

ATARI

COMPUTING

Issue 15 Dedicated to Dr Brian Stanton October 1999 • £3.50

PHENIX 060

GENTEX / CLASS 4

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ACC '99
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ATARI

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Airport of



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It would be very helpful if editorial, subscription
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 of paper or separate A4 sheets from this on disk.

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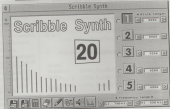
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41 Vision



30

ABOUT THE COVER



Phoenix Motherboard

Is this the future for 100 compatible
 computing? Will the Phoenix workstation
 upgrade the 100s? Will they both succeed? Whatever
 happens there are all interesting times
 ahead for Atarians.
 Photo courtesy of Corcoran/Class 4

FEATURES

- 8 Brian Stanton obituary
- 13 Phoenix 040
- 19 Competition
- 25 FMP Party
- 47 AC090 News
- 85 Contact list
- 40 Magpie



PD/SHAREWARE

- 40 News
- 41 Vision25
- 42 MagC Desktop Themes
- 42 Newton v0.95Data
- 43 Tron
- 44 The BIE Games
- 45 Roman
- 45 Ascend



REVIEWS

- 50 Scribble Synth
- 52 Hconnect and clients
- 54 The Studio In A Box
- 55 MagC 6
- 55 ENCLANT
- 57 3M Precision Mouse Surface
- 58 MouseSurfTer



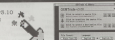
REGULARS

- 6 News
- 9 Reader offers
- 10 Subscriptions
- 11 Letters
- 33 Suggestive Remarks
- 35 Shmoozing
- 39 Reader Disk
- 50 Q&A



TUTORIALS

- 17 WebWizard v3.10
- 34 Nikon BASIC
- 36 T&T
- 37 Inside CRM



Roller Coaster

Thanks to everyone who wrote and emailed thanking us for our efforts over the last three years, we've added a second letter page to cover most of the points raised. It's really sad to read just how much some of you will miss the magazine and how we only get this level of encouragement after we've thrown the towel in! At least the controlled closure means we won't be taking any of your money down with us! We'll also have the opportunity to say thanks and goodbye instead of disappearing overnight. With some very interesting hardware developments for the trikon, the Phoenix and Falcon in the pipeline and ongoing development of key software there's still plenty for Atarians to look forward to. Which reminds me, we forgot to credit 51 Computer for the Comtek Falcon PCI photo in AC074 p12. There's still the rest of this year to look forward - especially AC079 and our Millennium Party where Atari Computing will have our public. US subscribers should find a discount entry slip inside the envelope - if anyone else wants one for years to coming please contact: Michael Francis directly at their address on the rear cover or ad on page 47. Finally, it's my sad duty to announce the death of Brian Stanton, our office manager, please read our obituary on page 8. RIP Brian.

Joe Conway

News...

Magic Game Contest '99

This contest has been organised by Magic Online in conjunction with The Place 2 Be and will be judged by Magic users. The aim of this contest is to create the best possible conversion of a classic Atari game possible of running in a GEM window under Magic (TOS/MINT support is naturally not excluded).

The Rules:

- The contest closes on December 31st 1999.
- NVDR new system calls can be used as enhancements to the game but the game must be fully functional on a standard MagicC configuration.
- Games may utilise freely available system extensions - BubbleGEM, GEMing etc.
- All games must be released as unrestricted shareware or freeware.
- All games must include documentation - ST-Guide Hypertext or ASCII is acceptable.
- Games must not be officially released until December 31st 1999 (no existing games are not eligible).
- Individuals or crew may submit as many programs as desired.

All entries will be made available for download on December 31st, 1999. At this time, voting sheets will be made available and the winners will be notified on Christmas Day, December 25th 1999. All nominations must be received by December 24th 1999.

Current prize list:

- 3 copies of the forthcoming N.AES 1.0
- 1 copy of Papyrus Office
- 1 Discosco 1 disc full version
- 1 Verifier (Atari ST/e, TT, Falcon)
- 1 World of Puddle (Falcon only)
- 1 Der Demon from Saxator (MAGC) role playing game, ST high resolution
- 1 Demos Session CD-ROM
- 1 DITF Graphics CD-ROM
- 1 My Game Disc (colour) CD-ROM
- 1 Mission 1 CD-ROM
- 1 Alternative Software Palace CD-ROM
- Radium CD's from JUNE AUDIO includes a CD with tracks from *Doctor J* and *in-pine* (produced using Atari), stylized profile, a comic, and more.
- 3 registered copies of Ausplayer

- 1 Quartz interface to connect PC mouse and keyboard
- All winners will receive copies of Atari Computing Magazine and CD-ROM

Sponsors include Atari Computing, AEM, ROM Logicians, Dracoon, Ausplayer, Mario Beckett, Weller Systems, and Java Audio. For more details visit <http://www.place2be/eng/contest.htm>



Here's a couple of the entries so far...

