 TO 6 STEP 2
180 P%=0
190 O%=space%
200 [OPT A%
210 \
220 EQUd start
230 EQUd init
240 EQUd final
250 EQUd service
260 EQUd title
270 EQUd help
```

```
280 EQUd table
290 \
300 .title
310 EQUd 'ExtraResource'+CHR$0
320 \
330 .help
340 EQUd 'ExtraResource'+CHR$9+'1.00 (09 Jun 1996)'+CHR$0
350 \
360 .init
370 .resourcefsstarting
380 STMFD R13!,{r0 ,R14}
390 \ Store return address
400 ADR R0,ResourceFSfiles
410 SWI 'XResourceFS_RegisterFiles'
420 \ Register files (as long as ResourceFS is running)
430 MOVVC R0,#1
440 MOVVS R0,#0
450 STR R0,[R12]
460 \ Keep in use flag in private word
470 LDMFD R13!,{r0 ,PC}^
480 \ Return
490 \
500 .final
510 LDR R0,[R12]
520 TST R0,#1
530 MOVEQS PC,R14
540 \ Check if module is active
550 STMFD R13!,{r14 }
560 ADR R0,ResourceFSfiles
570 SWI 'XResourceFS_DeregisterFiles'
580 \ If it is, deregister files
590 LDMFD R13!,{pc }
600 \ Return
610 \
620 .service
630 TEQ R1,#Service_ResourceFSStarting
640 BEQ resourcefsstarting
650 \ Check for Service_ResourceFSStarting
660 TEQ R1,#Service_ResourceFSDying
670 MOVNES PC,R14
```

```

680 \ Or Service_ResourceFSDying
690 \_____
700 MOV R0,#0
710 STR R0,[R12]
720 \ If ResourceFS is dying mark module
    as inactive
730 MOVS PC,R14
740 \ Return
750 \_____
760 .ResourceFSfiles
770 .file1
780 EQUd file2-file1
790 EQUd loadaddr1%
800 EQUd execaddr1%
810 EQUd endfile1-startfile1
820 EQUd attributes1%
830 EQUs filename1$+CHR$0
840 ALIGN
850 EQUd endfile1-startfile1+4

```

```

860 .startfile1
870 EQUs 'This is a sample text
    file'+CHR$10
880 .endfile1
890 ALIGN
900 .file2
910 EQUd 0
920 \_____
930 ]:NEXT
940 OSCLI 'SAVE ExtraResrc
    '+STR$~space%+"'+STR$~O%
950 OSCLI 'SETTYPE ExtraResrc FFA'

```

There will be more from Mark in the next issue.

Meanwhile, he can be contacted by emailing mark@armclub.org.uk or by writing to the Club's Freepost address.

Club notes

Payments

We are sorry that we can normally only accept payment for memberships and products in British Pounds and we do not have the facility to accept credit cards because of the high costs this would entail. If this really is a problem for any overseas members, we may be able to make special arrangements if you contact the Treasurer. Emailing treasurer@armclub.org.uk is the quickest way of doing this.

Also, because a small number of members have neglected to pay for goods they have ordered, we can now unfortunately not despatch any items until payment has been received.

Technical support

Please note that the Club technical support covers only RISC OS. We cannot support PC Cards, RISC iX, ARM Linux or RiscBSD as we do not have the expertise to answer questions in these areas. If you have a query about running software on your PC Card, it is usually best to contact the supplier of the software in the first instance or, if necessary, the supplier of the card.

Simon Burrows moves on

Some of you will know that I started a new job 18 months ago and recently it has become clear that I no longer have enough time to continue producing Eureka.

Looking back to the very first issue of Eureka, a huge amount has changed about the Club, then known as Club A3000 and run by founder Rene Barreto, as well as Acorn itself.

Earlier this month I called in to Acorn's new offices which happen to occupy the same building used by Acorn's technical staff years ago. I was struck by the optimism and enthusiasm of the people there, very reminiscent of Acorn's early days before it grew into a big company with the associated culture and internal politics. Maybe things are turning full circle at Acorn..?

Issue 1 of Eureka was produced by myself and Andrew Thacker, our graphics designer. Committee members who have been around since the very early days include John Bancroft, Nick Evans and Steve Arnold. Other early members including Rene Barreto and Bruce Dickson often help us out when they can.

My first involvement with the Club was at the BBC Acorn User Show at the Horticultural Halls in 1990 when I was roped into helping on the Club stand by Rene Barreto, whom I had never met before.

The following year I was persuaded to start producing our magazine/newsletter. I think the main reason was that I was lucky enough to own a laser printer at the time. Andrew Thacker stepped in to make up for my lack of artistic talent!

I'm very pleased that Peter Jennings has agreed to become Eureka's new Editor. He has been a regular contributor over the years and is very experienced in journalism and the Acorn world.

I will not be disappearing from the scene. Peter has invited me to become Technical Editor of the magazine and I have taken up the new position of Publications Officer on the Club Committee.

Thank you for all your help and support over the years, please give Peter as much encouragement and I'm sure that the magazine will continue developing as it has done over the past few years.

Boldly into Europe

*"It's 5am,
it's 300 miles to Utrecht,
it's dark,
and we're wearing Club T-Shirts.
Hit it."
(apologies to the Blues Brothers)*

The Big Ben Club, Acorn User Group of The Netherlands, have been organising a medium size show every year, and this year The ARM Club was honoured to be invited to attend.

In a spate of organisation soon to become internally known as 'Spods tour of Europe' a batch of three intrepid Club Committee members set off for Holland with a selection of computers, leaflets and Duty Free orders.

The journey over to the show was quite tiring, but an experience in itself — it's amazing how many funny looks you get on a ferry when you're sat at an A4 portable producing the posters and price lists for the show...

The show itself was very good. The Big Ben Club had put in a lot of organisation, and the venue — a four star hotel — was excellent. Several other UK based teams had come over, including the Archive magazine/Norwich Computer Services team, David Matthewman of Computer Concepts, Manchester Dealership and software house R-Comp, and the ever present Chris Cox of ART with the StrongARM card and a Stork portable.

Other stands were used by a selection of local dealers from Holland and Germany, and several Big Ben Club special interest group stands.

About 400 visitors attended, a very high turn out considering the number of Acorns in the Netherlands, and the atmosphere was very buoyant, with the StrongARM development causing a lot of interest; in fact the ART stand was rarely empty.

Interest in Acorn Computers remains high amongst the loyal members of the Big Ben Club, and even the recent changes at Acorn, including the closure of Acorn GMBH (the German branch) don't appear to have dampened this enthusiasm.

The Club presence was much appreciated too. We got to meet many of our Dutch and Belgian members in the flesh and gained a fair few more. There was also continued interest in GameOn!, many people taking advantage of our special show prices in Dutch Guilders, which presented a notable saving over our normal mail order service (which has to be in UK Sterling).

After the show, most of the British contingent headed off in convoy to down town Utrecht for a meal which was topped by the sight of the waitress running after us down the cobbled streets. Unfortunately she hadn't succumbed to the infamous charm of the Club Polo shirt but had spotted some out-of-date Guilder notes in our payment.

**Report by the EuroSpods:
Mark Smith (Chief Driver),
Tom Hughes (Chief Navigator)
and Toby Smith (Chief Scribe &
Gommymeister)**

(Perhaps names should have been changed to protect the guilty!)

The 1996 Show takes shape

Some optimistic forecasts are being made as the final preparations for Olympia go ahead

With less than three months to go before the big show in November, there seems to be a growing mood of optimism about how it will all turn out this year. One forecast even suggests that there could be more products and innovations there than at any previous Show. The innovations at least seem certain.

Club Corner

The organisers have offered a section of the upstairs area at Olympia as a Club Corner, to be shared by members of the ARM Club, Clan Acorn and other Acorn clubs, where they can have their stands and a lounge or other meeting place.

The plan has grown out of an original suggestion for a Clan lounge, which was put forward in response to some of the recently expressed views that ART were doing too little for their enthusiasts. The idea then was that the lounge would provide some much-needed resting space for visitors, and Acorn companies would be encouraged to provide a supply of leaflets about their latest products and perhaps stage some demonstrations.

The Club's Events Coordinator, Ralph Sillett, is being consulted by the organisers about the new arrangements.

Theatre of varieties

In previous years, Acorn World has had a demonstration theatre that has been dominated by Acorn. This year there will be more variety.

While Acorn (in the shape of its new companies) will again be staging demonstrations, the aim is to involve more of the 200 or so developers, of all sizes, who are still very active in the Acorn market.

This idea has met with such a big response that a new demo area has now been created, separate from the theatre, which will be fully booked with seminars throughout the Show.

Acorn World 96 will be at Olympia, in London, from 1-3 November.

Anyone with a product they would like to demonstrate should contact:

Keith Parker

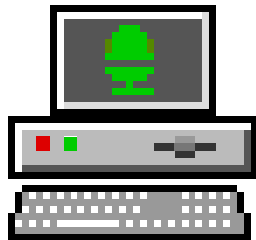
Print & Design

33 Fieldend

Twickenham

Middlesex

keithp@argonet.co.uk



Networking Your House

Tom Hughes tells you how to get connected

In recent years, a growing number of Acorn owners have been seeking to network their machines together, not just in the school or office environments but also in the home environment, either to other machines that they own, or to machines owned by others living in the same house.

When I recently acquired a Risc PC to supplement my trusty old A5000, one of the first questions that I asked myself was “how am I going to connect these machines in order to make best use of both of them?” This article discusses the various options available to the home user wishing to network machines together.

Linking the machines

The first problem is to decide on the physical method of linking the machines together, and the hardware required to do so. The main possibilities are either dedicated serial or parallel links between two machines, or ethernet links which can service any reasonable number of machines in the same area.

The main gains from choosing ethernet are the much greater speeds that are possible, and the fact that more than two

machines can be connected. The downside is that it is comparatively more expensive than other solutions, as each machine requires an ethernet interface card in addition to the cabling requirements.

Serial or parallel

Given a choice of a fixed serial or parallel link, you can choose either to run a full blown TCP/IP network between the machines, or to use a proprietary file sharing system such as RemoteFS or RSDFS. One problem with using TCP/IP is that file sharing (probably the most common use for a small network like this) is not readily available — although Acorn’s Access peer-peer networking product could probably be used, the performance is likely to be very bad.

I would suggest therefore that anyone wanting to link two machines cheaply should use a serial or parallel link with a proprietary file sharing tool, unless their primary use is likely to be for other purposes, in which case a TCP/IP link is probably a better choice.

The next question is one of software. If you have purchased recent ethernet cards to go in your RISC OS machines, they

will almost certainly have Acorn's Access+ peer-peer networking software included on ROM, so you can quite literally plug in the cards, connect the cable and go. Access will configure itself automatically as it comes up and a new icon should appear on the iconbar of each machine that allows you to mount remote discs that have been exported using the 'Share' option on the menu available from the hard disc icon on the iconbar.

Ethernet

If you have older ethernet cards, or you have a heterogeneous network where not all the machines are RISC OS based systems, things are a little more complicated. It is quite likely that card will only have a cut down version of Acorn's TCP/IP stack (look for the module InternetA, which is a cut down version of the Internet module) which, while it will work fine with Access and AUN, will not work with other TCP/IP based protocols.

In this instance, you probably need to install a full stack, either the current version of the Acorn stack, which is available from ftp.acorn.co.uk or on several recent magazine CDs, or the FreeNet stack, which is available from the Hensa or Demon ftp sites and on various CDs.

This will allow you to run TCP/IP based protocols between the machines and if one machine also has a dialup connection to the Internet, you can use a web proxy

server (there is one in the FreeNet archive) on that machine to allow web surfing from any machine for example.

Peer-peer

You can also run Acorn's Access peer-peer networking to share files between the machines. This is available as a separate product for those people who don't have it included on their ethernet cards. There is a PC version of Access (called ArcShare) available if you also wish to share files with machines running Windows.

If you have a wider selection of machines on your network, perhaps Unix boxes (even Risc PCs running RiscBSD), Apple Macintoshes running AppleShare, or PCs running one of the Windows systems, you might be interested in using OmniClient [see page 38, Ed.] that allows you to access files exported using NFS (from Unix and many other systems), LanManager over NetBEUI (normal Windows file sharing) or AppleShare (normal Mac file sharing), as well as Acorn's Access and AUN file sharing protocols.

Shareware

Other useful software includes DeltaNet, which is a shareware program that provides web, ftp (allows you to transfer files even if you don't have Access) and telnet (allows you to execute RISC OS *commands on a remote machine) servers for a machine; FreeTerm, which allows you to log into remote systems

(including those running the Deltanet telnet server); and the various web browsers.

Easy

The most important thing to bear in mind is that it really is quite easy to get a useful network running and, once you've got it, you'll wonder how you ever lived without it. If your network is more complicated than a simple plug in and go Access network then you may have a few problems configuring it, but once it is running you should have no more worries.

If you're having difficulties, ask people who have already done it. If you're connected to the Internet then comp.sys.acorn.networking is full of people who can help and the club technical help service is always available if you are stuck.

Good luck, and happy networking!

Tom Hughes

Useful information and software

<http://www.dsse.ecs.soton.ac.uk:8080/ftp/freenet/>

<ftp://ftp.dsse.ecs.soton.ac.uk/pub/Acorn/freenet/>

The FreeNet archive site

<ftp://ftp.demon.co.uk/pub/Archimedes/>

The Demon Internet Acorn software archive

<http://www.acorn.co.uk/acorn/store/ftp/riscos/releases/>

<ftp://ftp.acorn.co.uk/pub/riscos/releases/>

Acorn's TCP/IP stack

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

Information on ANT Ltd's networking products

Members' Advertisements

For Sale

Acorn A4000 Home Office with Acorn MEU. Full standard software plus some extras. £500. Tel Richard Morris 01543 423059.

Wanted

Acorn A4 wanted for student. Reasonable prices considered. Will collect from anywhere in UK if price is right.

Not bothered about software!

Matthew Cook

Tel 0115 9731468



Arnold's Observations

Our intrepid observations' man takes us on another of his quirky tangents and explores life as a traveller

Arrgh arrgh &'%\$!!!!! That got your attention! Why am I moaning? Well you see, I have just returned for a journey to a far off land (10 hours flying). Oh lucky me, you say! — I think not! Ten hours is a long time to be confined in a chair. I don't have issue with the actual flying, just all the stress associated with getting to and from the airport and the constant waiting around for some trivial stamp or inspection system to allow me to get on the plane. It drives me mad to have to book in at least two hours before takeoff.

Duty free

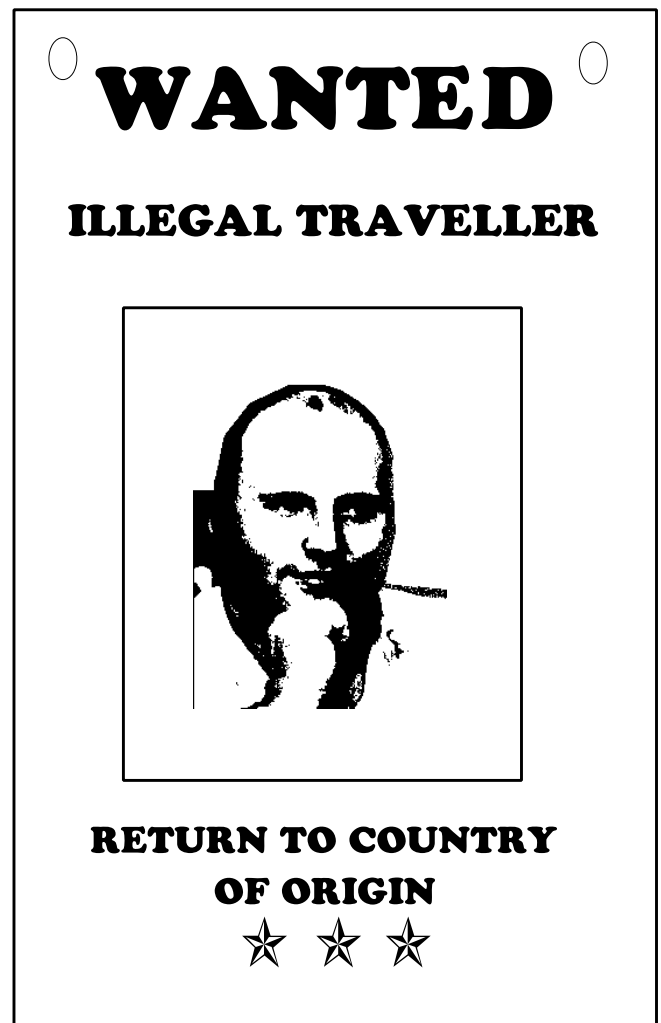
It's a complete mystery as to why the airlines need everyone booked in so early, especially in this age of the submicron and lightspeed technology. I know I'm being naive, it's not about ensuring that customers arrive in time to fulfil the bureaucratic rigmarole linked to international travel or get them to spend their hard earned cash on some duty free item that they really didn't want. (No-one can resist a bargain! We are all shoppers at heart.)

No! The real reason is for the convenience of the airlines to ensure an efficient service, where if you are late you can lose your seat to some other poor soul who has been waiting on standby. I'll leave this subject with this poser: if

there is so much time to ensure everything runs smoothly, why are so many planes delayed? Another of life's little conundrums.

American

So were did I go, you ask? I visited our cousins over the Atlantic (where they speak a strange form of English — called American). The USA is a place where you find the usual understanding of an object gets distorted into strange alternatives.





Suspenders

Try this for an example: I occasionally wear braces instead of a belt with my trousers. Well, in USA these are referred to as suspenders! Well I mean, I've never worn suspenders in my life — well at least not in public! So I felt distinctly uncomfortable with everyone commenting on the bright nature of my suspenders. I felt as though I was taking part in a Jasper Carrot comedy routine. This mixing of words highlights that we are the same people divided by the language.

Pocket Book

The travel did provide me with an opportunity really to get to grips with my Pocket Book computer. During my journey it became my personal friend. I would have been totally lost without it. I used every aspect of its capabilities: alarm clock, schedule, word-processing, spreadsheet, calculator, database. It was the technology partner during my travel — plus it weighed a hell of a lot less

than a portable!!! It is a must for the long distance worker. Just make sure you keep a close hold on it, as it's a desirable item — I know I had some very envious looks from people I met during my travels. I demonstrated the machine so many times that I'm thinking of charging Acorn & Psion for my Sales service!

A to B

All in all, travel is just getting from A to B — I just can't wait until they cut out the middle bit.

Anyway, time for me to close the travel dialogue until the next time. At some point in the future I might continue my tales of around the world in eighty airport lounges — when the feeling returned to my nether regions.

I'll leave with this thought: the information superhighway — another M25!

Have Fun!

Steve Arnold





DiagramIt

Geoff Stilwell gets his thoughts into shape

When Dalriada Data Technology announced a competition to think of a name for their latest flow chart/diagram creation program, I remember thinking that I'd like to win that. I am a fan of the writings and teachings of Tony Buzan. He propounds several interlinked methods of learning one of which is called Mind Mapping. Simply, this is a form of note taking which develops radially from a central theme, rather than the traditional linear form of notes taught in schools and colleges.

Note-taking

I like to use this form of note-taking. When I have come to review the notes or redraw them using the computer, only the Draw kind of programs could be used.