STNCCG 2000

In December 2000 the 10th anniversary reunion of the ST NEWS International Christmas Coding Convention will take place, appropriately dubbed STNCCG 2000. All attendees of the original event, as well as some members who have earned their name in the *Right ST/TT/Falcon* hall of fame in the past ten years, are invited to check out the official web site at: <http://stnccg.stn.org> Email: stnccg@stn.org

PHP Results

The results for the PHP competition were made available on August 21 1999 - too late to make our feature on page 28 but we can include them here:

4-Channel music:

- 1 D-Fence / FLN
- 2 SOS / Checkpoint
- 3 Ph-Laser / .dCC
- 4 Ticker / Teenage

Chipmusic:

- 1 DPM SC / Sector One
- 2 Ph-Laser / .dCC
- 3 Rhine / Tormant
- 4 Baggo / Waffle
- 5 SOS / Checkpoint & D-Fence / FLN

18 Colour graphics:

- 1 SOS / Sector One
- 2 Paradox / Paradox
- 3 Hawk / FLN
- 4 Spely / Tormant

Multichannel music:

- 1 MR / Checkpoint
- 2 Mr Future / Paradox
- 3 D-Fence / FLN
- 4 Ph-Laser / .dCC

Wild competition:

- 1 Sector One
- 2 Zips
- 3 Mask/OS
- 4 Camp
- 5 FLN
- 6 Zerkow-ST/TT/Falcon
- 7 Nix

ST-demos:

- 1 Teenage
- 2 Tormant

Mari Sightings...

Garry Robinson's reports there's an Atari ST (or Falcon) on the cover of Pat Boy Kim's album inside the CD book.

Stephen Brown reckons the video of best combo Brian Van Bocka's "Cracking in LA" (the music for the current Rolling Rock Beer TV Ad) features a guy using an Atari ST/Falcon. It only appears briefly and they smash it up towards the end!

Paul Glover spotted a couple of STs on stage at Reading this year. 'I think it was Elastica and Deacon, but I could be wrong - it was a long weekend. Oh, and Atari Teenage Riot, but they don't seem to use Atari any more!

Paul Mac/State Art Competition

Thanks to everyone who took part our Paul Mac competition in ACP14. Congratulations to our winner, Chris Korymboski, in Perth who wins the State Art CD Album and single collection competing:



- Informal Music - Ancestors of Sound
- Cleaver - Lamentation and the Ancestors of Sound
- Sensual Assaults - Bernadette Carrao and Paul Mac
- Slaves in Heaven - Layla Kafil and the Ancestors of Sound

The correct answers to the competition questions are:

- 1 What does Paul use for his sequencing and audio production work?
[a] Fairlight
- 2 When was Mac One Recordings established?
[a] 1988
- 3 In which English southern-coast beach resort town is the studio located?
[a] Brighton

Chris has already received his CDs and recently replied: "Thanks for the CDs. As music is a major interest it's always good to hear something new. The local college runs one of the few rock music courses which qualify for grants so Perth unfortunately has a healthy music scene."



The five runners who also receive a copy of Slaves in Heaven by Layla Kafil and the Ancestors of Sound, are:

- P Higgs, Durham
- S Charles, Gwent
- K Millan, Cambridge
- G McDermott, Dunfermline
- J Roberts, West Sussex

MagiC Documentation

For years programmers have complained about the lack of English MagiC programming documentation. MagiC author, Dr Andreas Kromida, didn't have time to do the translation.

Following a discussion in the comp.sys.atari.tos newsgroup, John Whalley offered to co-translate and has a "community project" where translations could work on bite-sized chunks but this didn't take off. However, profile Translation crew member Peter Hogg took up the project and translated the entire archive which is an enormous effort. Thanks to Peter's efforts the complete programmer's documentation for MagiC 4.1.8 is now available in English. The documentation will be included on the next evolution of the reimagined CD and are also available for download from: <http://www.whalley.demon.co.uk/atari/magc/>

System Solutions

System Solutions and Anodyne Software are meeting quality to meet the demand for Atari CD-recording products. After the success of Anodyne's CDWriter software package, many users' suggestions have been taken aboard for CDWriter 2.



CDWriter 2 can write contiguously from a mixture of source media within the same compilation, including for drives, and other CD-ROM drives (which means direct CD-to-CD copying, even from multiple CDs). Media change of any source other than the active one during writing is also possible, should files be spread across different cartridges, for example.

The program can auto detect which hard-disk partition has the most free space, and stream all source files into a large write buffer file on this partition. Useful if you're uncertain of the sustained read performance of any source drive.



Last of all, the pause gaps can have individual values as well as the usual global setting. To facilitate compiling, audio files and the gaps between may be auditioned via the popular Amigaplayer (for Picores and TT's upwards), an unregistered copy of which is bundled.

CDWriter 2 is only available as part of the CDWriter Plus v2 package, but users may upgrade from CDWriter v1 (audio-only) or CDWriter Plus v1 (audio and data look-ups). Contact System Solutions for ordering. Mail order, System Solutions, PO Box 1364, Brockwell, Berks, RG4 7Y. Tel: 01494 890000 Fax: 01494 890009 Email: sales@system-solutions.co.uk



The autumn Atari show in Germany will be held at the Messestadt Halle am Grödenhof in Hannover on Friday 19th and Saturday 20th November 1999 from 11am to 5pm. This event is organised by ROM Logoware, with the blessing of Pelika Verlag, the previous organisers. Pelika Verlag are now busy working on their Atari Milan II project which should make its debut at the show. In an attempt to broaden the show's appeal Apple Mac exhibitors are invited. A day ticket costs 12 DM (around £4), a two day ticket costs 20 DM (around £7) with a family ticket priced at 15 DM (around £5) with discount for advance ticket sales. For more information visit the official show webpage at <http://www.rom-logoware.com/atari-messe.htm>

Atari PD and Shareware News on page 40 in this issue!

NEWS

HERE IS THE NEWS...

ATARI COMPUTING Q ISSUE 15 7

Dr Brian Stanton

1947-1999

It is with sadness that I have to report the sudden and tragic death of Brian Stanton, Atari Computing's Subscription Manager, on Monday 14 August 1999. To say that I am shocked and saddened is an understatement. I had been speaking to Brian on the telephone on the previous Saturday discussing our plans for a meeting later that week.

I first met Brian around six years ago because of a mistake by System Solutions. We had separately attended an Atari Show in Glasgow, and had both upgraded our NVDI data. These were taken back to Dulwich for processing, and when the updates were placed in their respective envelopes some unknown member of staff dropped them on the floor and gazed at which was which before filling the envelopes and sending them off. I noticed I had received the 'wrong' disk because Brian had written his name and postcode on his master disk so I traced him through the phone book.

I had been thinking of getting online, and Brian encouraged me to join COX, which was a decision I have never regretted.

Brian was one of the founder members of NTAU (Glasgow's TOS/Atari Group) and one of its most staunch supporters and a regular attendee at our monthly meetings held in Hume Road.

Brian and I travelled together to most of the UK Atari shows over the last few years often stopping all overnight, with his sister Eve, in Liverpool and we planned to do this again for the ACC99 show this November.

Along with Sandy Thomson and Andy Wilson, Brian and I were the Scottish contingent of the original 12 members of the Atari Computing Group that started this magazine. Brian took on the responsibility of looking after the subscription database from day one. This became a massive and thankless task which he carried out dutifully until the day he died.

Brian successfully sustained the business of hours he put in 'working' for the magazine with his full time career as a Doctor in the X-Ray Department of

Greenhouse Hospital, Kilmarnock, and with his wife Tess, and his 3 children Andrew, Fiona and Peter.

Brian was my friend and I will miss him.

Al Gould

One of the Good Guys

Brian's death is absolutely terrible news. Brian had a knack for seeing the up, which I think he secretly enjoyed, but I always knew he was one of the good guys.

Before the launch of Atari Computing Brian used to help Tess, mowing their lawn at short intervals for several years. In recent years we all enjoyed getting together after Atari shows to catch up on the latest gossip.

Ironically Brian's death coincided with a flurry of incoming emails concerning the demise of Atari Computing. Magazine can be replaced, Brian can't. :(

RIP Brian.

Joe

A True Enthusiast

Brian Stanton was a true Atari enthusiast who had a real passion for his hobby. Over the years he helped me behind the scenes at Compo and Team Design, was a popular contributor to COX and worked tirelessly for Atari Computing since its launch, but I will always remember Brian as a good friend and he will be truly missed.

Steve Dalway

Someone who cared

I was the first of the AC team to hear of Brian's sudden death and phoning Al and Jan to tell them the sad news was perhaps the hardest thing I have ever done in my life.

I first met Brian in person at the Atari show in Birmingham where we launched Atari Computing, and took my wife and I assembly tasks to Brian. He had an endearing personality that you just couldn't argue with.



Al Gould took this photograph of Brian at the last meeting he attended on Tuesday 2nd August 1999

He rapidly became a good friend, and our phone conversations and email correspondence were always interesting and frequently hilarious. Brian had a well-developed sense of humour, often at his own expense, but like him it was never malicious.

However, it wasn't all clowning about. Brian had a more deeper and caring side to him, and when members of my family were ill or in hospital, Brian was always there to offer professional advice and help them call up just to find out how they were doing.

Working with Brian as part of the AC team also showed what sort of person he was. Managing the vast and complicated AC database is perhaps the most job anyone could do, but Brian just did it without complaining, and he'd phone or write to my mother with a problem to apologise, explain and then put it right, without a second thought.

I could say a lot more about Brian, but there's so real need, all of us, who met and knew him know exactly what a top class person he was.

I was privileged to know Brian, and I have some wonderful memories of the all too brief times I spent in his company.

RIP Brian.

Mike Kambois

ATARI COMPUTING Offers...

Essential accessories for you and your machine - subject to availability. Stocks for some offers are LOW, limited and you could miss out!

BACK ISSUES

Atari Computing Issues 1, 2, 3 and 4 are now sold out but we do have a small stock of other back issues - so get them while you can! All get them £3.00 each including UK delivery.



MOUSE MATS

Atari Mouse Mats and proud of all better get one of these top quality mousemats! These slimline mouse mats are 1mm thick and feature a smooth hard surface and non-slip base. They cost just £4.99 including UK delivery.



READER DISKS

Individual Reader Disks are available separately from the magazine. Each disk includes software exclusive to Atari Computing which is not available anywhere else.

We also have a Special! Hitbit BASIC Reader Disk compiled by Paul Jones, to accompany the tutorial.

All issues are available and cost £3.50 each including UK delivery.

Steinberg PRO 24 III



Steinberg PRO 24 is a MIDI recording and editing application which offers song file compatibility with Cubase. For many years PRO 24 was the preferred choice of artists such as Midge Ure, Dire Straits, Eric, PAVI who all produced hit records using PRO 24.