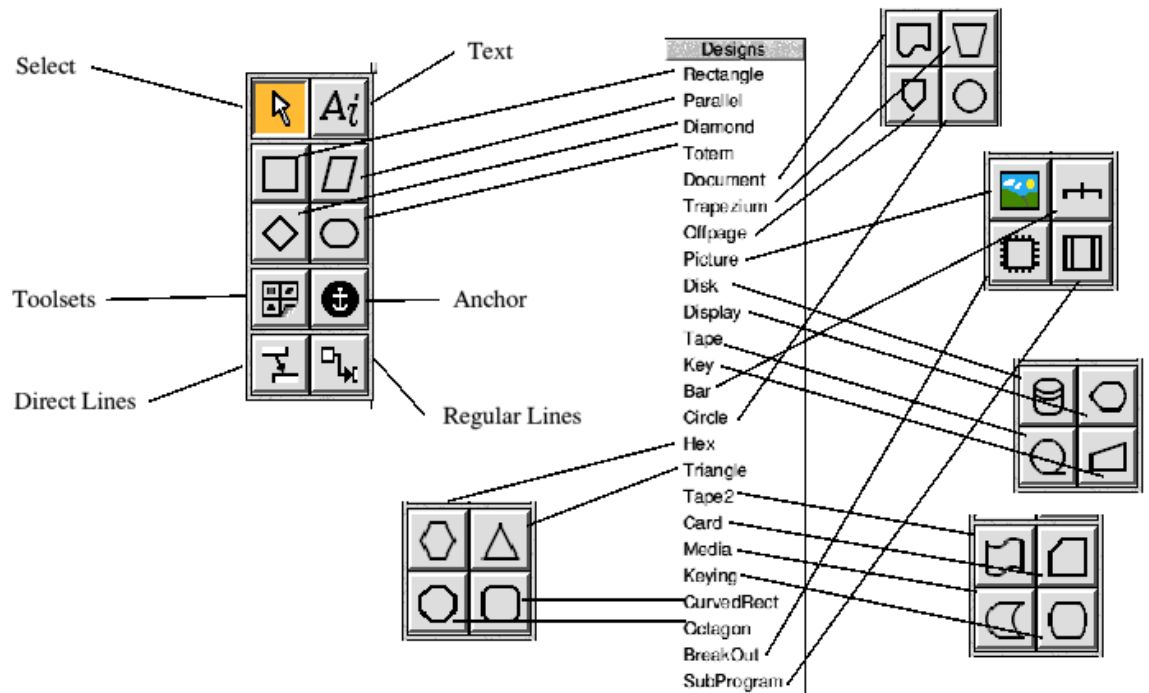
The program that eventually became known as DiagramIt looked as though it would better support the Mind Map methods and more easily create a diagram.

DiagramIt has a

familiar look and a simplicity that belies the inherent potential. You are presented with a Draw type window with a tool pane attached to the left edge. To create a chart or a flow diagram click on the shape you wish to draw and drag out the shape in the main window. Text can now be placed in the shape using the text tool.

Text and shape

The text and the shape can be given different attributes using the Style menu option in the same way as Draw: colours, line thicknesses, arrow heads, etc. Drop shadow 3D effects can be easily applied to emphasise an element in your diagram. Elements can be cut or copied and then pasted in the usual way



Tools and menus make the program simple to use

allowing the easy duplication of common elements. Multiple elements may also be aligned or distributed evenly as in Vector, Draw Plus or Artworks.

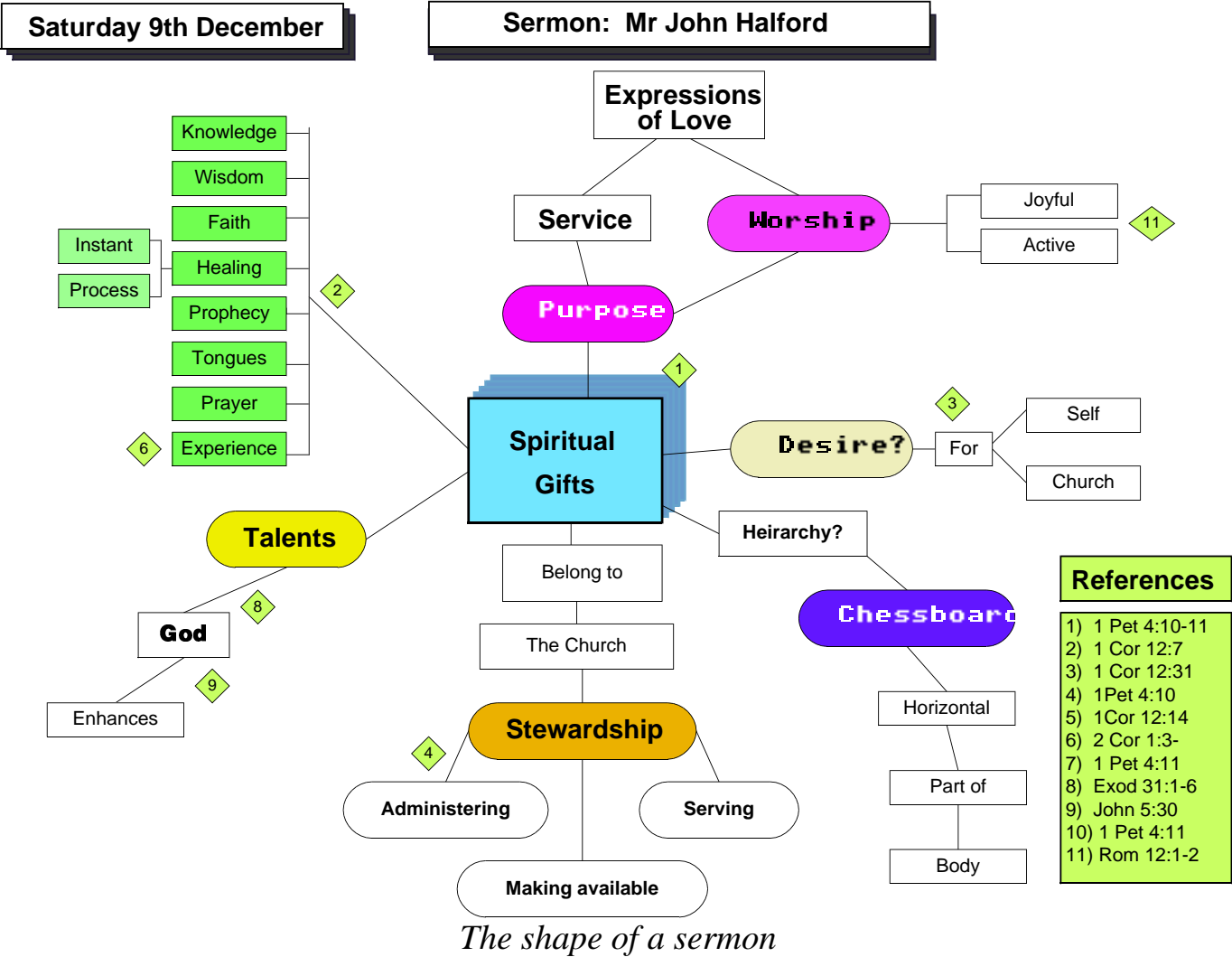
The power of the program becomes evident when you want to link the elements together. There are two tools that make this possible. One supplies lines that travel horizontally and vertically only to connect the two shapes, and the other will take the shortest route with a diagonal path.

Two additional tools make connections more flexible. The bar tool is most useful for organisational diagrams, and the anchor point allows several lines to

converge on a single point.

Most of the shapes have four connection points; top, bottom, left and right; but two of the shapes again have more flexible options. The first one, termed 'Break Out' allows lines to be connected to anywhere on the rectangle (I asked George Buchanan, the programmer, if more shapes could have this feature but he explained that would be mathematically very tricky).

The second is the Picture symbol. Any of the shapes may have a graphic dropped into them instead of text but the picture symbol contains no connection points. This allows the picture inside to be



labelled or annotated. Lines may even be connected from one picture to another picture.

Most shapes and computer flowchart symbols are included in the toolsets so DiagramIt may be used for a variety of purposes. As I have already said, I tend to use radial or pattern note-taking techniques when I'm taking notes of the sermon at church. Teachers often use this style of diagram when creating plans for a classroom topic. Annotated drawings would be ideal for creating presentation material for teachers or even advertising executives.

Tutorial style

The manual that comes with DiagramIt is tutorial in style and leads the user easily through all the program's features. I found it very easy to use and the diagrams produced with DiagramIt have been much sought after by my teacher friends.

My only complaint is that the program doesn't have enough shortcut keys. I found that I was continually switching between the select and text tools and the only way to do that was with the mouse. Yes, there is a way of temporarily choosing the select tool by holding down the Alt key, but this didn't allow the copying and pasting I wanted to do.

Upgraded

I did have a very long conversation with George Buchanan at the BETT show

earlier this year and it seemed that he was coming round to the need for this functionality. I suspect that he has probably upgraded the program significantly since we spoke, I've just been too busy to send off my disc for upgrading.

I'd thoroughly recommend DiagramIt for schools particularly and also for anyone who perhaps now uses Draw to create organisational diagrams, flowcharts or radial patterns. It will certainly make life easier.

Incidentally, Tony Buzan's 'The Mind Map Book' is worth a read. It could revolutionise your learning potential (and I don't make anything from it).

Geoff Stilwell

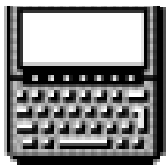
DiagramIt costs £50.00 for a single user licence and if you are already a registered Tablemate 3 user DiagramIt is reduced to £45.00.

It is available from Dalriada Data Technology, 75 Greville Road, Warwick, CV34 5PJ.

Tel: 01926 492459.

Email: info@dalriad.demon.co.uk or sales@dalriad.demon.co.uk

The Mind Map Book is published by BBC Books (ISBN No. 0 563 3710 3) and costs £16.99.



Pocket Book Corner

Toby Smith is still playing with things in his pockets

The response to the inclusion of the Acopass utility in the last edition has been pleasantly overwhelming. For those who didn't spot it, Acopass was also included on the magazine disc (a case of great minds thinking alike!) and I have heard many reports of successful users. Nice to get some feedback from the column!

Use Schedule for all your appointments, forthcoming tasks and so on? Fed up with the whole screen being taken up by to-dos in the day view? Find that when you add enough info about the appointments that the entry is so long it obscures everything else in the same hour?

Then you need to look again at one of the unsung heroes of Schedule — the memo feature. Any entry (day entry, to-do, anniversary) can have a memo of up to three thousand letters attached to it. The memos are created in a special instance of the Write Word Processor and hence can contain styles, data via 'Bring', evaluated expressions and so on. All this will be shown as a simple icon next to your (briefer) entry in the Schedule views. Memos can be created by using the Entry -> Edit memo menu option (Acorn +) to create a memo (or edit an existing one). Use the exit

option (Acorn X) to return to the Schedule window. Memos will be deleted with their entry, or by deleting all the text in the memo. Conveniently they will also not interfere with the 'find' facility which will not search through memo text. Schedule doesn't always reclaim the space used by edited memos (especially deleted ones) in order to improve speed and file handling on flash discs. You will need to manually compress the file (Acorn K within Schedule) to reclaim the space.

Anyone who has seen me early in the morning on a weekday will know that my brain usually wakes up about half an hour after my body, causing a sort of auto-pilot stage whilst I have my breakfast. Recently I've been getting a little careless about how I carry my Pocket Book downstairs, and last week, the unspeakable happened, and my little machine went down the quick and bumpy way. However, I can safely report no damage; a miracle of British design!

Inspired by this near miss, I've heard of a few other dropping stories, including ones where the machine hit concrete. One unfortunate owner reports one corner of his keyboard popping out, so he shut the case and snapped it back in. One owner even reports running over his

Psion in a car park, causing only mild scratches (it was a rough gravel surface) Having said which, whilst they appear to stand up to rough treatment, I wouldn't advise testing the theory...

A notable feature in the Pocket Book section of the PD library since its reorganisation has been Mapper3a, by Steve Litchfield. This shareware application is one of the most popular and advanced applications amongst Pocket Book II and Psion3A owners.

Essentially, Mapper provides a set of maps of the UK, and assorted overlays can be displayed on them. The list of overlays is quite extensive, including road and rail networks, locations of service stations and hotels, football grounds, and so on. Many of these have been contributed by users of the program. The program also includes a series of town plans for many cities up and down the country.

Whilst all of this data is in the smallest form possible, you will still need an extra SSD to store it all, but it can be selectively installed to cut down on space.

Mapper3A provides a cheap, robust and usable aid for the occasional traveller. However it does lack the fine detail and route planning features of the new

AutoRoute for the Psion, as mentioned last issue but at a considerable saving in cost.

You may be interested to know that this issue of Pocket Book Corner has been written in no less than four countries, having been knocked up on route to Acorn Expo in Holland (see separate report). Needless to say, the Pocket Book handled the trip excellently, knowing more about time zones than the rest of us, and enjoying the company of an A4 portable for the trip. On a wider scale the forthcoming Guinness Book of Records lists a Mr Fred Finn as the



world's most travelled man, totalling over 11 million miles.

Mr Finn, naturally, has a Psion 3a, into which his itinerary and phone contacts are stored, along with the world map and international dialling codes provided as standard. He recently added a program that tells him how to get anywhere in the world, on any airline.

"It has one or two gaps in places like Albania" said Finn, "but for the average traveller it is very good, and I use the program myself."

Toby Smith

Please direct any Pocket Book related stories, questions etc to Toby Smith at the Club address, or via email on: pbcl@armclub.org.uk.

ViVID5000 Graphics Enhancer



Steve Arnold offers some advice to A5000 owners who want some Risc PC capabilities without the cost

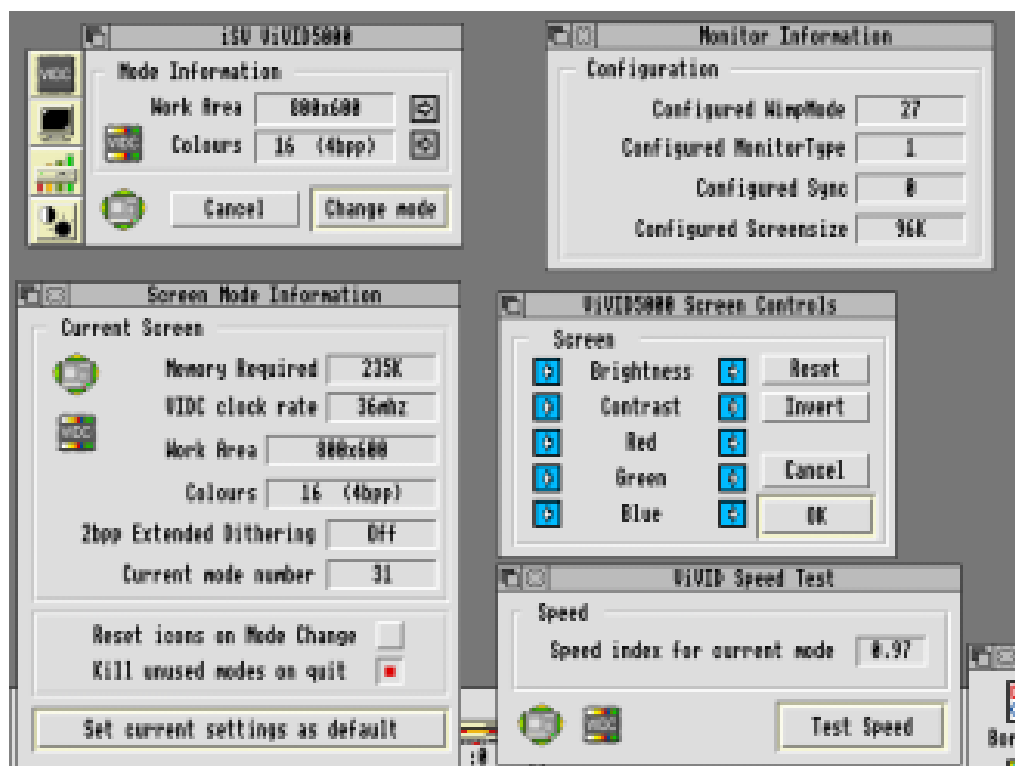
Living with an A5000, love a Risc PC but can't afford it? Well sorry I can't help you! But what I can do is recommend a piece of software that will greatly enhance your A5000's graphics performance for minimal investment. It's ISV's ViVID5000, a software mode enhancer which adds to the mode capabilities of the A5000, giving Risc PC-like modes and presentation and — dependant on the performance of the VIDC chip (the Video Controller) in your machine — some equivalent performance to higher screen resolutions (although obviously with a limited variety of colours). All the ViVID5000

requires is a multisync monitor. It has been designed to function with standard 14" multisync monitors such as the Acorn AKF18.

So I've wetted your appetite — otherwise you've got bored and moved on — so let's give you some details...

Three programs

What you get is an A5 envelope with a standard list of conditions of use for the enclosed software. Inside you will find a single disk containing the ViVID5000 software. Once you load the disk you'll find three programs: !ViVID5000,



!SuperVIDC and !iSVManual. These programs should be copied on a suitable location on your hard disk and run from there.

Variety of modes

!ViVID5000 is loaded by double clicking on its icon. A title screen start-up banner a-la-Impression style will appear and ViVID5000 will load up on the icon bar. The ViVID5000 takes around 64KB of memory for the main program, and about 20KB for module memory. The ViVID5000 application offers a variety of modes with resolutions up to 1024x536 and other emulated hi-resolution virtual desktops up to 2240x2016 in 16 colours. That is a lot of improvement on the standard desktop! To use ViVID5000, just click the mouse on its icon and the screen mode window opens. This window allows you to choose the resolution and the number of colours (just like the Risc PC). Click on the required mode and off you go!

All of the modes highlighted should work on any normal 14" multisync. However it must be noted that due to higher horizontal rates of some more expensive 17" monitors, such as the Eizo F550i,

that some of the 256 colour modes may not be available.

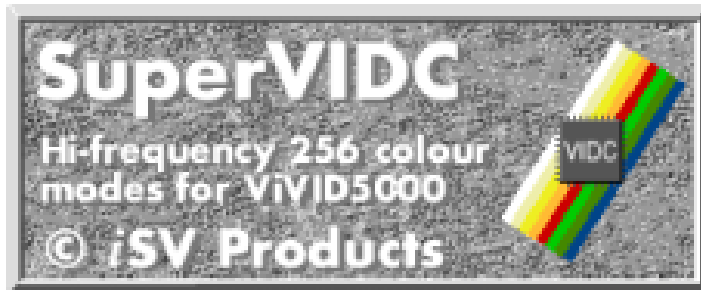
Below is a list of some ViVID5000 screen modes available and their operating frequencies.

Resolution	Vertical	Horizontal	256col
640X480	64Hz	32Hz	64/32Hz
640X512	61Hz	32Hz	61/33Hz
736X535	54Hz	29Hz	54/29Hz
800X600	56Hz	35Hz	56/35Hz*
960X624	50.5Hz	32Hz	n/a
1024X536	55Hz	30Hz	n/a
896X704	64Hz	23.5Hz	64/23.5Hz
992X800	78Hz	32Hz	55/22Hz
1024X768	68Hz	28Hz	55.5/22Hz
1024x816	65.5Hz	28Hz	52/22Hz
1056X832	61Hz	28Hz	50/21Hz
1088X926	58Hz	28Hz	n/a
1120X1008	54Hz	28Hz	n/a
1152X896	59Hz	27Hz	n/a
* SuperVIDC modes only			

There are a number of other modes not described here as these are too numerous to mention but it is worth highlighting Hi-frequency modes. These have the same resolutions as some of the above modes but a higher refresh rate

SVGA 60hz 60hz
XGA 60hz 60hz

!SuperVIDC may or may not be of use to you dependant on your machine. The !SuperVIDC application is supplied with



ViVID5000 as an enhanced application for use with high specification versions of the VIDC chip. This could add extra high frequency 256 colour modes into the ViVID5000 menu, which can then be selected like any normal mode as long as your machine is up to it! (See below).

Explicit warning

During the loading of !SuperVIDC, there is a test stage with an explicit warning that if your screen shows any signs of speckling or white dots or any new screen noise/flicker during this test, you must not install it. The reason is that this program can only safely work if the VIDC in your A5000 is a high specification part, that is a SuperVIDC device. If you ignore this sound advice and decide to use !SuperVIDC anyway then you deserve what you get! If you use this application inappropriately you could permanently damage your machine.

Tested

I have tested the application on five different A5000 machines and I have found only one machine which could support !SuperVIDC (unfortunately not mine!). So you should not be too disappointed if your machine is unable to

support this program. Remember it's worth a try but if you have any doubts during the test stage, then don't use !SuperVIDC.