- 24 Track multi system
- Record, playback and edit any MIDI keyboard
- Display and print music notation
- Realtime performance control
- Locally mouse driven interface
- Supports standard MIDI files
- Song files compatible with Cubase for just £10.00, including UK delivery, you can get it on the spot!

MOVING PIXELS CD



An exciting compilation of ready to run software programmed by Tony Butler. The source code for all the programs except Art For Kids is included and programmers are invited to further develop the software.

- Atari Space shoot 'em up (ST)
- Brushworks: full paint package (TT)
- Chambers: breakout style game (ST)
- Chess: Space fight game (ST)
- Fantasy 3D demo (ST)
- Hitbit: VGA cool slideshow (Falcon)
- MIDI Battle: Networkable game (TTS)
- Official Falcon demo - used by Atari
- Time Amazing: 70MB demo (Falcon)
- TT Wave Chase: hi-fi demo (TT)
- The Flying Bouncing Ball demo (ST)
- Plus unlicensed, unfinished projects and the price for this classic CD is just £10.00 including UK delivery.

Order form overleaf!

AC CLOSURE ISSUES

Q Is it still worth re-subscribing?

A Yes, we're planning an extra special collectors ACIM if your subscription expires with AC13 please do resubscribe now and complete your mail

Q Will I lose money?

A If your sub expires with AC13 or AC14 no refund is payable.

If your subscription expires with AC17 or later you will automatically be refunded the unused portion of your subscription minus an administration fee (£1 for UK address) to cover our costs.

Q Can I order goods instead?

A Yes, if you would like to use your outstanding subscription money to purchase goods we are happy to do this and will waive the administration fee.

Please use the Order Form overleaf (photocopies are acceptable). Calculate your refund from the table below, enter this amount in the space provided, then deduct that amount from your order total. Any further outstanding subscription monies will be refunded with your order.

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Q When does my subscription end?

A The expiry issue is included in the first line of the address label on the envelope your magazine arrived in. The first line also includes your customer code, please include this in any correspondence with us.

Q I subscribed through my local dealer outside the UK, what should I do?

A Please contact your dealer for more information.

Q Any issues plans in the pipeline?

A No. But if you have any ideas we'd be pleased to hear them!

Q If you have any other questions we haven't answered here please do get in touch with us at the contact points listed in our masthead on page 4.

ATARI

COMPUTING

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1 issue subscription				
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* Zone 1: Australia, Japan, New Zealand

* Zone 2: All other countries outside Europe

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- £ 2.50 ☐ 8086 (MS-DOS) Reader Disk
- £ 2.99 ☐ Best value 100/100/100mm
- £ 6.99 ☐ Cyber Patrol
- £ 6.49 ☐ Cyber Control
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LeftTers



As we expected following our closure announcement in *ACF 14*, our mailing has resulted in we have 2 pages of letters this time and more to come next time...

Multiverses

Atari was always a fun name to me. As a elementary student, I played the Atari 2600. As a junior high and high school student, I bought (disposable color) Atlantean with my modified Atari 400 in the great Atari/Commodore War on the 800's. Entering college, the 8-bit could stand away, and in America the ST didn't appear to go anywhere, so I bought a PlayStation, and later a Nintendo. Through the years the Mac proved to be a fine machine, but a never had the games and the fun feel of my Atari days. Nine years passed.

Through time I found myself returning to my old computing grounds of computer geeks in the Dallas Internet. The faces were all different, and the computers were the standard PC and Mac, but it was good to be back. The exchange of computer equipment, and characteristically challenged people made me feel at home. There I looked at the schedule of our meetings projected on a wall in the CPW/Exchange vendor room.

"Atari Users of North Texas... what?" On the seventh floor just like it had been a decade before, "Incredible!" With my wife to be accompanying we entered the sixth moving glass elevator. The beautiful scenery of the "Crystal Palace" reinforcement of wood paneling, glass, and neon green light radiated by us, and soon we were there, the seventh level. We walked to the place where DAL-ACE had been, but the large meeting room capable of seating three hundred only met me with a rush of air conditioned sterile air. "Over here love!" I heard my lady call. I walked to where she was, and found a heart warming scene compared to the huddle and bustle of the business oriented user group. I had left thirteen years before.

Stepping into the room, we found an old man with a beard leaning against a folding table in front of an assortment of about nine other people sitting in chairs listening. Little did I realize it, I had entered a year long AUNT tradition of the grand version of Dave Ackard "What Welcome... a new member?" "A new, old member actually. I'm from the days of DAL-ACE" "Oh my gosh! You are old. Here a seat, welcome back!"

I introduced myself to an Atari 8-bit User. The group was interested, and many had been 8-bit users turned IT users through time. It became quickly apparent that these people, while good natured, actually seemed to see their computer as little more than just fun hobby machines, though that could also be said.

As Dave preached on, my lady and I sat back in their line to see such a charming group of people ranging from their late twenties to their sixties. The later was more the case. "Here we have the newest edition of the Programmer from our dearest 8-bit user friends in Florida. Amazing how those guys keep playing away on their 8-bit Atari and never will have fun in their restaurants community they seem to have there. But isn't that what the Atari stuff is all about? Just having fun seeing what these old computers are still capable of doing.

Speaking of which, I recently got the current issue of Atari Computing number ten, which is to the best of my knowledge, the only professionally produced English language Atari magazine in the world."