If you are lucky enough to have a machine with a SuperVIDC chip then running !SuperVIDC will give all 256 colour screen modes having the same frequencies as their 16 colour equivalents.

The following modes will be changed :

800x600	256 colour
1024x786	256 colour
1024x816	256 colour
1056x832	256 colour
1600x1200	256 colour
SVGA 60hz	256 colour
XGA 60hz	256 colour
2112x1664	256 colour

Once again !SuperVIDC should only be used if the Screen is flicker free and stable. Any doubts and do not use it!

Manual

!iSVManual is the manual application — which somewhat departs from the Acorn norm — with an independent tool for displaying text and graphics. (This is generated by !InformED another iSV product). It forms a sort of 'minimalised' hypertext system, allowing the user to bounce around the manual with ease to search for a subject or even print the manual as a whole or by individual pages. It's a neat little tool that works



well, although I personally would have liked to have the additional text-only version of the manual hidden inside the !ViVID5000 application. This is for consistency and to comply with the expected availability of help information under the RISC OS menu system.

Conclusions

The ViVID5000 worked well under all tests and now remains on my machine as a permanent fixture (as a useful extension to my machine). It behaves very well under various environments and with various applications loaded. No errors to date. Overall I like this program for a number of reasons:

- It works. It does everything it says it can do
- It's excellent value for money
- It pushes the bounds of the A5000 technology without the addition of expensive hardware
- The information provided with it is both helpful and accurate.
- It's a useful product for the A5000

Definitely recommended for use with A5000.

Steve Arnold

ViVID5000 is designed for the A5000, A4000, A3010 and A3020. It costs £16.50 including UK post and packing (overseas £2 extra). Upgrades from ViVID20 are £5.50.

iSV Products are at:
86 Turnberry, Home Farm,
Bracknell, Berkshire, RG12 8ZH
Tel: 01344 55769

Members' Advertisement

The Sidings BBS

Nottingham 0115 9563481 24Hrs
SYSOP - Gary Parr CO-SYSOP - Matthew Cook

- * Large Filebase
- * Friendly SYSOP
- * Home of the the Arm Club pages
(email the sysop for access)

* Loads of areas:
Football Soaps Railway Computing
Electronic magazines
Fidonet/Riscnet/Fidonet

* Coming Soon:
Internet FTP!
FREE WWW Space!
Telnet access
3 NODES



Font Designers' Toolkit & FontTrix Pro

Christopher Jarman finds how to make a million
(but they're fonts, not cash)

Each package consists of one standard floppy disc in a plain brown envelope. Taking the Font Designers' Toolkit first, there are four original and well thought out applications, plus Version 0.32 of FontEd from Acorn. There is no booklet, because Aaron Timbrell has gone for a full set of well conceived on-line manuals which are fine. Each application has its own, written using iSV's own editor informED.

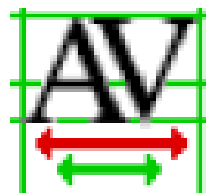
FontTrix



These programs are FontTrix, whose purpose is stated "To make millions of fonts". This is quite true, as from my own collection of around 350 fonts I found I could have made modifications giving me theoretically around 1,750,000 different fonts. It could be called 'Fun With Fonts' because you are not expected necessarily to design your own fonts with these utilities, but more to play about with existing ones and to change their shapes and characteristics. FontTrix does this very successfully and easily. You can either follow the manual alongside your tryouts or just play about

with the choices. It is possible by choosing an option called The Family Window to create 26 different weights of your font at once. Then you may customise your font using slider bars for six different characteristics. A nice feature of this application is that each new changed typeface that you create, is automatically put into its own directory and installed in your font manager straight away. It is thus instantly available for use. Of course one must bear in mind that the licensing rules for many commercial fonts forbid you to rearrange them other than in the privacy of your own home!

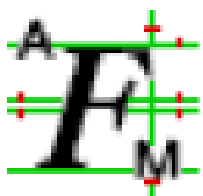
FontKern



Secondly there is FontKern the tool for spacing the letters correctly and adjusting the kerning to your own requirements. FontKern will kern a font, in particular it will take the kerning characteristics from an established font and insert them onto a new one. It is also possible to convert a RISC OS2 font to an autokerning RISC OS3 one. The use of it is elegant and entertaining, but I thought it quite

lengthy and perhaps more difficult to use than the other parts of the package. As it is visually very satisfying to see pairs of letters being moved about over their shadows as you click the mouse, I think it will repay any effort in mastering it.

iSVMetric



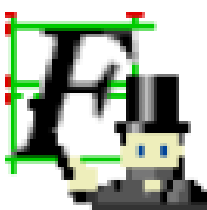
Next is iSVMetric the tool that will read and write almost all the measured data you would wish to know or use about your fonts. This is of more interest to programmers perhaps than to DTP enthusiasts.

FontCatLog



FontCatLog will show all the fonts you have, or have created with FontTrix. This appears either as an individual table for each font, which is extremely useful, or as a visual list, with each font used in a sentence of your choice. In other words you do not have to read about a quick brown fox, but may use any pangram you like. I favour from my collection, 'I'm jealous of any calligrapher who writes with zest, exuberance, freedom and unequivocal skill.' This can be viewed on the screen in WYSIWYG form, or printed out as a series of numbered and dated sheets.

FontTrixPro



The other product is FontTrixPRO. This has of course, developed from the FontTrix utility within the

Toolkit. It just does more for your money. The illustrated options window gives the full list of extras. It is available as an upgrade to owners of the Toolkit for £15. The way iSV describe it is that you can make 'real' fonts which can be loaded into FontEd. It has, in fact, an option to do this automatically. For those who have been frustrated by the constant messages about 'Invalid Linear Links' from FontEd this product comes as a godsend. I had an old font which I had thought was beyond repair and that I had messed up completely. Within a few minutes of loading it into FontTrixPRO it was cleaned up, sorted and ready for further development. What more can I say?

Powerful

iSV Products is now a well established software house with a fine reputation. The Toolkit and FontTrixPRO together make a powerful engine for forcing fonts to become exactly what you want. What is more they are astonishingly good value for money!

Christopher Jarman

Font Designers Toolkit costs £30 and FontTrixPRO is £25, both plus £1.50 carriage, from:
iSV Products 86, Turnberry, Home Farm, Bracknell, Berks, RG11 8ZH
Tel: 01334 55769



My World

Geoff Stilwell explores the Technology and Design CD-ROM from SEMERC

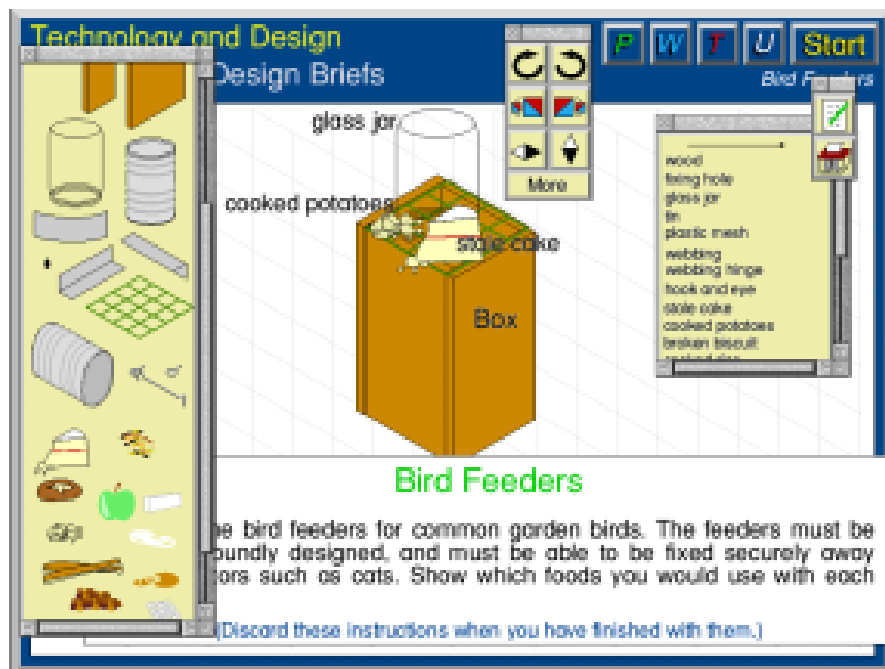
One of my favourite educational applications is 'My World' by Northwest SEMERC. The main reason I like it is that it is so open ended at both the creation stage and at the end stage when being used by children.

My World uses the idea of screens. It is quite straightforward for teachers to create screens in Draw (packaged with every Acorn Risc Computer) which can be specific to the work that is going on in their classroom. Children can then use these screens as experimental sites — there are no right or wrong answers. How many teachers have not seen Teddy being dressed in an early version of My World?

Children can move objects around, changing their shape, size and orientation as they go. Text can be added, notes taken, and completed screens can then be saved and printed as a record of the child's work. Children can, of course, make a pigs ear of the whole activity, but the wonder of the My World screen is that you can just close it down and start again, with no waste, apart from the time.

This open-endedness has its price, of course. Very few teachers have the time, or the inclination, to create screens which is where SEMERC's Technology and Design CD ROM comes in. Helen Melhuish has created an enormous set of My World resources for the curriculum





area of T&D. These are aimed at Key Stage 2 children (Juniors) and organised around six themes: The Environment, At Home, Recreation, At School, The Community and At Work.

Each theme is organised in the same way making the whole CD extremely consistent. You have the choice of watching a narrated slide show or video film clips, tackling one of several design projects based on what you may have seen, and finally the opportunity to make notes and evaluate what you are doing, or have done. The slides and films provide background information, actual problems that the children will tackle in the Design Briefs.

Garden birds

An example will illustrate how this works. In the Environment section the film clips show garden birds and mentions the problems they have surviving in the winter. The Design Brief

sets the task of making a bird feeder for the garden. The Design screen presents brief instructions which can be read then discarded. A button bar at the top of the screen leads to Pictures, Words, Tools and Utilities windows. The pictures and words may be 'picked up' and placed on the screen. Tools can be used to resize and reorient objects or text, and Utilities allow the user to type text which can be placed anywhere on the screen and a place to discard items not wanted.

Board game

Other design activities include creating a board game, inventing a new canned drink with all the market research implications, reducing traffic in the town centre, what to do with the site of an old railway, planning your own bedroom, ensuring safety in school, and many more. There is enough material on the disc for it to be used as a complete T&D course, or to provide a springboard to tackle similar real-life problems in



and out of the classroom. Of course, many of the activities overlap with and can be used to support other curriculum areas.

These minor niggles aside, My World Technology and Design is an excellent resource which I'd recommend to all primary schools.

Negotiating the whole package is intuitive with large colourful buttons taking you back and forth. I felt there could have been one more button to take you from an activity back one step, to the screen specific to each theme rather than to the Start, but it was only one more mouse click to get there anyway.

Fictional town

The whole CD is based on the fictional town of Skegton. The slides and videos are real so I wondered why it was fictional, surely there was a real place with the necessary elements, or perhaps there wasn't.

Geoff Stilwell

My World Technology & Design CD ROM costs £59+VAT.

You do need the My World 2 application to be able to use the CD and this costs £39+VAT which includes a site licence.

If you don't have a CD ROM Drive you can purchase the separate themed design briefs for £24+VAT each.

All of these are available from many local dealers or directly from SEMERC, 1 Broadbent Road, Watersheddings, Oldham, OL1 4LB. Tel: 0161 627 4469.

Try the BBS Path

Geoff Lane offers the friendly alternative
to the Internet Super Highway

Does the computer in your household get used more by the younger members of the family? Do the terms 'InterNet, FidoNet, BBS, Email, Super Highway' confuse you? Would YOU like to be able to get simple answers to questions about cooking, cars, education, health, animal care and police or solicitor related matters?

For £100 or less (more if you want to spend it) practically all computers can be connected to a phone line. You can then get access to the Internet. But, if you don't feel ready for that, you can always try a more user-friendly Bulletin Board, where help is usually on hand immediately or just a phone call away.

A BBS (Bulletin Board) is like an entertainment centre. Much is on offer, including Email, and there are hundreds of 'Conference Areas' to cover all interests. Among these are:

Medical - Police - Solicitors - Driving -
Cooking - Teaching - Vets -
Motorcycling - 4Wheel Drive - Diabetes
- Dieting.

These can be entered just for interest or to seek advice. You can ask about anything from the value of vitamins to the effects of a heart operation; enquire about a tapping noise when you drive

round corners or seek suggestions on how to remove an engine. Replies may be from professionals or just enthusiasts but will usually be of interest. Questions can be written and answers read while NOT connected to the phone line to keep down the telephone bill.

What do you need? A computer, of course (mine is an A3010 with 4MB of RAM but no hard drive), and a modem. A 14.4 USRobotics modem at under £100 is perfectly adequate and is good value for money compared to the faster 28.8 model. You will also need some communications software. I use Connector and the latest version is available from the Club PD Library with the current configuration suitable for most, if not all, Acorn machines. It also has some BBS numbers already installed. Finally, you need to find a BBS that has a local phone number to keep the bills down.

So, if you are reluctant to join the information Super Highway on the Internet then consider travelling the BBS country road. It may not be as fast but the journey can be just as pleasant.

Geoff Lane

There will be an article on Connector from Geoff in the next issue.

Anagram Genius

Matthew Cook makes The ARM Club
act humbler

When I was first asked to review Anagram Genius I was puzzled by not knowing what the program actually did. I thought “Yes, its some crossword puzzle solving application”. But I was mistaken. When I looked at the program I saw that the application has one purpose: to create anagrams. What use would it be in the real world was one of the first questions that popped to mind.

The program comes in a two part cardboard box, of quite a sturdy nature, containing a double density disc, a manual, and a Game Loading help leaflet.

The manual describes anagrams as “a concept many of us are familiar with for crosswords, where rearranging the letters of the clue produces a single English

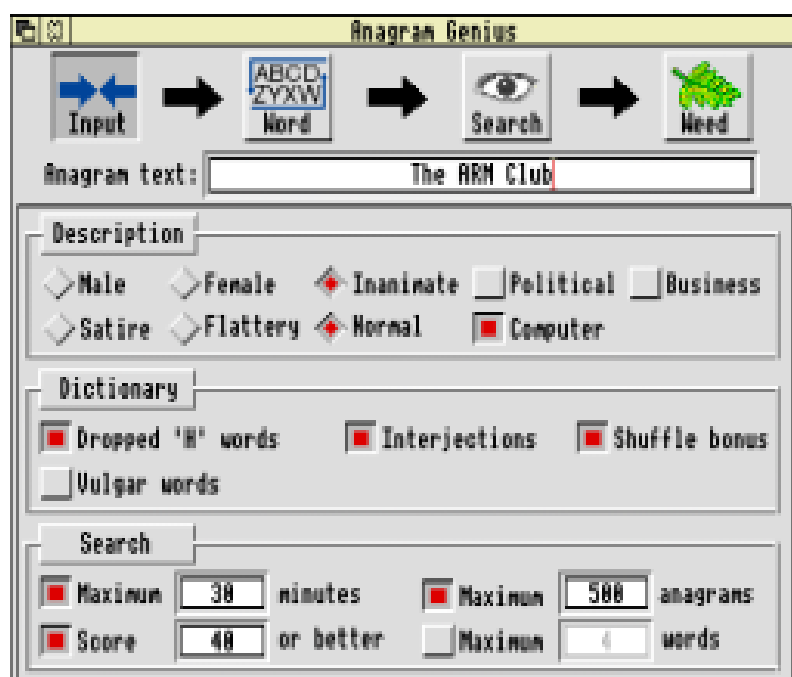
word which is the answer.” It goes on to describe the program as “a quantum leap in multi-word anagram programs.”

Loading the program is done in the usual RISC OS way and you are presented with a loading banner before the program appears on the icon bar. Clicking on the icon bar icon then presents the main screen which the program is centred on.

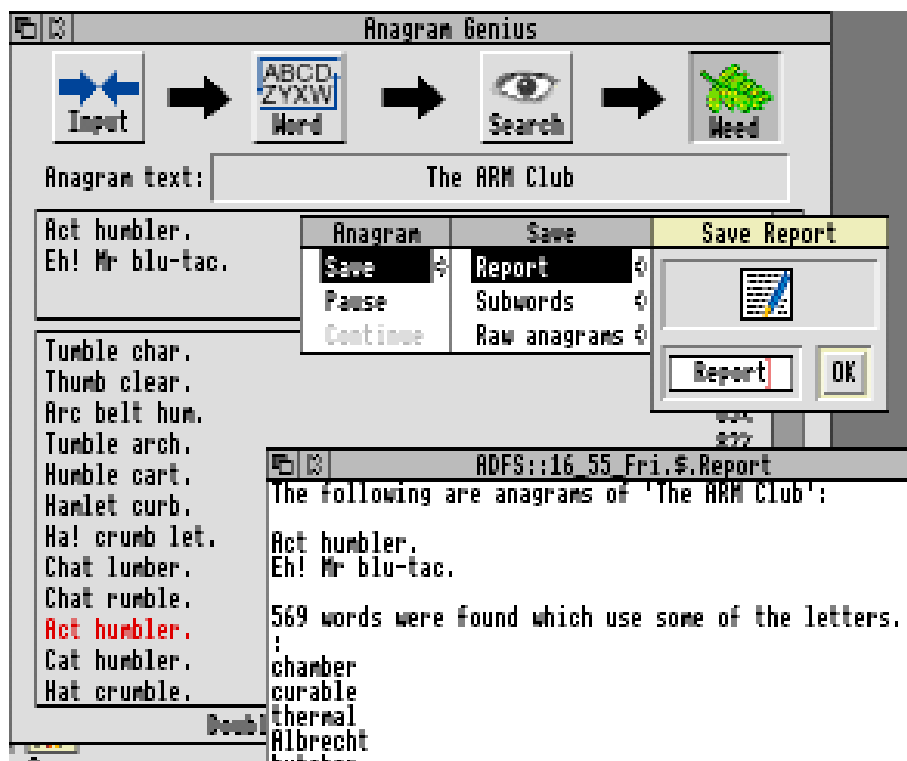
The main screen has the four stages in creating your anagrams represented by four large icons. Underneath are various other configuration options, many of which are self explanatory.

After reading the manual I plunged in and tried an appropriate name: “The ARM Club”. I then selected the appropriate description options: Inanimate, Normal and Computer, and left the Dictionary and Search options to the default. Then clicking on the “Words” icon, sends the program into the next stage which searches for suitable words which the program scores from Superb to Terrible. Any you feel are wrong can be altered at this point.

The next stage is achieved by clicking on the next icon, “Search”, which sets the program going



through its large dictionary, finding sets of words that you or the computer scored in the last stage and then displaying them in phrases. I was quite disappointed by the results as there did not seem to be any suitable phrases. So on to the final screen "Weed". From there you find suitable anagrams and they are displayed in the top window, where you can also rearrange the order of the words.



Once you have chosen your words, you can output text files from the program by saving as Report, Subwords or Raw Anagrams.

Back to the manual and at the end there is a tips section to help you get the best out of the program, especially when inputting names, and these points were quite useful when I was playing with the program. Also there is another application on the disc, !Features, which allows the removal of the Satire, Flattery and Vulgar options. This would be very useful in schools, as the disc has no copy protection. The application could be altered using !Features and then the !Features application could be taken off the disc to prevent children from turning them back on!

And there you have it: a program that does the job it sets out to do and does it

quite nicely. To answer the question I first posed, I am not sure what real world use there would be? An English exercise in spelling, grammar and punctuation the manual suggests. I let my Mum use it to make a set of anagrams for a Girl Guide quiz and it produced quite a few good ones. It seems one of the those programs you buy for a task then it creeps to the back of your drawer or shelf. I'd recommend it as faultless to anyone that wants to create a lot of anagrams, but if you can do it by hand then you could save the money for something else.