What was that? Had I taken interest? A computer platform with a magazine? I had heard that Amiga had a devoted following, but Atari? The next morning, Ken Kordes from Systems For Tomorrow came to my meeting to sell his Atari merchandise while Dave Ackard displayed imported files from digital cameras on a Palm, and Michael White displayed internet browsing with STX. It was then I stalked out the meeting and bought that magazine for my lady since it had a X-Files theme to the cover.

Later I would thumb through the pages of the magazine. I was amazed to see a magazine that had produced such a sterling look with current featured material like X-Files to have been produced by an Atari Computer. The magazine had a nice look, small. It advertised the new Milan computer, talked about shares in Europe, and possibilities of connecting the Atari are through other platforms like a PlayStation. Then there was talk about hardware hacks for existing Atari computers, pinwires, add, and articles. An initial impression was that Atari had a very fun and creative community eager to show what the world what their machines could tell us, in sometimes a different way, and sometimes better a way.

Years ago there was a comic book released with Atari games called "Atari

Force" and in that series, the cover of a standup, complete with "ATX 8000" outboard computer by the way, travelled through "Multiverses" or realms of other possibilities of what could have been. As I flipped through the pages of that magazine with the X-Files cover, I stepped out of a world with a dominate PC computer with an lesser Macintosh tag along to a multiverse where Atari computers were king, alive and well by it's users and vendors. I had returned to the world of computing, that I knew, and I intend to stay. Many thanks to the staff of Atari Computing for being that portal to a multiverse that I may not have found other wise.

Greg Goodwin aka Doctor Cla, via Email
New ST User and editor of AUNT BTTC
help@stern.starcave.com/ALM2

Bye-bye Atari Computing

I'm deeply saddened by the closure of AC (I'd just re-subscribed as well), at least no-one will be out of pocket, unlike Atari I have just seen off a cheque for a ZIP drive, finally deciding to ignore all those PC HP offers on the high street, and kick-start my ST into life, starting by backing up my HD, and a high res monitor. I hope all goes well for you, see you at ACC'99. I've backed THE WEEKEND off to be there.

James Audley, via
Ox starcomping conference

Thanks James, I've already seen postings in the newsgroups about how I've deserted the Atari scene already but I'll still be around and using Atari software for the foreseeable future - and that goes for the entire editorial team. See you at ACC'99!

Wonderful CD!

Just thought I would drop by and voice my praise for this wonderful megagode CD. I only received it yesterday, but the content has to be the best of any CD I have perused. I am currently in the process of downloading the programs onto floppy (I use a PC at work to read the CD), and I have to say that the two programs I have already transferred and tried are excellent. Kindness v1.51 is exactly what I needed for doing diagrams for my latest project - anyone still using Easydraw should change over now. Though a another program that I had always glanced at but never redowned I would read, but since trying out the demo on the CD, I am beginning to get some ideas. It would be a great way of organizing and maintaining websites for instance. Please keep them coming. What's the latest evolution number of the CD?

Get via the Ox starcomping conference

Evolution I remains current with 3 in progress. It's possible the megagode

CD may survive the closure of Atari Computing/Wemagade Publishing Ltd if there's enough interest. Who knows, it could even evolve into a CD based HTML format magazine...

No Surprise

Sorry to hear the closure - it's not a complete surprise. The UK is down to a few hardcore clubs. I had hoped the Pilot would provide a revival. Oddly enough, Atari games live on through Haters, Mickey/Marty, etc. Classic gaming magazine is very successful. Windows only leaves the need for an alternative platform. Linux, Mac, whatever... There is a market out there and I am part of it. Thank you and the staff for keeping the magazine going as long as you have. Atari computing continues to live on!

Tony Grant, Abacus

(Atari Bay Area Computer Users Society), San Francisco, by email

Show Teaser



It was with regret I find the last Atari magazine is closing down. I think the team have done a grand job over the last three years and I've been a subscriber since AC#1.

Since I retired I have been spending my time typing and restoring vintage computers and now have a collection of 31 - half of them Atari's from a 400 up to a Mega STE all in perfect condition. I have made many friends including a lad who is trying to create a RAM memory board capable of boosting both the memory and CPU and so far he's managed to upgrade a 1 Mhz Mega ST to 4 Mhz but there's still lots of development work to do. He's working from the circuit diagrams I've ripped up and sent you.

Could you please publish the remaining user groups or contacts in the

AC#15

final issue - unfortunately there doesn't seem to be one in north London so all my contacts are by letter.

One beneficial side-effect of PC dominance is loads of good stuff being sold at amazingly low prices. I recently got hold of a 1 Mhz STE, SC1224 colour monitor, SP1-D3 mono monitor, 80 Mhz hard drive, hard scanner, monitor switcher, optical mouse, Panasonic KCM 580 printer, software and manuals for £111!

It'll be looking forward to receiving AC#16 and AC#18 and would like to register my OMR complaint. I mean subscribers will have to wait for AC#16 until after AC#19 where letters will be able to collect their copies.

Charlie Ayres, Wood Green, London

We're especially pleased many subscribers have stuck with us since AC#1 and it's good to hear you're still making good use of your Atari systems. Thanks for the circuit diagrams - really they appear to be (c) Atari Corp so we can't share them with our readers.

Mike Bartlake originated The Context File which first appeared in AC#14 on page 52 but the response has been disappointing. But if there are any user groups, BBS's etc who would like to be included in the final list please do get in touch. Mike adds "We would really like to make the final

issue full of useful contacts and sources of help so that Atari users can find help and advice long after we have ceased publication."

You mention there's no user group near you in North London which is the ideal location from which to attend Cleveburn Computer Club meetings which are held around 1 mile north from junction 28 on the M25 and, as we've pointed out repeatedly, Internet access is now so cheap there's really no reason for any Atariist to be isolated. Write to Derryn Grier at 11b Cassin Way, Garrison, Watford, Herts, WD1 4PH for more details.

Although we're saying very hard to get AC#16 ready for collection from AC#18 it is our January 2000 issue and everyone should get it before then. There's still a chance we won't have AC#16 ready in time for AC#19 and if we took time out to send magazines out before the show something else wouldn't get done.

So come along to AC#19, enjoy our Millennium Party, pick up some bargains and collect your copy, or wait - the choice is yours!



GET IT OFF YOUR CHEST!

Get something to say on AC's forthcoming closure, or you just want to have a moan about something?

If so, then Atari Computing welcomes your comments, gossip, news, advice and used tenners!

Send your contributions on paper, or preferably ASCII text on disk, to: Atari Computing, 65 Mill Road, COLCHESTER, Essex, CO4 5LJ, UK.

Or email us at: letters@atari.computing.com

We reserve the right to edit letters for reasons of space or accuracy without altering the context.

Phenix: System Architecture



In many Arabi wars, the Falcon was one of the most eagerly awaited systems in our computing culture. It heralded a new promise of adventure and ambition far beyond what had previously been achieved by anyone in the consumer market. Here we had a versatile machine combining rich, lifelike colour graphics, hi-fidelity audio capability and market-leading digital signal processor technology integration. Such qualities in an accessible package enabled the Falcon to transcend its rivals in numerous novel and fully professional applications. Certainly not least, we also proved ourselves prepared to make home-building a comfortable experience.

An introduction to the hardware and software evolution of Centek's powerful new computer with Shiuming Lai...

Unfortunately, it was also the filing Atari Corporation's last personal-computer before one almost equally absolute attempt to win back market share by re-entering the lucrative games arena, with the less successful

We never tire production of the numerous Filomail or any other more powerful influence. That was a real pity. Because ST's goal of a converging digital future with computers playing a central role was spot-on (without that all-important DSP chip, it would never have got as far as it has now). It was this year, becoming apparent there were serious flaws in the Filomail design. Most notably, its 32-bit central processor was squandering time down a 16-bit bus, mainly talking to peripheral. To save on design and production, it also continued the ST's tradition of relying on main memory for its video frame buffer.

Since Acorn's departure from computing, third party developers have become ever more inventive and successful. The Afterburner and GEM libraries II accelerators, cracked speed limits by breaking some of the main bottlenecks in the Falcon design. Fast, accurate, and... (200) by... (200) by...

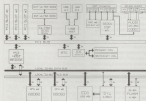
full-width memory. However, beyond a certain point, some fundamental features which essentially make a PalmOS no longer be easily upgraded without changing that essence. So far, no accelerator has overcome the barrier of the DSP having to access main memory through an even slower (8-bit) bus to the CPU's bus, although quite a few have limited its clock speed. There has been no way of multiplying the number of DRAMs available to each master/slave mode.

Consists of France proposed replacing the entire machine with one of smaller concept but the higher performance and quality. After producing near Palcos accelerators along the way, partially to evaluate potential technologies... their work has resulted in the *Wipro* accelerator.

Technical assistance of ERMCO (1983)

It's not looking at a very serious machine here, a professional design showing characteristics with heavy duty military and industrial PC (Personal Control) embedded computers. For example, line filtering, self-renewing lens and an excellent processing infrastructure.

Florida can run with up to two different DNSs by choosing an NSD-like mode. This



PHOTOGRAPH: A Fractional Diagram

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Figure 1. *Estimated mean values of the dependent variables*

If you've found this article of interest, here are some further sources of information:



1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 2680, 26

A detailed chip-for-chip comparison between the Falcon and Phoenix, plus a good look at the 32 Virge GX hardware functions gives us an idea what we can look forward to from software developers. An exciting read.

Keywords: child sexual abuse; disclosure; self-blame; social support

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PHENIX WorkStation

processor made its debut in Atari circles as 50MHz in the Ixion. Plusdata Computer's Hades TDI clone, which was again for its fast implementation of the Atari T1 computer model, it's a partially RISC supercell architecture, incorporating three execution units (two integer and one floating point) giving in total an average CR (Cycles/Byte Instruction) rating of 0.68, compared to 4.17 in the Falcon's 68MHz 68030. Effectively, the 68060 is able to execute several instructions per cycle, as even at the same clock speed of 68MHz its execution throughput is 4.31 times higher than the 68030.

Both of the Phenix CPUs can address the same memory locations, it's based on the centralized shared memory parallel architecture model. Zenith's custom arbiter logic takes care of granting bus access.