Matthew Cook

Anagram Genius costs £18.80 from:
The Fourth Dimension,
1 Percy Street, Sheffield, S3 8AU.
Tel 0114 2769 950
Fax 0114 2781091



OmniClient

Tom Hughes goes communicating
with Acorn's 'Universal Network Client'

As I already had a small network of two machines (a Risc PC running both RISC OS and RiscBSD, and an A5000 running RISC OS), and was using Acorn's Access+ peer-peer networking to connect them when running RISC OS, it was natural that I be given given OmniClient software to review.

OmniClient is described as a "Universal Network Client" and it provides file sharing and printing using a number of protocols, thus allowing a computer running RISC OS to communicate with many other systems of all sizes and types.

The basic OmniClient package provides support for Acorn's AUN Level 4, Access and Access+ protocols; NFS over TCP/IP as used by Unix and many other systems; and Lan Manager over NetBEUI, as used by Microsoft Windows' built in file and print sharing. Additional modules are available for AppleTalk; Research Machines NetLM; and Novell Netware. A module for Lan Manager using NetBIOS over TCP/IP instead of NetBEUI is also in the works.

Using my machines I was hoping to able to test Access/Access+ from RISC OS, and NFS/Lan Manager using my Risc PC running RiscBSD as a server.

Unfortunately I had reckoned without OmniClient's Lan Manager support only running over NetBEUI whilst the samba server for RiscBSD only runs Lan Manager over TCP/IP, so that had to go untested.

Turning to the installation instructions in the 120 page manual supplied, I began by copying !Omni to the hard disc of my A5000 and then starting it. After a short burst of hourglass activity I got an error — not a good start. The problem was due to the lack of AUN networking on my systems and was quickly cured by copying the !BootNet application from the floppy and running it. A more permanent fix was affected later by editing a configuration file to prevent OmniClient trying to use AUN. All this was only vaguely documented in much later parts of the manual however, which was disappointing.

Once I had overcome that small obstacle, everything went smoothly — running !Omni resulted in an icon appearing on the left of my iconbar, and clicking on that produced a window showing all the available Access mounts, and a single icon for Access+. Double clicking on one of the Access mounts caused the iconbar icon to change, with the name of the mount being given underneath it, and

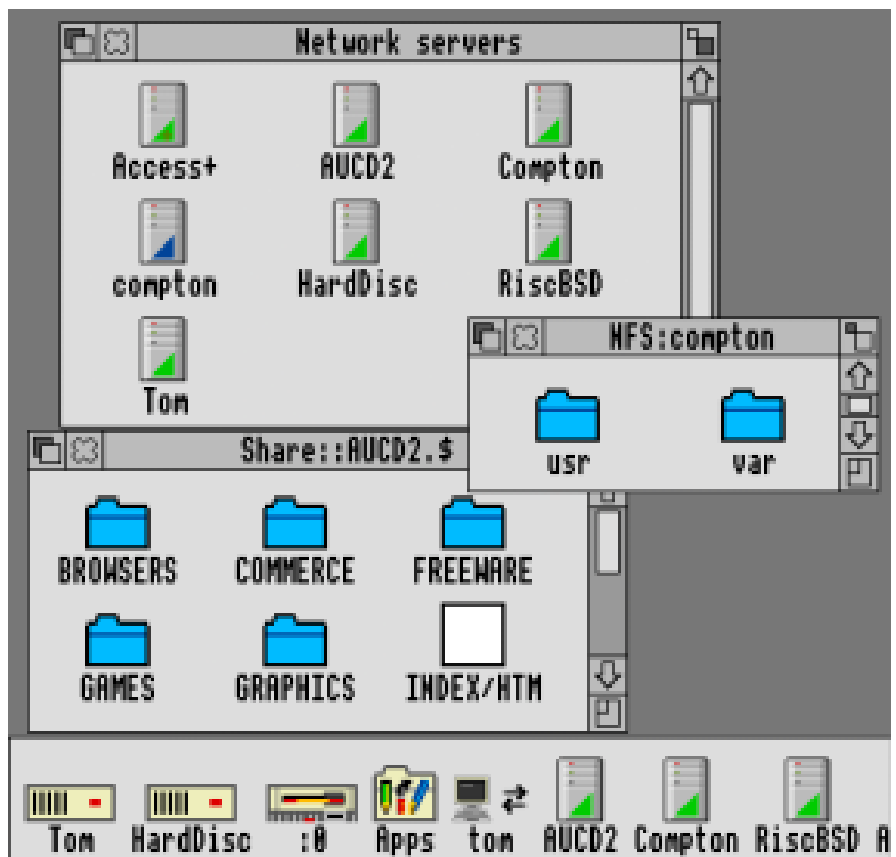
each further mount that I clicked on was then added as an extra icon on the icon bar.

Clicking on one of the mounted discs on the iconbar produced a filer window in the normal way, and all the normal operations could be performed on the disc (except where disallowed by the permissions set when exporting the disc).

I then dismounted the Access mounts using the iconbar menu, rebooted the Risc PC running RiscBSD, and began configuring an NFS server. This just required me to add some entries to the list of exported directories, and to ensure that pcnfsd was running so that OmniClient was able to perform user authentication.

As NFS servers do not appear automatically in the OmniClient server window (the protocol doesn't support it), it was necessary to select a menu option to connect to the server. This produced a dialogue box where details of the server and directory to be mounted were entered, along with a user name and password. After a brief pause whilst the supplied details were verified with the server, a new icon appeared on the iconbar for the NFS mount, and clicking on it revealed a filer window showing the correct directory.

Closing and reopening the server window



caused the NFS server to be added — it doesn't appear to get automatically updated if it is already open, and double clicking on that produced a new window with a directory icon for each mount point on that server (currently only one). At this point, new mount points can be created for the server using the menu as before (once again, the mounts window for the server had to be closed and reopened to update it).

Using the iconbar menu, it is possible to save the mount points that have been entered so that in future the server is shown in the server window at startup, and clicking on it produces the list of mount points, which then only require the entry of a password to complete the mounting process. The mounts file can in fact be had edited to include the password as well, but this is not

recommended for the obvious security reasons.

All in all, the file sharing works as smoothly and cleanly as you would expect in the RISC OS environment — once the issues of authenticating and mounting remote directories have been taken care of, you are left with device icons and the icon bar and a normal filer interface. A configuration file inside !Omni provides automatic mapping for a number of common file extensions into RISC OS file types, and more can be added by the user if necessary.

The second aspect of OmniClient is support for remote printing. This operates, as normal with RISC OS, via !Printers. Support for Access printing is already built into recent versions of !Printers, and such printers are automatically made available.

There is also support for NFS printing built in to !Printers, which dates from the days of Acorn's original NFS client. This simply requires that a new printer is added whose connection is configured to NFS with the server and printer name entered along with a username and password if required, and any special options for the remote printer.

As an alternative to these mechanism, any remote printer which can be accessed using a protocol supported by OmniClient can be used by adding a new printer in !Printers and setting the

connection to type file, with a special filename entered in the filename box according to the conventions given in the OmniClient manual. This basically entails specifying the server and printer names along with any username and password that are required as part of the name of a file on the OmniPrint filing system.

This is an interesting solution to the problem of making OmniClient integrate with !Printers, and seems to work well. The manual does suggest that future versions of !Printers will have better support for remote printers of other types, which presumably make this process much more transparent.

Overall, with the exception of a few minor bugs and the fact that the manual could be a little better organised, this is an excellent package that does everything it claims to with little or no fuss. For anyone who regularly needs to access a variety of remote systems, this really is a must, although the expense may unfortunately put a few people off.

Tom Hughes

OmniClient costs £49 +VAT for a single-user licence, from ANT Ltd at:
PO Box 300, Cambridge, CB1 2EG.
Tel: 01223 567808 Fax:01223 567801
Email: sales@ant.co.uk

OmniClient was developed by ANT and sold to Acorn last year. A new version is to be released shortly.



DIY CD-ROMS

Nick Evans finds the ideal toy to keep him happily occupied during the boring summer of sport

One day a large box arrived courtesy of the postman and inside was a floppy disc, a 13 page booklet for CDSim, an A5 folded sheet giving Bronze CD-ROM installation instructions, a 6 page price list of Eesox products, a 7 page booklet of instructions for CDScribe, a 6 page booklet describing how to make CD-ROM discs for the Acorn Platform and 2 identical folded A5 sheets describing the Eesox SCSI-2 CD-ROM driver.

Joy of joys

Also in the box was an external Philips CDD2000/09 CD-ROM writer. Joy of joys, something to keep me occupied while the rest of the family was watching Euro 96, Wimbledon and the Olympic Games.

The writer is a SCSI device which is in a box measuring approx. 12.5 x 9.5 x 3 inches. The working part itself is the size of a normal CD-ROM drive and can be mounted internally in your computer if there is space. The front of the drive has a socket for earphones, along with an associated volume control, a small green light to show that it is powered up, a small orange light that shines when a CD-ROM is being written and a turquoise close/eject button. The CD fits in a tray.

Ten minutes later I had loaded the software, replaced my CD-ROM drive with the writer and started to write a CD-ROM. I had already put all the files that I wanted onto a couple of hard discs. This was because I have an A440 which will not accept that hard discs can be larger than 512MB in size. Well, the disc can be larger and can be partitioned, but the size of the partition can only be that big. DOS has the same sort of problem but the largest size it will format to is 528MB.

Being a mean sort of guy I wanted to make sure that the CD's I produced were full to the brim and this meant that I had to get 640MB onto the CD-ROM.

The CDFS driver for the CD Writer must be loaded first otherwise the Writer will not be recognised. This now forms part of my boot sequence.

The next thing to do was to ensure that the files on my drives conformed to the ISO 9660 standard which meant that the file names could only be 10 letters long. They had to be capitals and characters such as ! were excluded. The _ (underscore) character is allowed and is converted into a ! by Acorn's CDFS so that applications can be read straight from the CD-ROM.

There is a later (semi) standard called ISO 10660 which has been brought about because Windows95 and Apple computers accept long file names with lots of different characters, but Acorn has not yet updated its Isoform program to cope with the modern world.

!BadName

One of the programs in the Eesox suite is !BadName which converted all the files with none compatible ISO 9960 names into the correct characters. It was very quick, but since I tend to use ArcFS archives, there were not many illegal characters around — just the odd hyphen.

Next came the problem of producing a disc which was larger than the 512 MB allowed by RISC OS 3.1. This took a bit of working out. First I tried writing to the SCSI device in two separate stages but, as the information on the CD-ROMS is held at a certain position, I found that I was overwriting files. Then I decided that I would read the text file for !Isoform, which was held on the hard disc. This explained that I had to produce a file called +link — an obey file which only contains the full name of the directory (in my case a different disc) from which the extra files to make the disc more than the filecore limit are available. Low and behold it worked.

I wrote the file to a raw SCSI disc which is one that has been formatted but not partitioned. The disc was 660MB in size

which is slightly larger than the standard CD-ROMs currently available. (The 7 Gigabyte CDs should be around late next year. The instructions were quite easy to follow and the Isoform program did all the hard work of transferring the files.

The next thing to do was to see if the CD would work even though it wasn't written yet. To this end there is a program called CDSim included in the Eesox bundle which uses CDFS to look at the CD-ROM image. Unfortunately you cannot use this program to copy files onto the image that has been produced, but it will tell you whether the CD-ROM files are able to be read etc. In fact it is just like using a CD-ROM.

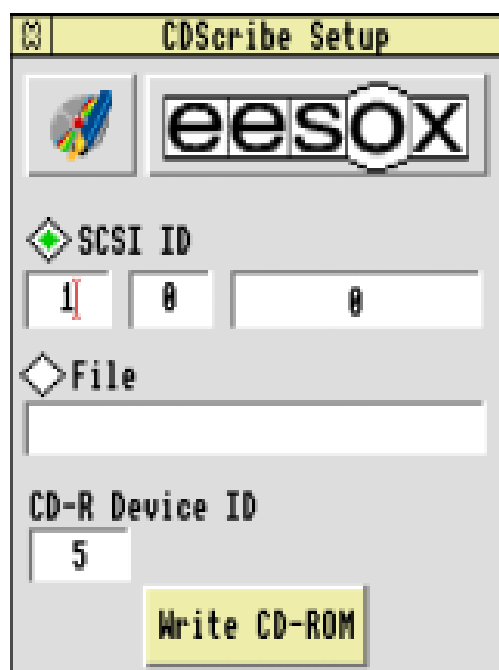
Configure

One of the things that you have to do is to configure the machine to have one more CD-ROM than previously as, for instance, if you have one CD-ROM drive normally, in order to read the CD-ROM image with CDSim, you must have 2 CD-ROM drives configured. CDSim has a set of options for setting the SCSI device id or the full filename if the CD-ROM image is isoformed and also an option to set the speed of the simulated drive from 1 to 6 with 5 stages in between and a speed called maximum, whatever that one is.

These options can be saved so that they are automatically loaded with CDSim. The different speed settings are useful if you are producing a CD-ROM which

contains some speed-dependant files such as replay files. If you then click on the new CD icon on the icon bar up pops the CD image for you to check. A program from Eesox called CDFast has been loaded up from my boot file for about a year now, this is a aching program to help speed up CD-ROM access time but has now been displaced as it causes a fatal crash with CDSim.

Then I used a program called CDScribe which actually controls the business of writing the CD-ROM. This has setup boxes to either tell you which raw SCSI device or isoformed file hold the data you want to write to the CD-ROM and also the CD Writer device identity number. Unfortunately these options cannot be saved. I would have thought that most people, once they have a CD Writer, would have the disc from which the file originates and the id of the CD Writer pretty much constant so it is somewhat irksome not to be able to change the default settings.



That aside, once the settings have been changed, activating the Write CD-ROM slab caused the

- Check Writer
- Check source
- Initialise disc
- Copy data to CD
- Finalise disc
- Eject the disc

menu to appear and, provided that everything is ok each item becomes checked off automatically and about 40 minutes later for a 640MB CD-ROM, one is spat out of the CD Writer's tray. If there is no recordable medium in the CD Writer an error message will tell you. The estimated time taken to write the CD is given at the beginning of the procedure so that you know how long to take down at the pub.

The first CD that I produced was perfect, even though I do say so myself. It took 44 minutes to write.

The point about CD Writers is that the data stream going to them has to be constant since any interruption writing to the disc will make it unreadable. This means that CDScribe is not multitasking. One of the problems that can arise is that every now and again a hard disc halts its progress for a while especially when it gets hot. The heads wander about a bit as the drive recalibrates itself interrupting the flow of data. This is probably the commonest cause of failure of the Writer. It can be avoided by buying a hard disc having

the suffix AV (for audio visual) which do not recalibrate. These are more expensive than normal drives and only Micropolis AV drives are easily available. I use my old and trusted Maxtor 660MB drive as a SCSI device to which I write the raw image and this may account for the 10% failure rate I have had.

The problem is exacerbated if the CD Writer writes at a high speed, and the optimum speed at the moment appears to be writing at double speed ie 300kb per second. Some CD Writers available can write at quad speed but the failure rate is higher. This Philips CDD2000 writes at double speed but reads at quad speed - this is about the same speed as a floppy disc is read on your Acorn machine.

The true price

Needless to say as soon as I acquired the drive the cost of recordable medium ie blank recordable CD-ROMs increased in price due to a world shortage. The cost at the moment is about £7.00 per CD to which you should about add 10% to cover the failure rate. The true price per CD comes to nearly £8.00.

The next thing that I tried to do was to sample an audio track and see if I could write that.

I had already got a program called CDRAudio from Eesox which is supposed to read audio discs and save the data as either a Reply or a PCM file.

A PCM file is a raw data file that can be read by an audio compact disc player. Unfortunately no matter what I did I got the dreaded 'Target Error — Illegal request' message. This means that it ain't gonna work at all. I don't know why and I am hoping that Eesox may be able to tell me.

Most helpful

I have found Eesox to be one of the two most helpful Acorn companies, Colton being the other. Using email, which must be the method of choice for communicating with any company, I have always received a helpful reply by the time that my next logon has taken place.

At the moment it does not appear possible to write multi-session CD-ROMs with the software produced by Eesox, but I hope that this will follow, as well as the ability to read audio CDs. The reply that I received from Eesox on this point was: 'The CDWriter is certainly capable of doing so, although we haven't enabled the software to do this yet. We are intending to do an update of the software some time in the future which will allow creating Audio CD's, multi-session CD's as well as many other features.'

Eesox are to be congratulated on producing this bundle for the Acorn market. Its value would be greatly increased if PC CDs could also be produced. This is causing me some

problems with the Pocket Book section of the next ARM Club CD in particular, as well as some hybrid CD's that I am trying to produce. This is mostly a problem with the very outdated Isoform program. It could be circumvented by having an option to ignore illegal characters and long file names when writing the CD image. The way around this, according to Eesox, is to read the files from a PC card partition.

The value of being able to produce stable backups is enormous. I now have a CD-ROM which contains all of the programs that I possess along with fonts and clipart. This has replaced over 2000 discs although archiving them did take a bit of time and it has certainly made the advent of the second PD/Shareware CD-ROM closer.

Back-up service

I am now able to offer a back-up service to members should they wish it. There are, unfortunately a few constraints caused by RISC OS 3.1 in that the discs, and I can accept ADFS, SCSI or IDE discs, can have a maximum partition size of 512MB. I have an ICS IDE interface and so can accept compatible, partitioned drives.

The next constraint is that imposed by Isoform. This means that many characters are illegal and cannot be used when making filenames. Hard spaces, hyphens and other characters will be changed on making the CD and so the

files will not be found if called by a program. The way round this is to archive the applications with either ArcFS or SparkFS.

Another limit is that there can only be eight levels in the isoformed directory structure, such as:

\$.dir1.dir2.dir3.dir4.dir5.dir6.dir7.

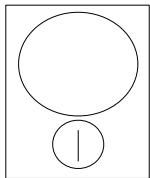
Again I have never knowingly had directory levels this deep, but it is possible with some commercial programs. I noticed this with the database Impact which was placed in \$.Eureka.Discs.8 directory and it has a further 6 directory levels within it.

Nick Evans

The CDWriter including CDScribe costs £799 (internal) or £859 (external). The CDSimulator (with CDWriter) is £99.

Blank CDs are £6.99 each, £60 for 10. Eesox are also able to supply the SCSI card for a PC and PC software to use the Writer on that platform. The SCSI card is an Adaptec 1505, which is a special controller card for SCSI CDs or scanners. It is not designed for use with SCSI discs and the software is the common, but poor, WinOnCD. The price for a PC SCSI card and software (for pukka PC only) is £100. Eesox are at:

Newton House, 147 St Neots Road,
Hardwick, Cambs CB3 7QJ.
Tel 01954 212263



Well I never knew...

The regular round-up of hints, tips and fascinating facts about your Acorn computer that you may not have known, collected by Geoff Lane

Hi Folks. It's time for another page of 'Well, I never knew it did that' beginning with three tips sent in by Bob de Jong. The first expands on Bob Harding's hint in issue 18 (or was it 17b),

(a) If you have two Edit windows open it is possible to highlight the text in the non active window by holding down the 'Ctrl' key and selecting the required text, this leaves the caret in place in the 'live' window to copy to.

(b) In issue 17 (The genuine issue 17) I pointed out that by using the adjust (Right) mouse button to close a window this causes its Parent directory to open, Bob points out that if you hold the shift key down whilst doing this it will open the parent directory and keep the current one open. 'Well, I never knew it did that.' I find using the adjust (right) button to open and close directories helps keep the screen tidy; this 'hint' makes this facility even more useful.

(c) Clicking with the select (left) mouse button between the scroll bars and the bumper arrows moves the text up or down one page at a time, using adjust (the right mouse button) has the opposite effect (Bob mentions that you could of course use the 'Page up/down' keys for the same effect.

My daughter Claudia reminds me that when using the left or right cursor arrow keys to adjust the caret position if you hold down the 'shift' key the caret will move one word at a time, hold down the 'ctrl' key and the caret will move to the end of the line. I find this better than using the mouse on most occasions.

I found a particularly useful function recently that may be of use on any make of computer. If you feel around the back, sides or front of your unit you will find somewhere a SWITCH!! Gently rock the switch and the screen will go blank, the computer will be OFF. Whilst in this useful mode bedrooms can be tidied, homework can be done, gardens can be tended, houses can be decorated and you can converse with strangers (such as parents, spouses and siblings) occupying your household.

A joke maybe, but any hobby taken to extremes can be detrimental. Enjoy your computer but be careful it does not become an obsession.

Keep the 'Hints and Tips' coming folks as without you this page cannot continue. What about some useful, interesting or fascinating 'OS_Word' functions or any modules that can be safely *UNPLUGGED to increase memory?

Geoff Lane



Creating your own Web pages

The second lesson from former Club Webmaster Andi Flower on the techniques for creating World Wide Web pages

Here is another example of an HTML document. This time with more commands.

```
<head>
<title>An example home page from The
ARM Club</title>
</head>
<body>
<center>
<h1>The ARM Club - Example home
page</h1>
</center>
```

This document introduces some of the more useful text effects within the HTML language such as **bold** or *italic*. It is also possible to add things such as

```
<hr>
horizontal lines to separate sections of
text. You can use
<pre>
preformatted text, which generally uses a
monospaced font
(like corpus) and doesn't need the
line break command
to separate lines.
</pre>
<p>
```

In order to add comments you need to use the following command:

```
<p>
<!-- This text will not be shown in the
browser -->
</body>
```

The new commands that have been introduced are explained here:

<center> This command is reasonably self explanatory. It simply causes the text contained between itself and **</center>** the closing command to be centred in the browser window.

<h1></h1> The heading command. Where n can be any number between 1 and 6 with 1 being the largest of the headings. The actual style with which each of these headings is displayed in a browser is configured within the browser itself.

**** creates bold text.

<i></i> creates italic text.

<hr> This creates a horizontal line. Note that no closing command is required.

Another very useful HTML command allows you to set the colour of the background of a document. In order to do this the first <body> command needs to be changed to:

```
<body bgcolor="#ffffff">
```

The six fs are actually three pairs. Representing the saturation of red, green and blue from left to right. Thus the following table shows what colours would be produced:

<u>Code</u>	<u>Colour</u>
ffffff	White
000000	Black
ff0000	Red
00ff00	Green
0000ff	Blue
ffff44	Bright yellow

I'll leave it to you to find out what other colours you can generate with this command but suffice to say that there are plenty.

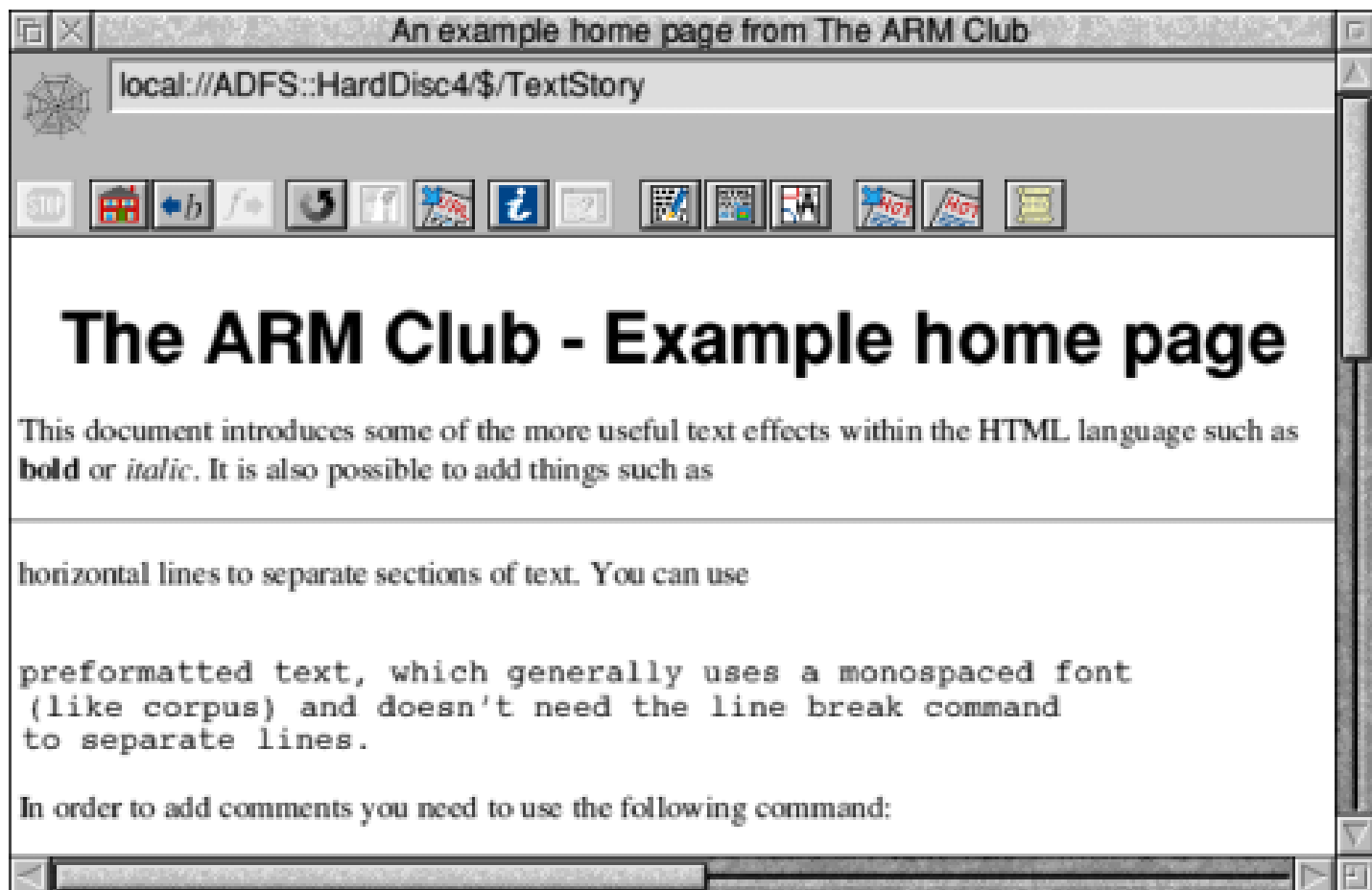
With the bgcolor modification shown above, the web page created is shown below.

Un-ordered Lists

There are several different types of list that can be created within an HTML document. In general use you will only use perhaps two of these. These two being ordered or un-ordered lists. Un-ordered lists are created using the two commands and and the closing command . For example:

```
<ul>
```

```
<li>The ARM Club WWW pages
```



```
<li>Acorn' s home page
<li>ART' s home page
<li>Acorn software at Hensa
</ul>
```

The results are shown to the right:

Well, now you know how to make your documents look prettier and next time I'll start by showing you how to add the correct links for the list above to allow you to start moving around the Web. I'll also show you how to add images both to the document and as a background texture making the pages look even better.

Andi Flower

- The ARM Club WWW pages
- Acorn's home page
- ART's home page
- Acorn software at Hensa

For information about the history of the WWW try:

<http://www.w3.org/pub/WWW/WWW/>

Competition Corner

And the winners are...

There were eight correct entries for the contest to win a copy of the TextEase 2 desktop publishing package, worth more than £70, and the lucky winner whose card was pulled out of the hat was Mr D F Marshall of Hale in Cheshire.

The winner of the HTMLEdit program who knew the answers to the five questions about the internet was Brian O'Keefe from Finchley in London.

Now another chance to win...

This time we have a copy of Formulix, the formula and equation editor from Computer Concepts, to give away. All you have to do is send the correct answers to the following questions to 'Formulix Competition' at the Club's Freepost address and wait for your entry to be first out of the battered bowler.

1. Give the value of Pi in full.*
2. Write the Greek letter Sigma, used in mathematics to indicate summation.
3. Write the figure 13 in hexadecimal.

Good luck. *Only kidding. The value to two decimal places will be enough.



DTP CD-ROMs

Peter Jennings looks at images for the desktop publisher

Two new CD-ROMs from the well known and well-stocked APDL public domain library, DTP-1 (issue 2) and DTP-2 suggest by their titles something more than just another collection of PD, freeware and shareware graphics. But anyone hoping for some useful applications and utilities, with perhaps a program or two to rival Impression Publisher and Ovation Pro, will be disappointed.

The edges of the cases are, however, more precisely labelled as "DTP Graphics" so if you are after a wide-ranging selection of pictures in a variety of formats, keep reading.

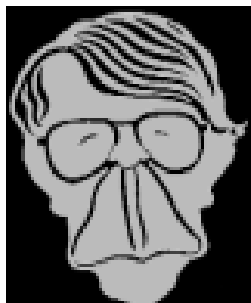
At first glance both discs appear to have the same contents. There are ArtWorks and CD viewers and a sprite map of the London Underground on each, along with Info and Network text files, a sprite of how-to-use-a-computer instruction,

called Beginners (sic), and four directories of graphics. Three of the directories are called Artworks, Colour and DTP on each of the discs but DTP-1 has an Earthmap directory and DTP-2 has Shareware. Of course the contents are different even if the names are the same.

Each disc has around 500MB of graphics, made up from more than 6,000 files, but very few of them are tied specifically to desktop

publishing and almost all would be equally useful to anyone who needs illustrations for other purposes. This is borne out by a text file on the disc, which says that much of the material has been chosen with a view to its usefulness to schools, clubs and local magazines.

The CD viewer allows very quick browsing through the disc with quick access to view any of the images either small or full screen.



Source

There is an occasional reminder of the source of some of the graphics with notes about ordering pictures, or paying for the use of those in the shareware section, with addresses in America and prices in dollars.

As usual in these large collections, the quality varies from excellent to unusable but the standard is generally high enough for the few duds and some duplication to be ignored. Although there are only four directories of images on each disc there are dozens of sub-directories in each with a great variety of subjects.

Reduction

There is a good reduction in the price for buying both discs. If you want only one, your choice may depend on whether or not you are interested in Earthmap on DTP-1. This is a huge scrolling map of the world which enables you to zoom in on any area — although if you go in too close it is not always easy to see just where you are.

Peter Jennings

DTP-1 and DTP-2 cost £19.95 each or both for £37.50 (including VAT and postage) from APDL at:
39 Knighton Park Road,
Sydenham, London SE26 5RN.
Tel 0181 778 2659.
Fax 0181 488 0487





CDtracker

Our resident music freak, Simon Timothy, powers up his speakers and gets to grips with another audio CD program

Many people these days have CD-ROMs fitted to their machines, usually so that they can use data CD-ROMs such as the various discs full of public domain software. However, CD-ROM drives can also play audio CDs just like your Hi-Fi. Simple playing of CDs is provided as standard with newer versions of Acorn's CDFS — click on your CD drive icon and an audio disc will start to play.

Commands

CDFS also offers a selection of commands to play certain tracks and gain some information from the disc (track length, unique disc ID code and so on). Naturally many applications have sprung up to exploit this and provide Hi-Fi like features on the desktop.

The latest offering in this area is CDtracker from a new venture called Werewolf Software. CDtracker is described as a 'comprehensive database system with advanced playing facilities'. I installed it on my Archimedes and started telling it about my CD collection.

The program contains two parts, a database of CD tracks and a CD player. There appears to be a little confusion as to which is the more salient as the manual centres on the CD player and the program and advertising on the database.

Database section

The database section holds quite a lot of promise. Essentially it is a specialised database for CDs, taking comprehensive information about each track (including length, recording & release dates, track name, artist and record label). The database section has search and sort facilities, as you would expect, and can also print and save selections from the database, certain fields and so on. The functionality seems well thought out although some parts of the user interface are a little clunky.

Powerful

I am sure that I will eventually master the theory behind the database and use its more powerful features. I'm not generally a fan of purpose built databases — most of the features can usually be gained by designing your own database in a general database application such as DataPower, Squirrel, Key Plus and so on. However, some of the features in CDtracker can't be replicated by a general database: these include the interface to the CD player, the ability to read track lengths from the disc when adding a new CD to the collection and the ability to export data direct to a complementary Tape Inlay printing application.

User interface

The CD player part of CDtracker appears very much as though it was bolted on as an afterthought, and has a user interface that can only be described as ugly. It does contain all the ‘standard’ features that you would expect, including programmed play, assorted repeat modes, the four standard time displays and so on. It also includes a shuffle mode for playing the tracks in random order, a feature present in some of the alternative packages but not as well implemented.

One area where CDtracker does fall over is if you try to load other CD playing programs while it is sitting on your icon bar. It might seem illogical to have multiple CD control applications running, however I often start one that tells me the track names, then switch to a simple player to conserve memory and not have big windows cluttering up my screen — I want my computer to do other things as well. It is not a dedicated CD player.

Antisocial

CDtracker appears to be of the opinion that no other CD player is worthy of the task, and will instantly kill any it knows of — rather antisocial behaviour! When I did manage to find one it couldn’t take a dislike to, it became apparent why: while other CD applications will co-exist with each other and changing tracks on one will be reflected by the other, CDtracker does not do this and will happily report the wrong information. Attempting to use

another program will cause CDtracker to complain bitterly.

One other problem I found is that CDtracker uses the CDFS facility to lock a CD ROM in the drive, thus preventing it from being ejected. This disables the eject icon on any other software loaded, and more noticeably, the eject button on the front of your drive.

This did cause me some annoyance until I realised what was going on. Having said that, I do like the fact that CDtracker reminds you to lower the flap on Risc PCs before ejecting! However the automatic grabbing of control over the hardware button has damaged CDtracker’s chances of being used regularly by me. I hope that this will be fixed in a future version.

Time codes

There does seem to be something a bit odd about the CDtracker clock. This appears to be self-updated rather than taking the time from the actual CD. When adding a CD to the database from the information recorded on the disc, the time codes can often be wrong: not only do they bear only passing resemblance to the times listed on the CD case, they can also play incorrectly. On several of my CDs, CDtracker managed to play tracks cutting off the ending, and often adding endings of the previous track to the start of the next one.

Monty Python

I'm sorry but my personal recollection of the original Monty Python's "Always Look On The Bright Side of Life" song doesn't start with Vic Reeves singing the finale from "Dizzy" (the previous track). None of the other CD players I have tested make this mistake and a quick bit of hacking also showed that the track length information was provided correctly by the direct CDFS commands. These are points which will, hopefully, be looked into and fixed for the next version.

Another niggling feature is that both the manual and program take every opportunity to criticise the main competition in this field, SmartCD+ sold by The ARM Club.

Comparison

As CDtracker seems to prompt it, I will draw a direct comparison between SmartCD+ and CDtracker: Both of these applications go about cracking the same nut in different ways. CDtracker has far more database style features than SmartCD+ and can be considered as a database that can also play the tracks, and as such is a 'big' application. SmartCD+ is more aimed at being a small utility that plays your CD whilst you get on with other things. It doesn't store as much information, and has no search facilities, and as such is closer to a Hi-Fi. Essentially both are good for different purposes, but having played with both extensively, I prefer the user

interface of SmartCD+, having a smaller and more compact window and displaying information on all the tracks rather than just one. Having said which, most of the time I use a simple utility written by a friend that just gives the basic play and skip buttons, and takes up 32k of memory, rather than SmartCD's 250k and CDtracker's whopping 450k.

Impressive idea

To conclude, CDtracker is an impressive idea, let down by a user interface that appears to have mutated rather than been designed. The database features are quite nice, but the CD player section is clunky, occasionally wrong, and takes far too much control for my liking (disabling the hardware eject button is inexcusable). The manual is in parts overly technical and detailed, being very daunting at first. Having said which, if you want something that can catalogue and search over an extensive collection, CDtracker may well suit your needs. If you want a simpler application that just plays audio CDs, then look elsewhere.

Simon Timothy

CDtracker is available from Werewolf Software, 23 The Spinneys, Bromley, Kent BR1 2NT.

Tel / Fax: 0181 464 7510

Email:

info@werewolf.fido.zetnet.co.uk



Termite Internet

Geoff Stilwell logs on

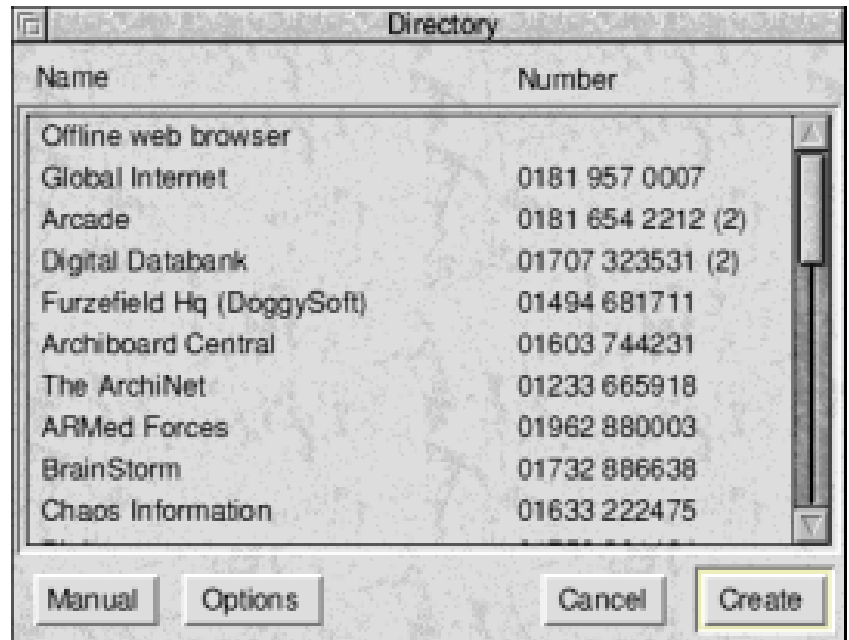
I jumped at the chance to review a copy of Termite when the opportunity arose. I had just acquired full Internet access with Global Internet (who I would recommend as a very cheap and friendly service). The setup discs were PC based and as I had a PC Card running on my RiscPC I happily went that route. Things were relatively straightforward on the PC but after using Mosaic and Netscape for Web browsing, Eudora for email and FreeAgent for Usenet I was eager to return to the 'drag & drop' RISC OS environment and to an integrated suite of software.

I must admit I was leaning towards the ANT Suite initially, despite it being more expensive. I had heard it did things better, although I also heard that Termite was more user friendly. When it arrived I hoped that this was true as I didn't want my wife berating me about the size of the phone bills while I was learning.

Impatient

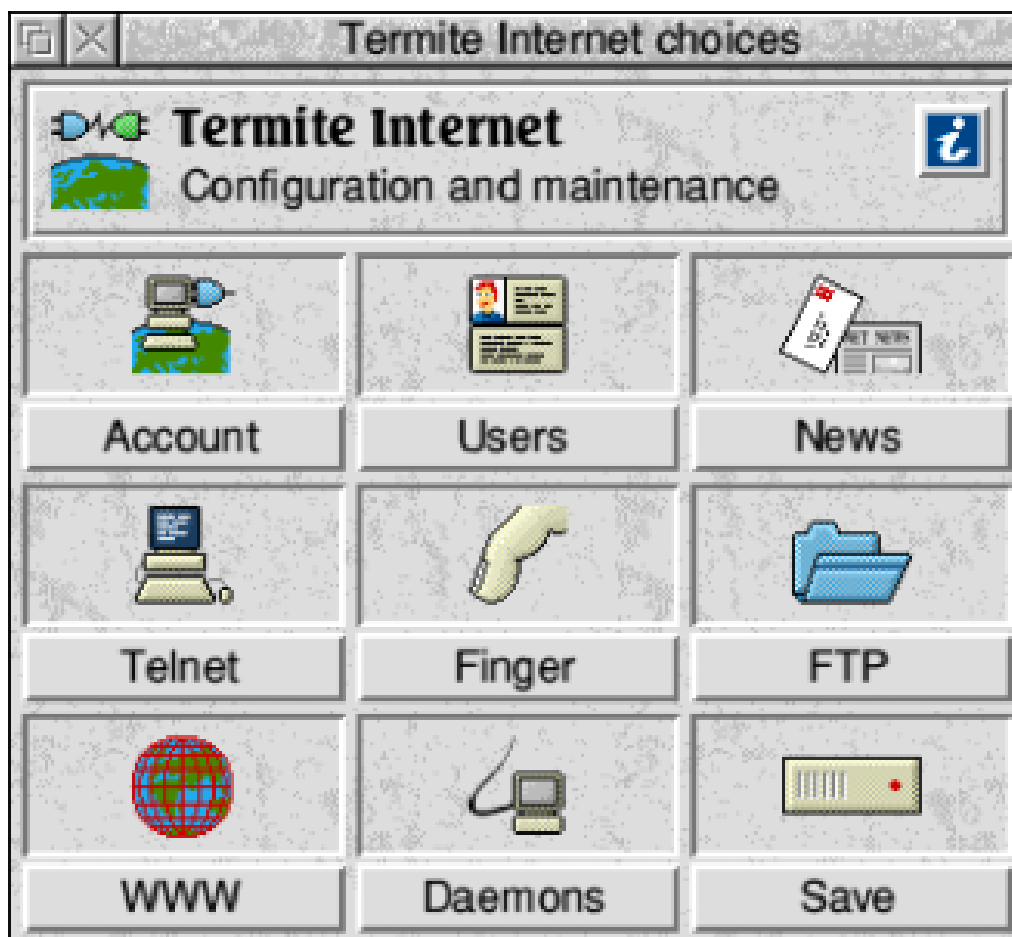
Unfortunately the three Termite discs arrived without the manual (not DoggySoft's fault. Simon Burrows was trying to save on postage). Being an impatient sort I tried to work it all out without the manual. "This'll test its user friendliness," I thought to myself.