Atari, quite rightly, made a big fuss about the Falcon's DIP. Phenix continues with the Phenix640 DIP640 series - to be more precise it's the DIP6400. That's where the similarity ends, for on the Phenix evaluation card, at a clock rate of 68MHz allied to 384Kbytes of (local SRAM), this chip achieves a data transfer rate of 32Mbytes with the CENTURIO II host. On a standard Falcon with its 8-bit bus port this G3/CPU transfer rate is 1.1Mbytes. Phenix runs the DIP6400 II at 60MHz (and one instruction per clock cycle, twice the efficiency of the DIP6400) and will accept more of the same DIPs on Zenith's own PCI cards. Present indications suggest that each card will contain another three DIPs, of course, each chip will have its own 384Kbytes SRAM for storing data sets. Best of all, at last, the DIPs can access main memory directly, and quickly - via the PCI bus bus.

Connectivity has changed from the Falcon in many ways. Gone is the old cartridge port (not buffered and liable to cause processor exceptions if physically extended in a low impedance machine), RF modulator output, SCSI I, LAN, RS-232, Centronics parallel, analogue controller input and even the PBUS. In their place we have an Ultra SCSI bus with 20Mbytes transfer rate. One external and one internal connector are provided for Ultra SCSI devices, the bus is auto-terminated and the SCSI chip is hot-pluggable - which means no electrical damage from live (de)connections.

Next we have an external DSP port (aka the Falcon). It is the most important bit, with the outside world will should please electronics designers because it

carries a number of supply voltages: +3.3 (3A), +5 (3A), +12 (3A), -5 (8 (3A), -12 (8) and +6 stand by (100mA).

The additional PCI cards will also include the port, which can be used as a digital audio I/O supporting 4 input and 12 output channels through a frontpanel box in a similar manner to the SoundPad T44/8 or Line Audio (andPAD) series for the Falcon.

Cenitex takes the music user very seriously, as demonstrated by the flawless 68060 performance of CENTURIO II. Phenix, this aspect alone having taken six months of research to perfect. Another Falcon design mistake has been rectified in the audio I/O area: in addition to 3.0Vrms mini-jack headphones and microphones sockets, the Phenix has proper line-level RCA connections for stereo input and output.

Last of the external connectors are two USB ports. The Universal Serial Bus is a modern high speed serial bus supporting 11Mbps and daisy-chaining of up to 127 devices. It features hot-plugging, meaning you can connect devices while the computer is switched on and they will be detected by the host OS which then allocates resources to drive the device. Bus power is also provided for low-current devices such as keyboards and digitizing tablets. Forward USB hubs exist, to split the USB bus and also give extra power for more demanding devices.

USB is now a maturing technology and we're seeing all sorts of peripherals from scanners and printers, to digital cameras and legacy support interfaces. Phenix will drive MIDI through one of the many USB/MIDI adapters popular with the new G3 Macintosh machines, likewise for Centronics parallel. In both cases, USB-specific or USB-supporting peripherals are rapidly finding their way to the market.

On the motherboard there are two ATA-4 IDE connections, each supporting two devices, including modern storage media systems. Cenitex plans to ship with complete machines.

CDVD: High capacity optical media (4.7Gbytes, as opposed to 680Mbyte for CD) now popularly used as a digital-video carrier for high-end home cinema systems. Identical disc dimensions to CD and sophisticated laser optics in the transport mechanisms ensure backwards compatibility with CDs as we've come to know and love.

LS-120 Super Floppy: Apple caused a stir by declaring the floppy disk dead and burying it from the iMac onwards. Sure, 1.44Mbytes is not a lot these days, but

Cenitex memory and Phenix I/O

Modern electronic design



tools allow logic designs to be made and simulated on the desktop very quickly. Along with the availability of fast, dense programmable gate array chips, development of quite highly integrated circuits can be done in-house. Reasons for doing so include cost (having full-custom silicon made is an expensive business) and performance tuning to the specific application.

Cenitex developed ANPR to replace the off-the-shelf RAM controller on CENTURIO II Rev. A, for Rev. B, offering significant speed advantage. ANPR is also used on Phenix 640 II, where the local bus speed is half that of the CPU core (68060MHz respectively). That's the reason for using ECC (Error-Corrected Code) RAM on the CENTURIO II and Phenix; at these bus speeds ECC will/must measure performance in burst mode and can be picked up very cheaply second-hand since PCs are shovelling ECC in favour of the newer SDRAM (Synchronous Dynamic Random Access Memory).

SDRAM doesn't give any speed advantage and bus speeds well over 60MHz. At the moment the Phenix has a local bus bandwidth of 32Mbytes. Cenitex is designing Phenix 640 K2 for the purpose of aiming to achieve 210Mbytes with 68MHz local bus (running the 68060 in full speed bus mode) accessing SDRAM.

The on-board Ultra SCSI is also likely to be dropped in favour of a fourth PCI slot to accommodate a SCSI card if so desired. Since ATA-4 IDE hard disks match the performance of Ultra SCSI at a fraction of the cost, higher performance will be an option. Ultra Wide SCSI uses 16-bit as opposed to 8-bit transfer, reaching 60Mbytes, while Ultra2 Wide SCSI delivers a healthy 80Mbytes, ideal for network servers.