Installing the software is easy with an installer program announcing when to insert the next disc. The 'Read1st' textfile tells you to use the !TermiteIP to set your Internet options (along with a 'Good Luck' message from the nice guys at DoggySoft). My modem wasn't one of the list included by default in the package but I had heard that setting it to Generic would do the trick, and it did.



Then I encountered my first problem: my Internet provider, Globalnet, wasn't included in the list of options.

I rang DoggySoft and was informed that an up-to-date list of providers was available from DoggySoft's Bulletin Board. I powered up Termite and found that their BBS was already an item on the menu (clever, these DoggySoft people!). I'd been using Arcade BBS for about two years, so I managed to find



my way through the menus to the Termite area, where I was able to download the files I needed. I then used Termite to access Arcade (also on the menu) to check my old mail box and found the BBS software very easy to use. Here I was also able to use Offlite, the mail and news reader, to read off line what had been left on Arcade for me.

Dialling up

Again, installing the updated list of providers and entering all the details of my Internet account ID and password was straightforward. I then tried dialling up my provider by double clicking on the Globalnet entry in the Termite Directory menu. The modem made all the appropriate noises, brrr, brrr, screeeeeeeach, boing, boing, and the

connect message came up... and the box stayed but nothing else happened. (Why can't nothing start to happen before the phone connects, costing you money?).

Wonders

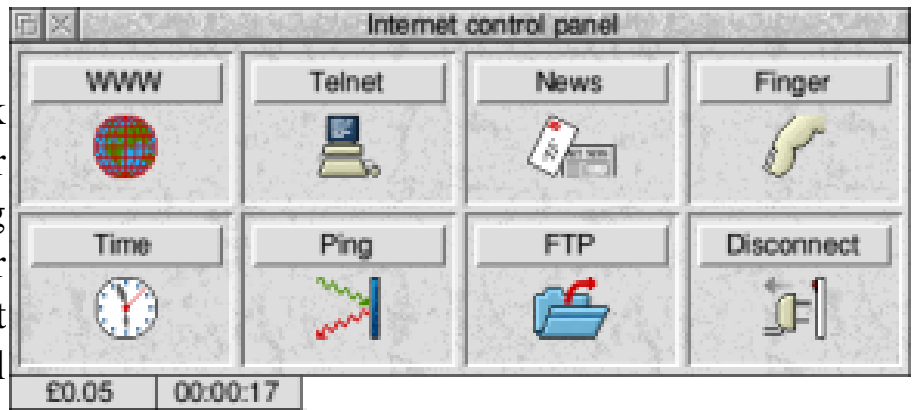
Investigating all the menus and dialogue boxes proved fruitless because I then realised that two years of BBS use had not fully prepared me for the wonders of Usenet, Telnet, Ping, Finger and FTP, even if I did know what they words meant. I went straight back to the PC side and used Eudora to email Simon Burrows. My message? STFM! (RTFM is a common acronym on the internet. It stands for Read The F... Manual. I'll leave it to your imaginations as to what the 'F', and the 'S' in my message, stand for).

Tryout session

I had to be patient for a week or two. I tried emailing another friend who was already using Termite. I invited him over for a meal and a Termite tryout session. Eventually the manual arrived (without the ring binder, Simon couldn't get that through the letter box) and I read it. It is very concise. In the 328 pages most of what the average user will want to read is in the first 90 pages. The rest is divided between Protocols, the Termite Script Language and SYSCALLS, stuff for the techies.

Surprisingly I did manage, with a few minor changes to the settings, to get it working. I got the browser working and I started to surf. I also tried to send some email. I composed the message in the off line news and mail reader, Offlite, but when I was on line there was no visible way of sending or receiving email. I was used to using Eudora through the PC card on my machine where there is a button and a menu option for sending and receiving mail. In Termite there is a News button on the control panel, a button for the Web, Telnet, Finger, Ping, FTP, Time and a button to disconnect but no button for email.

I found out later that this is supposed to happen automatically. There only seems to be one short paragraph that mentions this in the manual. But it wasn't



happening. The reasons will become clear later.

My friend, John Ward, did come to dinner and we spent the rest of the evening working on Termite. After some more minor adjustments to the configuration settings we went on line again and it all seemed to work. There was a minor problem now with the mail progress window popping up every two minutes. This was eventually cured by the later Beta version 9, which checks the mail but opens the window only when the provider says it has mail waiting.

Impressive features

John did show me some of the browser's more impressive features. Clicking on a link with the adjust button starts up a new browser window. I don't know how many are possible but we had four windows downloading large colour photographs of the Crystal Cathedral while we were checking out a search engine's hits in a fifth. One handy little feature was activated by pressing the Tab key when the cursor is in the URL entry box. This deletes the current entry

but leaves ‘http://www’ which usually prefixes most web site addresses.

I have just taken a training course in HTML programming and I’ve started developing pages for my church. We had a look at my work with Termite’s browser and I was surprised how different the pages looked. I understand that Netscape, which I had been using at the church offices, is setting its own standards regarding HTML which not all the others are following, hence the discrepancies. The one main omission for me was tables. Where tables have been used on a web page Webite ignores them and displays the information in a linear way. This obviously destroys the effect of the design of the page. I understand that DoggySoft are working on implementing Tables in a future version. There’s a lesson there for HTML authors: check your pages using a range of browsers.

So many variables

When I spoke to James Ponder of DoggySoft about the problems I’d been having he informed me that Termite was having problems with three Internet Service Providers (ISP) and mine was one of them. It appears that there are so many variables with Comms and the Internet (In my opinion it’s a wonder anyone gets connected at all). These three ISPs had PPP (Point to Point Protocol) implementations that were incompatible with Termite’s PPP implementation. My POP3 (Post Office

Protocol) email account was not compatible with Termite. I was tempted to find another provider, but James insisted that DoggySoft were working on the problem.

A couple of weeks later I received an email from DoggySoft’s mailing list saying that Beta version 9 had been posted on their web site. Registered Termite users have a password which allow them to download upgrades to Termite’s various parts. Beta version 9 was duly downloaded and Termite on my Hard Disc was upgraded in the space of a few minutes. The next morning, bright and early, I tried it out. and it worked! Now I could use Termite with confidence. Thank you James and all at DoggySoft.

Apart from WWW access my main use of a comms package is email and now I am getting into Newsgroups. Newsgroups, for the uninitiated, are Internet discussion groups. There are over 16,000 of them with subjects ranging from computer interest groups (comp.sys.acorn.announce) through serious discussions about culture in Sri Lanka (soc.culture.sri-lanka) to trivial ravings about your favourite pop group or TV prog (alt.fan.take-that).

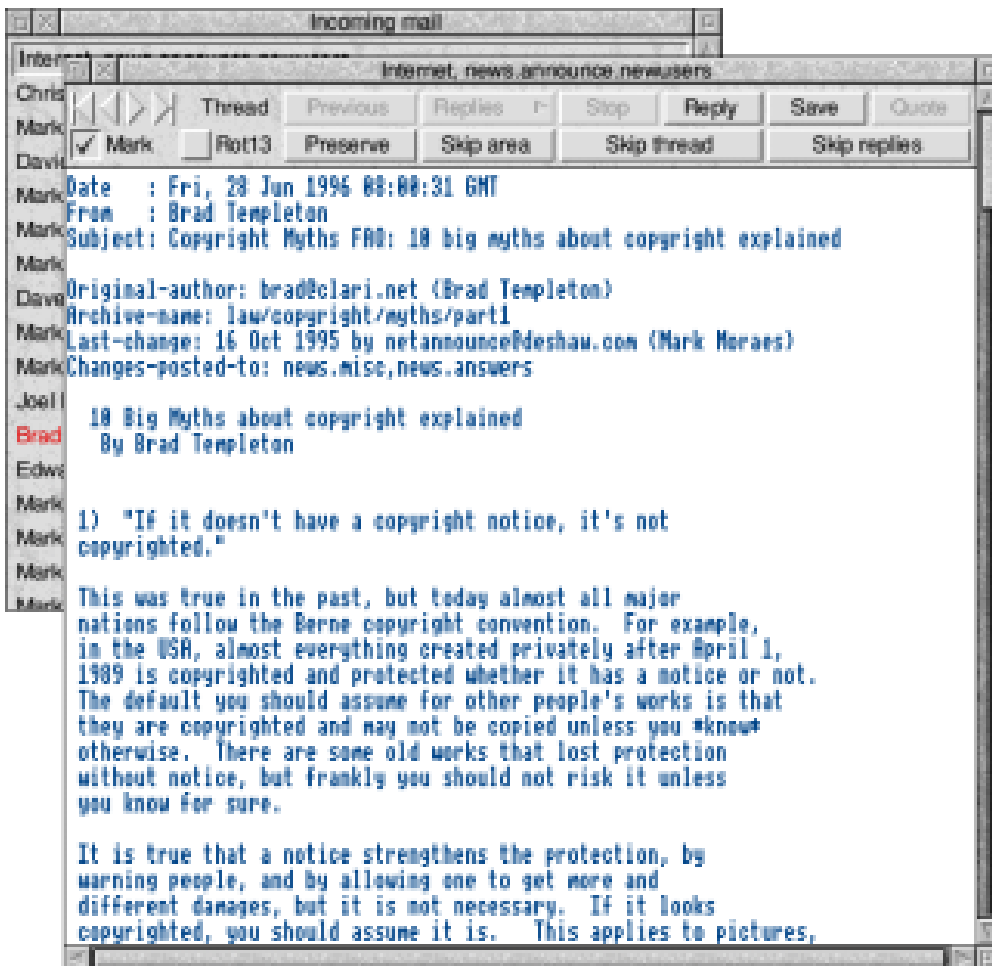
Termite handles email and newsgroups in a similar way. When you go online your email and selected newsgroup postings are downloaded automatically. To read them you have to load ‘Offlite’. The

email and news are automatically loaded into Offlite and sorted into their correct areas and then their headers are displayed in a list. Clicking on one of the headers displays the message itself in a window.

The controls here are quite straightforward with arrow buttons that

window menu. this also gives you some control over what messages are displayed and/or kept and for how long. An expiry period for news and mail can be set using the Offlite icon bar menu. Here I would have preferred an additional system of selecting a number of messages, or even areas, and pressing the Delete key.

Sometimes the 'signal to noise' ratio in newsgroups is very low and you want to delete all the 'noise'.



take you through the list one by one, or you can follow a thread (a set of linked articles) or skip threads or whole areas.

You can reply to an article by clicking on the Reply button. This automatically fills in the dialogue box ready for you to type your reply using whatever text editor you normally use (Edit works as well as DeskEdit, StrongEd or Zap). To send a new message you use the Incoming mail

when all you want to do is check if the mail is important.

If you create mail messages while you are online, whether using Offlite or by clicking on a 'mailto:' link in the Web browser, these are sent automatically by Termite a few seconds after they are saved. Mail created and saved offline will be stored and then all sent together

when you go online. It is not easy, however, to retrieve and edit any previously created messages. In my opinion this is quite a serious omission.

FTP (File Transfer Protocol) is used to download files from remote computers. This is a bit of a grey area for me where Termite is concerned because I have been able to use the WWW to acquire the software I needed. I did have a problem when downloading once when I received an error message saying that I couldn't proceed using the Hensa protocol. As I understand it the Hensa protocol can only be used by people with an academic email address, such as bob@essex.ac.uk. I'm not sure what the rest of us do :-/. [*See footnote, Ed.*]

At one of the recent Internet exhibitions I watched an IRC (Inter Relay Chat) demonstration. This is where you can hold a typed conversation with someone on a remote computer in real time. this is achievable with Termite, using the Telnet button. The Oaktree Talker is an Acorn Chat server run by the ISP, Zynet, in collaboration with DoggySoft. I did try to access this on a couple of occasions, even started to chat with someone, but on both occasions the whole program crashed.

To be fair, the Internet is changing daily; as technology grows, as the big companies such as Netscape, Microsoft and Sun try to force the pace of change and keep moving the goalposts. No

Internet software is ever going to be finished, it is just a case of keeping up with the game. Yes there are omissions from the Termite software that I've mentioned, some of these are being developed as I write.

DoggySoft are a group of, what appears to be, very talented young programmers, some of them still at university. They have set themselves the mammoth task of providing an all encompassing suite of Internet software that will get the average user onto the Internet with the minimum of fuss.

It may sound, from this review, that this was not my experience. I don't want it to sound like I'm making excuses for DoggySoft, but I do believe that I was unlucky with my choice of provider, Global Internet (Who I can now recommend for Acorn and Termite users as well). As it transpired I was quite impressed with the response I had from James Ponder and his subsequent success in solving the problem.

I would recommend that Termite users subscribe to the Termite mailing list which does keep you up to date with developments and allows you to share your problems with other Termite users and get a great deal of support from them and the DoggySoft team.

It appears that this has been less of a review and more of a "My Experiences with Termite" article. I hope it has been

helpful to those who are considering going online.

All I have had to compare with Termite is the commercial PC software I've already mentioned. These were developed by big companies with teams of programmers devoted to nothing else. Yes there are many features within these applications that I missed in Termite: Sorting Newsgroup articles in different ways, address books in the offline readers, support for the most up to date HTML and Netscape extensions. These will, no doubt, be implemented eventually, when some of these things have been generally accepted by the Internet community. By that time the goalposts will have been moved again. The lads at DoggySoft have certainly got a job for life!

Geoff Stilwell

Hensa

Non-academics can access Hensa in the evening or can log on at any time to one of the sites which mirror it, such as:
ftp.demon.co.uk/pub/mirrors/hensa

Ed.

Termite Internet costs £79.95 +VAT and is available from:

DoggySoft, Furzefield House
Furzefield Road, Beaconsfield
Bucks HP9 1PQ

Tel: 01494 673222

Fax: 01494 675878

BBS: 01494 677728

Email: support@doggysoft.co.uk

Global Internet may be contacted at:

Tel: 0181 957 1005

Email: info@globalnet.co.uk

Full Internet access can be purchased from them from £8.81 including VAT

Can you help Eureka?

Eureka is growing. This is the 19th issue and we would now like to have a cumulative index to help keep track of everything we have published and to make it easier for everyone to find that little gem of information that we know we read in it somewhere, some time.

Is anyone interested in preparing this index before the pile of back numbers gets too big to tackle? It does not matter if you do not have them all. They can be supplied on disc as Impression Publisher files to make the job easier. Beebug's ArcScan program would be a suitable tool but any other system of indexing would be possible.

If you would like to help, please contact the Editor at the Club's Freepost address or email: Eureka@armclub.org.uk.



The *Eureka* Disc

The Club's PD Librarian, Nick Evans, reveals his new selection

Don't forget that we have, in the past, been able to offer an upgrade service for those of you who have found that the version number of your favourite PD program has been superceded and this has now been extended to those discs which have significantly altered since you bought them. If the original PD disc is returned, along with stamps to the value of 50 pence for each disc, then I will replace this disc with the latest version. Please don't send cash as I have found that a lot of this goes astray in our postal system. Stamps will do and cheques/postal orders can be made out to 'The ARM Club'.

The PD catalogue viewer will not work with RISC OS 2. We suggest that you increase your computing enjoyment by inserting RISC OS 3 into your Acorn machine.

The files can be loaded into a text editor of your choice by pressing down the SHIFT key and double-clicking on this program at the same time. The text files can then be found in the FILES directory.

The printer option expects a standard printer lead to print out properly. You will have to negate the effect of the changed lead connections in the Turboprinter cable by loading up the module called "Turbo" which is given

to you with the Turbodrivers. It is inside the 'Modules' directory on the Turbodriver disc.

To increase the access speed to the files of programs it is best to run the catalogue viewer from a ram disc.

Some of the programs on the disc may not run from an Archive. You should, wherever possible, de-archive the programs onto a floppy or hard disc before running them.

This month's magazine disc contains:

- The latest news about The ARM Club discounts scheme.
- A sample program from Mark Smith to go with his article in Eureka.
- AA_Utils This program from Richard Gunn transmits a code to the serial port to tell your modem to auto-answer after one ring.
- ArcScan is an archive from Brian Cocksedge. It contains ArcScan files of the indexes of Model Engineering magazine and also the Dabs Press Book Indexes.
- Bounce is a small program that amazed Geoff Lane when he wrote it

because it fills the screen.

- CapsLock is another small program from Richard Gunn which allows you to toggle the state of the Caps Lock key from the icon-bar.

- Connector is included because many members have asked for a PD/Shareware comms package. Until now there hasn't been one that worked well under RISC OS 3. Now there is, and although it seems to be updated very regularly it does do exceedingly good comms.

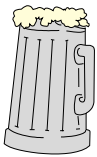
- Distances is for those who are about to sit their driving test. It calculates stopping distances.

- NumberGen is a random number generator from Andrew Berry. It is set up for the obvious use, but this can be changed. I haven't won anything with it yet.

- SmallSave is a small, fast screen saver. Again this is from the fingers of Andrew Berry

- SpinDown, also from Andrew Berry, controls a feature of ADFS hard drives which allows them to be 'spun down' (ie the drive stops turning).

Nick Evans, PD Librarian



Bitfolio Clip Art

Nick Evans takes a serious look at cartoons and Christmas joy

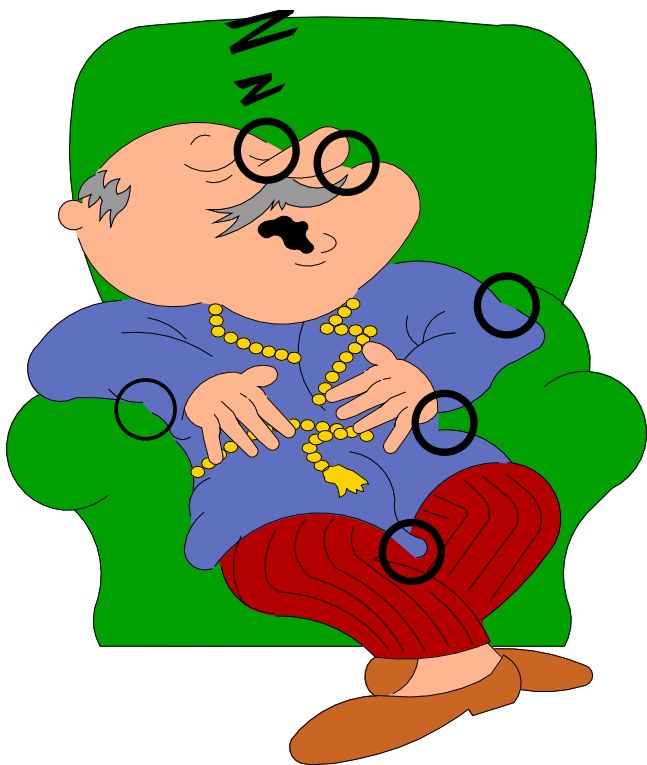
Bitfolio Clip Art is an enormous range of Draw format art from Management Graphics. It is available on CD Rom or in smaller numbers on floppy discs.

I am a great collector of clipart having built up a very large collection over the years, from both PD and commercial sources.

Yet still I find that when I am producing some document or other, the piece of clipart that I would so dearly like to include to add the finishing touch is not there. So I wander through a collection of books etc, and end up scanning this elusive finishing touch. However, this

almost inevitable hole in my collection does not stop me from buying up more and more discs of clipart.

I received three Bitfolio packs — Cartoon Collection, More Cartoons and the Xmas collection. Each pack consists of three 800KB discs. On the first disc in each pack is the SparkFS reader and an archived file of clipart, and on the other two discs in the pack there is an archive. The discs are inside a plastic wallet of the sort that has been around for years and was originally designed to hold two 5.25" floppies. Putting three 3.5" discs makes them a little bulky and does detract from the presentation a little.



Gaps in the outlines

Also included is a registration card which exhorts you to fill it in in order to receive free software upgrades and telephone technical help. I find this more than a little bizarre for clipart — surely the one product which is not upgraded and for which technical help is of little avail. Perhaps I will phone up and ask some pertinent question if only I could think of one.

Picture of each

The final enclosure is a double sided and folded A4 piece of paper with a small picture of each of the draw files printed in full colour. At least that is true of the Cartoon collection but the other two collections had the reverse of the paper printed in black and white only. The Cartoon Collection sheet also proclaimed that I had the PC version in .cgm files on 1 3.5” disc, where as the

other two pieces of paper at least had the correct description of the medium.

Copyright notice

The copyright notice, which was not present in the Cartoon Collection pack said that I had been granted a non-exclusive licence to use the symbols for any purpose, other than the republication or electronic distribution of the symbols. I have thought long and hard over this and have even shown the paragraph to a lawyer who specialises in copyright law and it does seem as though I may not be able use the files in a paper publication as well as an electronic one since the meaning of the notice is far from clear. However, undaunted, you will find some of the clipart files reproduced.

I de-archived the software and was mortified to find that there was one disc in each pack which came up with a disc error such that about six draw files could not be extracted. I thought that my disc drive must be at fault, but I got the same result on each of the five Acorn machines that I have at my disposal. To have one disc throw up disc errors I would consider unfortunate. To have 33% with errors is, to my mind, just plain sloppy.

Unimaginative titling

The files are cunningly titled so that the files in the Cartoon Collection run from Cartoon101 to Cartoon200, the files in

the More Cartoons pack run from CART235 to CART334 and the files in the Xmas Collection run from XMAS001 to XMAS100. Original it ain't but the printed sheets were indispensable due to this unimaginative file titling.

The other irritating thing that I found was that the files had been saved at varying degrees of magnification from 4x to 0.5x, but at least the grid was toggled off.

The size of the drawfile varied from 14 to 482KB with the vast majority being between 20 and 50KB.

The colouring was very good and produced a nice printout on my laser printer at 800 x 600 dpi.

Gaps in outlines

Apart from this I was not very impressed with the quality of the files. Nearly all of them had gaps in the outlines of the figures. The drawfile printed opposite shows this lack of continuity quite well and I have drawn rings around some of the gaps. On this one drawfile there are at least 15 of these continuity defects. Obviously they become more noticeable the larger the size of the printout.

Overall I feel that very few of these files will be of any significant use and the files in those Bitfolio packs that I have certainly do not improve my collection significantly even over some of the PD

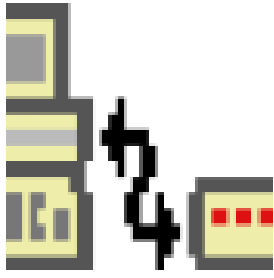


clipart which is available. The quality is not what I would have hoped to see in commercial Acorn clipart and is very definitely surpassed by other Clipart packs that are available.

It may well be that you could find a use for some of the clipart but my advice is that perusal of the colour catalogue would be a must before you part with any significant sum of money.

Nick Evans

The packs cost £20 each and there is a CD-ROM available with more than 10,000 images at £96 (both prices inclusive) from LOOKsystems, Unit 1, The Gables Yard, Pulham Market, Diss, Norfolk IP21 4SY.
Tel: 01379 608585



Atomwide High Speed Serial Port Card

Simon Burrows reviews this essential upgrade for many comms enthusiasts

The Internet has made a huge difference to people's opinions of modems. Not long ago, they were the preserve of enthusiasts and anoraks but now every computer user seems to think they need a modem.

My first modem was a 2400 bits per second (bps) Amstrad model which cost around £200. I found this perfectly adequate at the time, if a little slow.

A bargain

About a year later and after much saving up, I bought a US Robotics Sportster 14400bps at a cost of £350. Ouch — I thought that was a bargain!

The changing market for modems is reflected by Acorn's attitude in the design of its machines: computers launched prior to the A5000 have quite poor serial port capabilities.

The A5000 and subsequent machines used a newer Input/Output controller chip which is somewhat better, and the Risc PC and A7000 have good serial port capabilities including a *FIFO* buffer which helps to avoid losing data when it arrives very fast.

A common source of confusion with modems are the different ways in which speeds are quoted:

When a modem speed is reported as 14,400 bps, this is the maximum speed at which data is sent across the telephone line to the remote modem.

However the modems at either end of the telephone line can use data compression to squeeze more information through the telephone line.

As a result, the stream of data transferred between the modem and the computer may be more than 14,400 bps in order for the modem to have enough data to sustain this rate when compressed.

Higher rates possible

This is why most comms packages refer to a speed of 19,200 bps rather than 14,400 bps — 19,200 bps is easily achievable through the use of compression. Much higher rates are possible using error control and data compression, for example a 28,800bps modem can achieve throughput of 115,200bps at best.

Difficulties

I won't bore you with the technical details, but Acorn machines prior to the Risc PC and A7000 could run into difficulties through data arriving at the serial port faster than it could be processed.

Acorn had several attempts at improving this situation through releasing various soft-loadable modules for RISC OS 3.1 machines. If you are using one of these machines, you should certainly obtain a copy of Acorn's 'SerialDevice Driver' module version 0.22 or later. Many recent comms packages include this module as standard.

The solution?

As a result of Acorn's limitations, two companies came out with expansion podules providing additional higher performance serial ports. These were released by Intelligent Interfaces and The Serial Port (whose products have now been taken over by Atomwide).

This review concentrates on the Atomwide Serial Port Card since it has recently been upgraded in specification, however Intelligent Interfaces also produce high specification serial port cards and their advertisements can be found in the newsstand Acorn magazines.

Latest generation

The latest generation Atomwide Serial Port Card provides between 1 and 3 additional serial port sockets, each

capable of sending and receiving data at up to 460,800 bits per second.

Being a half-width expansion card (podule), it cannot be used on the A3010, A3020 and A4000 because these computers have no suitable podule slot. The A7000 can only have a podule fitted if there is no internal CD-ROM drive fitted.

Do I need one?

If you own a modem slower than V32bis (14,400bps) then there is no real point in buying a Serial Port Card unless you need more than one serial port (for example, to connect an A-Link, teletext adapter, serial printer or serial mouse to your computer).

V32bis (14,400 bps)

The Risc PC and A7000 do not need a Serial Port Card to keep up with these modems.

The A5000, A4, A3010, A3020 and A4000 can also drive these modems at full speed, although you should check that you have the soft-loadable module described earlier.

The A3000 and Archimedes machines prior to the A5000 will have difficulty driving a V32bis modem at full speed. If you wish to do this, you will need a card such as the Atomwide model.

V34 (28,800 bps)

Once again, the Risc PC and A7000 can keep up with this speed. However any

older machine will not, due to the lack of a FIFO buffer on the serial chip, leading to poor connections and lost data packets.

Faster still?

Modem technology is still developing, although at a slower rate than in the past as the limitations of the current telephone system are reached.

For example, US Robotics has recently upgraded its Courier and Sportster V34 modem ranges to operate at 33,600bps instead of just 28,800bps. The Risc PC and A7000 serial ports will work reliably at speeds up to 115,200bps, the Atomwide Serial Port Card up to 460,800bps, hence it can be seen that the Acorn serial port is once again becoming a limiting factor.

Other uses?

Additional speed is not the only possible reason for wanting additional serial ports for your computer.

If you need to use more than one serial device (eg an A-Link and a modem), it can be very annoying to keep having to unplug one cable and insert another. It can also wear out the socket on the computer.

Some people could not do without multiple serial ports, for example operators of dialup bulletin boards.

Many BBS systems allow more than one

person to dial in at the same time and interact with one another, this is only possible because more than one modem is connected to the same computer.

The product itself

The Atomwide Serial Port Card is supplied in a large box complete with laser-printed paper manual and floppy disc containing assorted software.

The card itself is reasonably heavily populated with chips and other components, and is supplied with a *loopback plug* which is used for testing that the serial ports are working.

The card is available in three versions, with either one, two or three serial ports fitted in addition to the standard Acorn serial port fitted to the computer itself.

Installation

The card plugs easily into any machine with a spare podule slot.

The card makes use of the Serial Block Driver protocol (identified by use of the *!SerialDev* application). Written by Hugo Fiennes, this provides a standard interface for applications to access one or more types of serial device.

The manual is comprehensive and easy-to-follow. Full instructions are given for converting the popular comms and Internet packages for use with the card. These include the ANT Internet Suite,

Termite, Voyager, ArcTerm7, Hearsay 2 and ArcFax. Support is also included for using the card with DOS and Windows applications running on a PC card.

Once installed, an application called *!CardTest* is provided to check that each serial port is working properly and verifying the maximum possible data speeds with each serial device.

The latest version of the *!SerialDev* application is also provided to replace any existing copies which you may have. Also included are examples of C and Assembler source code for incorporating support into your own applications.

In use

Once the card has been installed and set up, it is almost completely transparent. Communications rattle away as fast as their makers intended, no longer constrained by Acorn's serial port restrictions. It is great to be able to have several serial devices connected at the same time without having to keep unplugging one to insert another.

Conclusion

The Atomwide Serial Port Card is a well-designed and professionally finished product. It meets its objectives cleanly and with minimum hassle for the user.

The card is one of those products which you either need or don't need. If you have a 28.8K modem and a pre-Risc PC machine then you need one. If you have a

14.4K modem and a pre-A5000 computer then you should definitely consider one.

If you regularly need to connect more than one serial device, the card could be well worth while, and if you run a multi-user bulletin board then the card is pretty much essential.

Value for money

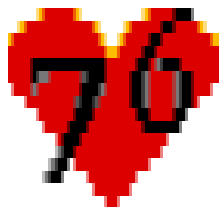
At first sight, the cards may not appear particularly cheap, but if they remove the need to buy a newer computer or else allow you to drive your existing modem at full speed, they offer good value for money with the backing of Atomwide and The Serial Port, both well-respected and long-standing Acorn developers.

Simon Burrows

The card costs £79 fitted with a single serial port, £89 for a double and £99 for a triple. All prices +VAT.

Atomwide Ltd are at:
7 The Metro Centre
Bridge Road
Orpington
Kent BR5 2BE

Tel: 01689 814500
Fax: 01689 814501
Email: sales@atomwide.co.uk



HeartBeat

Steven Flower sets his pulse racing
to find out how fit he really is

Before I actually begin to review the product I think it would be useful to give a little background information so as to provide some insight as to my fitness level. I am a Canoe Slalom Paddler and compete at both National and International level. I also enjoy working out on a regular basis using means such as running, cycling and weights. I already have access to a Polar Heart Rate Monitor which is based on a watch and a similar strap.

Initially I was disappointed with the packaging of the product. The problem is that you actually get only what seems to be an advertising leaflet stuck to the front of a standard white box. The layout of the information on the leaflet is quite impressive but for 120 quid I would expect a more attractive package. What's worse is that the actual software has subtle differences to what is shown on the box.

Opening the box you are presented with several items including the waistband, receiver, software disc and manual.

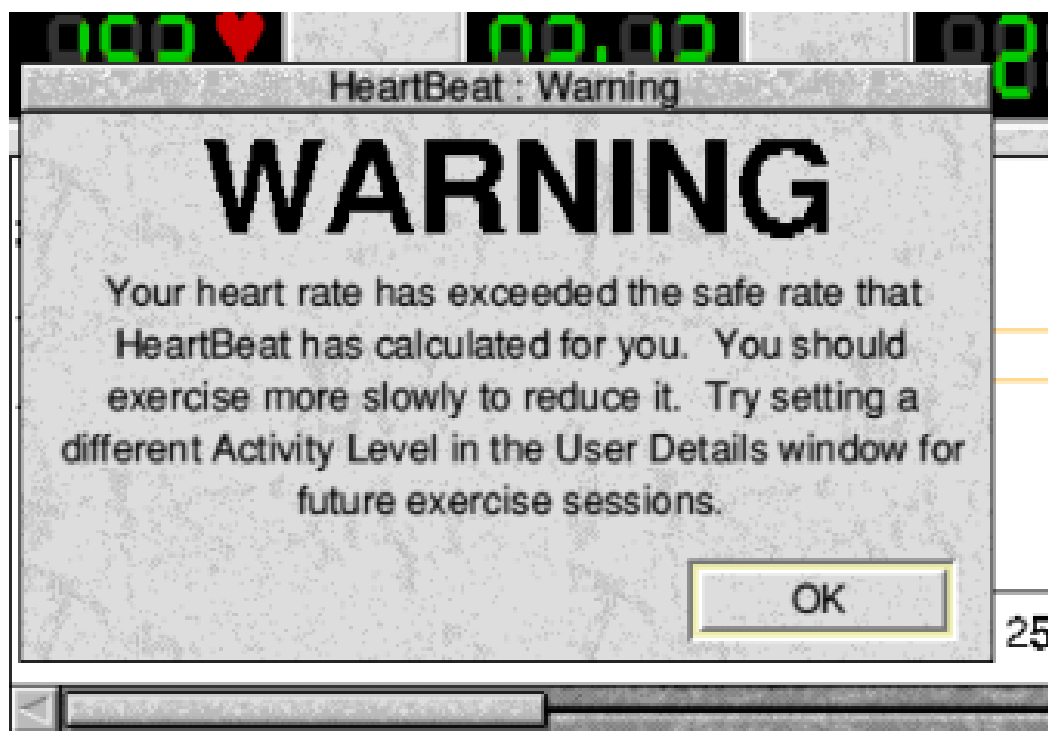
Installing the software is very simple as it is a case of just copying it to the Hard Disc (although it can be run directly from floppy if necessary). The receiver and waistband are equally easy to setup and don't need any technical knowledge of the machine. So far, so good.

Set up

After reading the manual (which seemed to contain little information) I proceeded to set up a user as was explained. Following this, I worked out for three minutes allowing the system to do its calibration which was an experience in itself. The manual states that "a step



rhythm is generated by the machine for you to keep to". All I can say is that if I was supposed to keep to that rhythm, then I would not be in any fit state to be writing this review! The rhythm seems absurdly quick but, even worse, there is no explanation in the manual of how the rhythm should be interpreted.



Beware, you are not as fit as you think!

The calculations that are performed by the software seem to produce a perfectly reasonable figure for the step rate that I should be able to maintain. So after the calibration process was complete I continued to work out a little more to see how the software would cope.

Timer

After spending a little time working with the software I found that the timer was occasionally a little precarious. Whilst recovering I decided to save the user details as they were currently set, only to find that the program crashed. On running the application again, I found that I had lost all of the user and calibration details which it had just taken me ten minutes to set up!

Fine I thought and began again. After setting everything up again I worked for

some time getting the software to do as I wanted. Unfortunately the 'heart rate training zone with high and low alarm settings' does not allow you to set your own levels and the rest of the package is just as unforgiving should you wish to alter these settings yourself. I assume that this is for safety reasons but for serious athletes who would have any genuine use for the package, far more flexibility and features would need to be introduced to interest them.

Graphs generated

The graphs that are generated by the system during any period of exercise can be exported in either of two formats, Draw files or CSV data. This is one feature that is useful but necessary for the package to retain any records of the work that has been done before.



Good, still beating!

So far I have discussed the main HeartRate application but there is a second, smaller application supplied with the package. Running the HeartMon application displays a simple window which contains a numeric display of the current heart rate that is being received. Nothing complex but can be useful when all you wish to know is what your current work rate is.

Good standard

The hardware supplied with the system is of a very good standard and does the job admirably. However, the software really does let the package down with a quite severe lack of features and one or two problems such as the fast step rate generated for calibration. The manual is also relatively un-informative not providing the necessary level of detail for a package of this type.

Conclusion

In conclusion, the package really falls into nomansland between the professional athlete and the 'Sunday jogger' with the understanding needed to use the system properly being outside that of the 'Sunday jogger' and the options wanted by the professional simply not provided by the software. As a starting point to increase the attraction of the package across the spectrum of users, the manual needs to provide more information on how to use to software

correctly (that is how to interpret the step rhythm generated by the software).

The potential for increasing the options and functions within the software package is immense. There are many areas in which I felt improvements could be made such as:

- Altering the low and high alarm warnings for heart rate.
- Allowing other means of graphically representing the data recorded (a line graph as opposed to a bar graph)
- Allowing the re-calibration of the axes on the graph.
- Allowing the user to set a recovery period.
- Average heart rate calculations.
- Allowing sample periods other than the default 30 seconds.

There are many other things which could be done with this package that could be provided as a 'Plus' package giving more power to the user and I hope that VTI continue to develop it and exploit its potential.

Steven Flower

HeartBeat costs £99 + VAT
from VTI/Eclipse,
1 The Shopwhyke Centre,
Shopwhyke Road, Chichester,
West Sussex, PO20 6GD
Tel 01243 531194

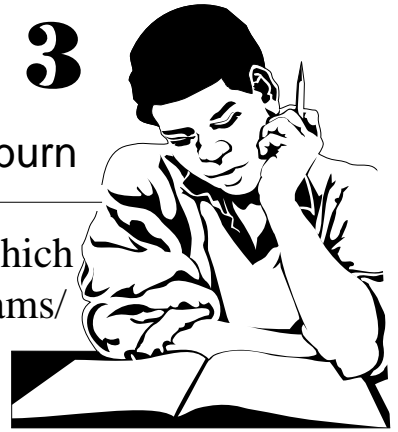
COREL DRAW 3

Can be for Acorn user says Alan Wilburn

Introduction

Corel Draw is a program, similar to Art Works, on the PC range. Unlike Acorn

a strong box which contains the programs/clipart CD, a large detailed



manual to cover the programs and a large reference book (300+ pages) containing coloured pictures of the 14,000 items of clip art, the bitmap files and movie clips as well as examples of the 250 fonts.

The programs are:—

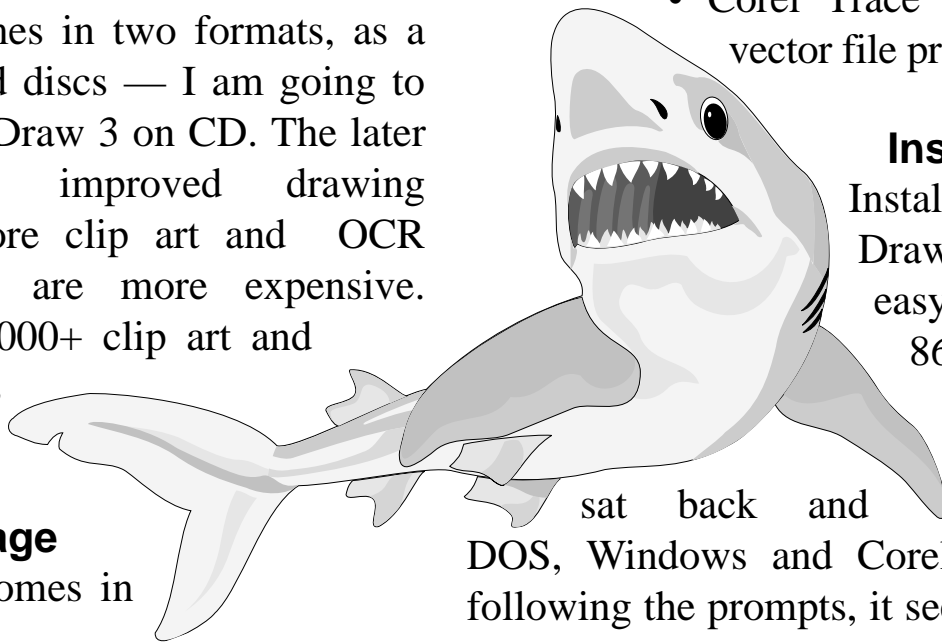
- Corel Draw a vector graphics drawing program.
- Corel Chart a chart/graph drawing program.
- Corel Photo-Paint a bitmap painting program.
- Corel Show a graphics slide and animation presentation program.
- Corel Mosaic a graphics file manager to organize a library including thumbnail images which it creates.
- Corel Trace a bitmap to vector file program.

companies, the trend appears to be that when a program is upgraded the original version is still sold but at a reduced price along side the new ones. Corel Draw is now up to version six so three, four, and five are now discounted and can be quite cheap. I am not advocating that you decamp to the PC world but that Corel Draw is a good buy for RISC PC users with CD drive and PC card, not for the drawing program which I have not bothered with, being reasonably competent in Art Works, but for the other possibilities for the Acorn user.

Corel Draw comes in two formats, as a CD or a CD and discs — I am going to deal with Corel Draw 3 on CD. The later versions have improved drawing applications, more clip art and OCR capabilities but are more expensive. Corel 4 has 18,000+ clip art and Corel 5 has 24,000.

The Package

Corel Draw 3 comes in



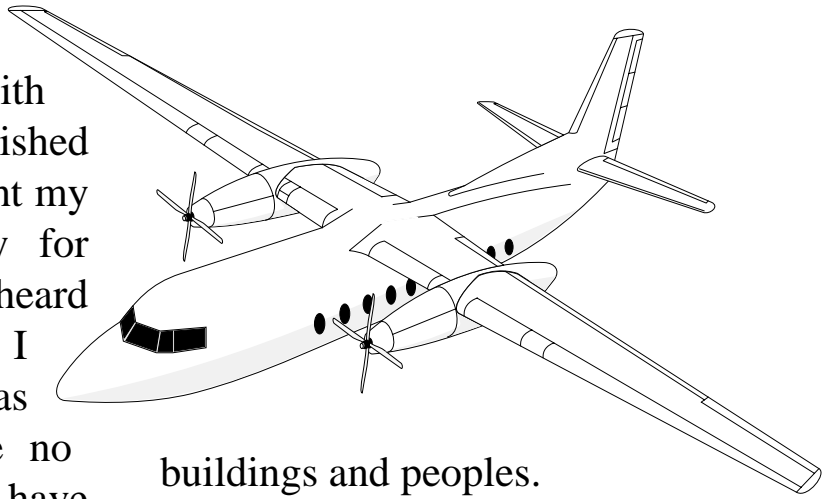
Installation

Installing Corel Draw was fairly easy I allowed 86MB for the partition and just

sat back and loaded DOS, Windows and Corel in one go following the prompts, it seemed to take

The ARM Club Magazine page 73

all day but I suppose it was only a few hours, Corel took the longest but it was quite happy getting on with it by itself so I just left it. When finished 61MB had been used. When I bought my 600 I needed plenty of memory for printing and scanning and as I heard Windows was memory rapacious I had 16MB DRAM fitted. The PC has 12MB allocated to it and I have no problems with speed etc. though I have heard that people with smaller memories find Corel Draw very sluggish loading and exporting files.



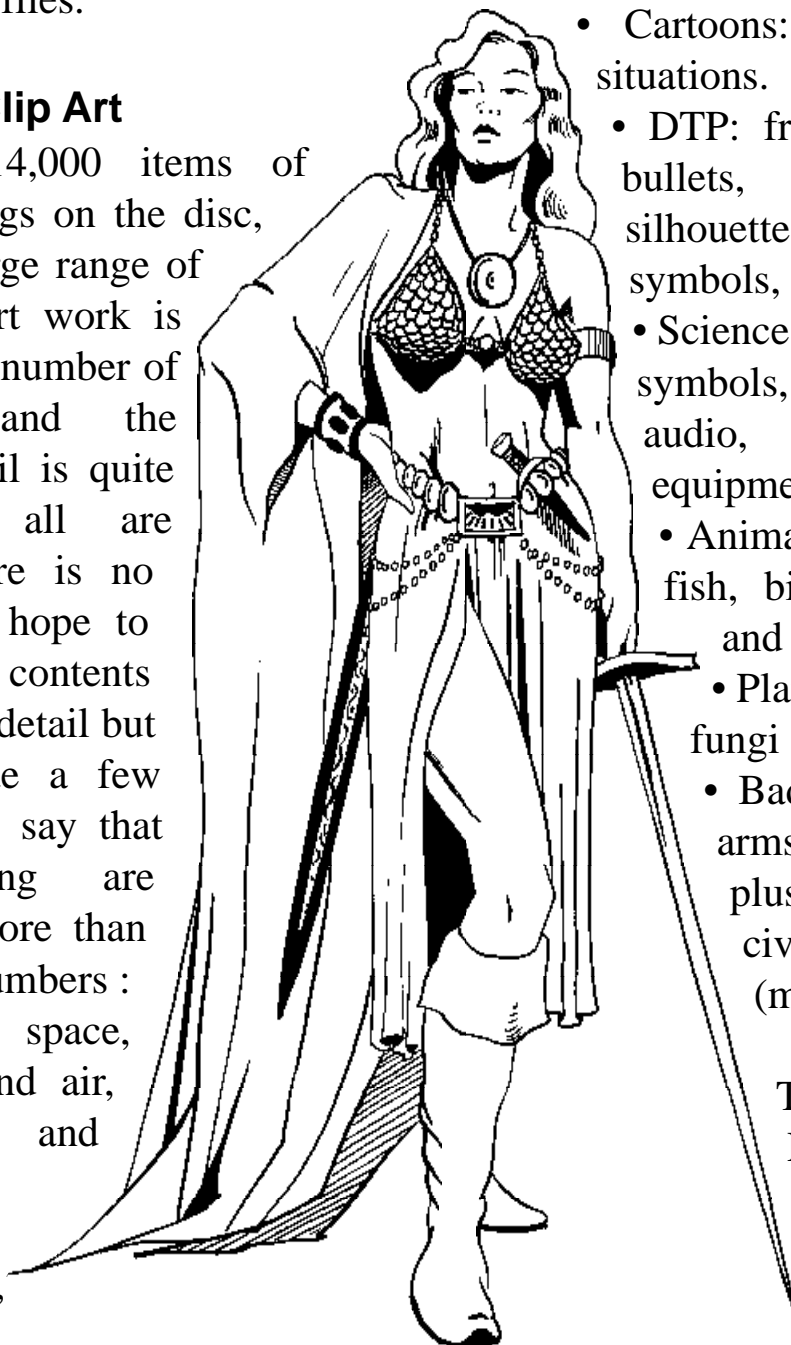
buildings and peoples.

- People: famous, men, women, children, occupations, sport and leisure.
- Cartoons: people, animals and situations.
- DTP: frames, borders, corners, bullets, arrows, flashes, silhouettes, drop capitals, rules, symbols, shapes and signs.
- Science: human body, electronic symbols, solid shapes, tools, and audio, visual, chemistry equipment.
- Animals: pets, farm, mammal, fish, birds, reptiles, dinosaurs and insects.
- Plants: flowers, trees, ferns, fungi and food.
- Badges: covering coats of arms of firms and countries plus armed forces and civilian organisations (mainly american).

Clip Art

There are 14,000 items of vector drawings on the disc, covering a large range of needs. The art work is supplied by a number of companies and the range of detail is quite varied but all are suitable. There is no way I could hope to deal with the contents in any sort of detail but I will include a few examples and say that the following are covered in more than satisfactory numbers :

- Transport: space, land, sea and air, military and commercial.
- Places: maps, flags,



These are in CDR (Corel Draw format) and have to be loaded into the program and exported in an EPS format that



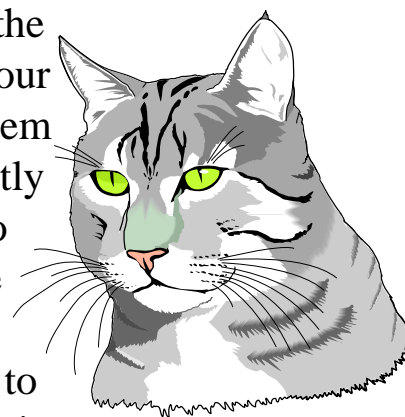
will load into Art Works or any of the PC formats which have PD conversion applications available to convert them to Draw files. Any of the files can be exported as bitmap graphics if required in colour or grey-scale.

There are a few directories of files in TIFF format with a most impressive set of black and white fantasy pictures.

Corel Trace


Corel Trace is similar to Image Outliner, !Trace and !Tracer on the Acorn machines. It has two main choices one for outlines that are then filled and another which traces lines with no fills which can give line drawings. Both choices can give some very good results. There are a large number of choices to

customise the tracing to your needs. The system is slightly complicated to use from the Acorn platform as you have to change your sprite



to a usable format such as BMP or PCX with ImageMaster or a PD program such as !Creator, trace it, save it in Trace EPS format, load it into CorelDraw and export it in a suitable format such as EPS or WMF. This is not all that complicated once you have set it up as the program remember the directories and formats to save and load from so when you click on the save option that directory appears and is set to save in the pre-determined format. The files can then be loaded into ArtWorks or changed to Draw format with a PD application.

Bitmap Export



☒ **C**olor

☐ **G**rays

☐ **D**ithered colors

☐ **C**ompressed

256 colors

Resolution

150 DPI

150

DPI

Size:

1 to 1

1115

x

977

Pixels

Width

Height

OK

Cancel

Reset

About...

Projected uncompressed file size:

1064 KBytes

File Conversion

I convert PC format files to sprites with a number of programs but at times hit snags that I cannot deal with, for example PCX files giving the message: "I cannot handle 16777216 colour EGA PCX files" in !Translator. In the past I have put them to one side as no other programs I have will load them. I can now load them into Corel Draw 3 and then export them in a format !Translator can handle.

As you can see from the dialogue box there are a number of options. Colour allows 16, 256 and 16M colours and size allows a number of screen sizes to be selected. If 256 colours is chosen, the saved file can then be loaded into Translator and converted to a sprite. Corel Draw imports and exports bitmap files in a number of PC formats including PCX, BMP, GIF and TIFF.

Conclusions

I consider Corel Draw to be a worthwhile buy for the clip art, file conversion capabilities and Trace program. It does need Windows which most people will have.

The cost

Corel Draw 3 is sold at greatly discounted prices. If I remember correctly, I was quoted in excess of £120 inclusive by Corel themselves.

The normal price is £60 – £65 if bought by mail order, inclusive of VAT and post and packing (normally £9+), but if you are near a discount store you save the postage and perhaps more. It is worth while shopping around as there is such a variation in prices.



Writing for Eureka

The Editor offers some hints, tips and advice for new writers and a few reminders for those who have contributed before

Everything in Eureka is written by ARM Club members and everyone is welcome to contribute.

This brief article is not intended to be a course in journalism but there are a few points so important that they must be made clear from the start. Most essential of all is accuracy. If you are doubtful about anything — CHECK IT! If you are fairly sure — CHECK IT until you are completely certain. Also, always use a spelling checker.

Be fair and even-handed. Don't take an extreme attitude about anything and either be blind to its faults or incapable of seeing its good points.

All magazines have their own styles. Try to follow them. It will save the Editor from hours of needless work making corrections and increase your standing as a contributor.

For Eureka, the main rules are:

- Do not use carriage returns at the end of lines except when starting a new paragraph.
- Type only one space after a punctuation mark, including a full stop.
- Do not use the keyboard hyphen (-) for a dash (—). You can produce a dash by holding down ALT and typing 152 on the

numeric key pad. If you have an older machine without this, type two hyphens (--) which can later be converted.

- Use smart quotes (“”) if possible.
- Use MB for megabytes with no space after the figure (such as 8MB).
- Note the correct use of capital letters and spaces in: RISC OS and Risc PC.

If you do want to write for Eureka, first contact the Editor (see below) and put forward your idea or details of your interests. If you want to review something do not approach the author or supplier for a copy. This must be done only through the Editor.

Send your article as a plain text file. Reviews must be accompanied by a selection of screen shots and a copy of the program's icon sprite. Full details of the price (saying whether it includes VAT and post) and the supplier's postal and email addresses, phone and fax numbers must be noted for an info box.

Our full guidelines sheet can be sent to you on request.

Peter Jennings

The Editor can be contacted by email at: eureka@armclub.org.uk or at the Club's usual Freepost address.

Spobbleoid

Gary Parr enjoys himself among the blocks and monsters

I have had this game in my possession now for just over a week and have already played it many times. I remember a very similar PD game on the Atari ST many years ago and it's nice to see a familiar one on the Acorn platform.

The main features are:

- 72 Fab levels, set over 12 actions zones. Over 2.5MB of eye bashing visuals.
- Seriously BAD*, 8 Channel stereo FX, with 11 original and kickin' soundtracks.
- Bonus Rounds, powerups and a wad of other game features.
- Hands on level designer — create your own mayhem!
- 50 fps action with 3 parallax scrolling mixed by Graeme Richardson.

On first looking at the game you may get the feeling that it is designed for the younger generation — about primary school age — but after playing the game for a while you find that the levels get more taxing and you really have to think about what you are doing. Sadly after a while some people may become bored as the levels seem to be the same. But this is where the level designer comes in (and we will come onto that later). Now onto the game itself.

The game is actually two games and a designer. There is the original

Spobbleoid and Fantasy Spobbleoid, both very similar in design. The designer enables you to design or edit your own levels or edit the original.

For those out there still running on old machines, it will work. I use an A305 2MB with ARM2 and had no problems at all. The game can be installed to a hard disc or can be run from floppies. Installation is just a case of following the on-screen prompts. You can also make data discs for you own high score tables or levels. Remember to write protect the originals as you will need the original disc 1 for the copy protection prompt.

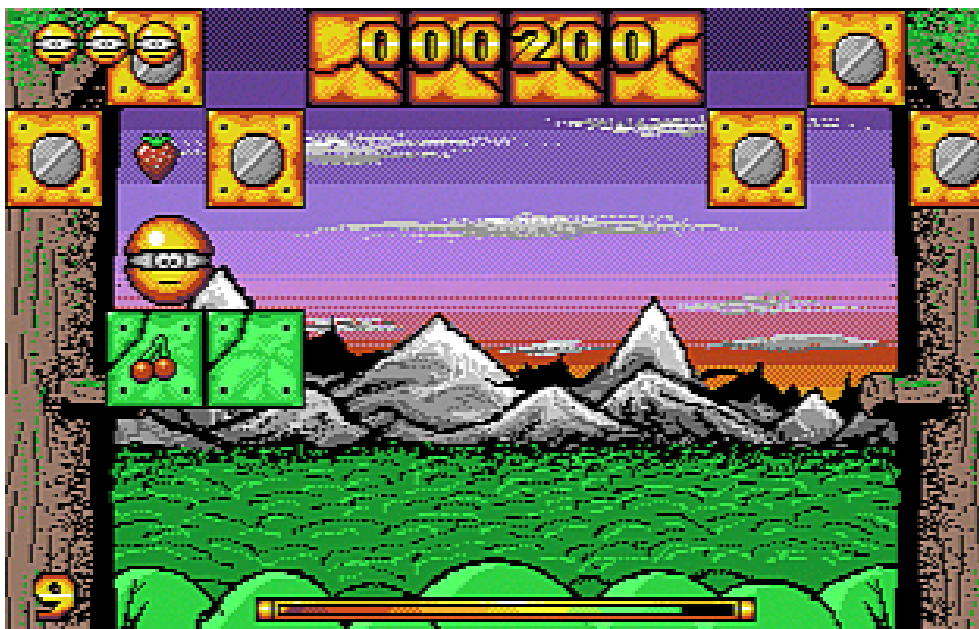
The object of the game is simple. On each screen there are a number of objects to be collected, which are either out in the open or behind blocks which you must move out of the way. On harder levels there are "monsters" which, when touched, cause your time to decrease. You may also find Extra Time blocks or Extra Lives blocks to boost your chance of winning. There are more obstacles, such as blocks which have to be unlocked with a key which you will find somewhere on the level, or blocks which can only move in a certain direction. As you complete levels you go in to different zones, each having their own theme. After each zone you will be given a password so you can continue at a later

date where you left off. There is a space provided on the inside rear cover of the manual to note it.

Now for the sight and sounds. There is very good quality sound, which makes the game very enjoyable. It is fully configurable and you can switch off each part, such as the background sound. There are many sound affects for different tasks, such as pushing a stone or picking up a jewel. The graphics are very good and do enhance the game. Many of you will be like me and if you play a game which looks ‘blocky’ you do not play it again. The scrolling on the levels works fine even on ARM2, so those on lower spec machines don’t worry.

The controls are very simple and can be redefined by the player and there is also the option to use joysticks if you have joystick ports. The defaults are:

Z - Left
X - Right
' - Up
? - Down
Return - Push Block
P - Pause
R - Retry Level (and lose one life)
CTRL + R - Quit present game.
CTRL + ESC - Desktop
CTRL + S - Toggles Sound (on/off)



The designer enables you to construct or edit your own levels. You can do anything: add more objects or have more blocks or monsters. The editor will enable you to design your own levels to your own desire, but remember to make backups because accidents do happen — as I know.

Over all the game is very enjoyable, mainly due to the very good sound and graphics. It will mainly suit children around the age of 9-11, but can be played by all ages.

Gary Parr

* Note to older readers

‘Seriously BAD’ is high praise. Ed.

Spobbleoid costs £29.95 from:
4th Dimension,
1 Percy Street, Sheffield, S3 8AU.
Tel 0114 2769950 Fax 0114 2781091

Coming in Eureka 20 ...

- The final preview of Acorn World before the big show opens at Olympia
- The end of the long wait for Ovation Pro. Now will it take over from Impression Publisher?
- Computer shall speak to computer. With QuickLynk or RSDFS? We compare both systems
- A review of Music Maker, the fun way to teach children about notes, scales and harmony
- Creating the three-dimensional look with Top Model
- Colour printing with the Canon BJC4000
- A disc full of interesting and useful PD software
- Plus all the regulars, Club News, Members' Advertisements and lots more

Eureka issue 20 should be in your hands just in time for Acorn World 96. Don't miss either!

Benefits of Membership

*The Leading Independent User Group for
Archimedes and Risc PC Users*

THE
ARM
CLUB

- Club magazine published and sent four times a year to members
- Disc of quality software written by members with each magazine
- FREE Technical Help Service — we will do our best to solve any problems which you may have, by letter, telephone or fax
- Special discounts from well-known companies for Club members
- Training courses, regional meetings and Open Days
- Regional contact lists of other members, to get in touch
- Discount Public Domain Library, including unique Club software
- Joining pack includes copy of most recent magazine and disc
- Special offers at Shows and Open Days
- Opportunities to get involved in the running of the Club itself
- School and Affiliate Membership available on request

If you want to get the most out of your Acorn computer, join today!

Annual Membership costs only £12.00

*The ARM Club, FREEPOST ND6573, LONDON N12 0BR
Technical Tel 0973 891330 Fax 0171 288 3451
Affiliated to the British Association of Computer Clubs*