What do you do with the hundreds of floppies carefully built up over the years? I still haven't stopped accumulating them, even since buying a CD recorder with features of reducing the nuisance. Now I have to find storage space for piles of CD-R discs as well. Apple actually offers Zip drives as an option to its G3 power systems (it really is Zip disk, it's nothing if not just another type of floppy disk) but Cenitex has opted for LS-120 by Iomega (JIF). The media assumes the same form factor as 3.5" floppy disks but packs over

Delmon VDI

Phenix is the name of the Delmon VDI. Like the rest of Delmon, it's programmed entirely in 68040 assembly language and is very fast. Here you can see a screenshot of Delmon running TOS programs.



128Kbytes of data with high-precision optical tracking to navigate the cleaner recording surface. Old-style CD and HD floppy can be read by LS-128 drives.

In terms of graphics, Phenix scores ahead of the Falcon by using a PCI video card with 4Mbytes of dedicated video RAM. The 3D Vipe GX is one of the 3D generation cards, as it has hardware texture and geometry transforms processing facilities. Any colourful and detailed games with high frame rates will be possible with these features. If you prefer, you can utilise this to perform complex mechanical modelling and simulation all day long instead.

J. PUNT of Delmon Says

Phenix is Not TOS! Cenek's is a pun to point out his new machine is not a TOS clone, a common assumption being a great deal to the company's young involvement in the Atari scene. It's certainly true that TOS is very compact and efficient compared to the mass of

software that some "modern" operating systems are, but it's still far from making the best of the hardware it runs on. Stagnant graphics output is the first thing most of us will think of. It also doesn't handle multiple processors, due to its underlying structure, which hasn't really changed much in operating systems go. Things we've seen in RISC-based TOS updates needed to be bugfixes, efficiency improvements and added functionality in the machine level and user interfaces.

A process scheduling manager is needed to effectively distribute the workload across processors, because not all problems are easily split into parallel computation tasks. Without scalability designed in, at the most, an operating system and its applications may not benefit from running in a multi-processor environment.

Cenek's solution is a new OS called Delmon. Unlike the OS of clones such as the Eagle, Phoenix/Halo and now Hilar, Delmon is not a patched version of the TT's TOS 1.0e but a ground-up development with TOS compatibility. Confused? We've now seen how the hardware is based on a familiar architecture, so as not to completely alienate the prospective developers from the existing Atari programming base. It's the time for the system software. Lots of new concepts are being introduced but implemented and supported in a way to make the developer's life as painless as possible. See our screenshot of the Delmon resource editor, Phenix, and the

Cenek explained:

The VDI of Delmon is a complete new layer that was called by Slicks Heston and Rouse Corbett (the graphical PCI part). It is a very modern layer like, for example, the OpenG2 layer. It is also open to plug-ins from other developers.

Inside the VDI, there are many new modern OS calls/functions to allow developers to develop very quickly! But there are also all the good functions from the GEM VDI which enable backward compatibility. For example nearly all the HRC2 3 calls are included. The structure of Delmon is modern, for example, you could plug three video cards on the PCI and the VDI will declare them as VDI devices via the PCI manager done by Rouse.



▲ Phenix, the resource editor for Delmon

Delmon VDI boxset. Cenek's low-level debugger is another good example, it works in a very similar way to the highly regarded Phasit but is multi-processor aware. Having its own OS also gives Cenek complete freedom over its development.

Why Phenix?

Falcon enthusiasts will be among the first to buy a Phenix, no question about that. Cenek's strategy extends further, though. Keeping the PC off its perch of general dominance is not one of them, neither, the applications where you don't want a gimmicky and unreliable 280Mbytes OS (the Delmon kernel is currently only 280Kbytes) or needs the user to be concerned with hardware interrupt settings, good mental challenge though it is. In the words of Cenek, it's for those looking for something new from computing, that cherished excitement and individuality the world of PC "standardisation" has been eliminating.

Next issue, we plan to bring you a report of a live one drive of, hopefully, Phenix 660 K2. Watch this space! ☺

PCI Bus

PCI: Peripheral Component Interconnect.

A low-independent open standard but developed by Intel during the early '90s. Universal families of devices may be connected by means of "bridge" interfaces.

Phenix and Delmon fully support PCI Bus Haster mode, allowing any device on the PCI bus to take control for 128Mbytes of local DRAM. Without PCI bus mastering, the CPU must perform all the memory transfers to and from PCI devices. This "slave mode" is exactly what happens on PCs running Windows 95/98. Only since Windows 98 have some peripherals like IDE been able to become Bus Haster with special drivers.



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Computer Shopper issue HQ/October 1999

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ATARI
WORKSHOP

WebPage.Wizard v3.10

Joe Connor gets whizzy with it...

Wizards on other platforms are programs which lead users through complex tasks step-by-step and provide an alternative to printed manuals and hypertext help files.

WebPage.Wizard's approach means anyone can create a web page following simple step-by-step instructions. Web.Wizard is supplied in an AS plastic wallet featuring a product overview and two HD floppy disks which include:

- WebPage.Wizard: Simple HTML document assembler
- Frame.Wizard: Frame-based HTML document creator
- Table.Wizard: The point-and-click way to create tables
- Collection of Royalty free images
- A-Z of HTML, L3 commands
- HTML, Scripper/Link Ripper

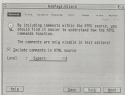
After launching Web.Wizard and entering your name and keycode details the Wizard page of the wizard-dog is

displayed. A popup invites the user to select their level of expertise but because all the screens are easy to understand I've presumed you all are Experts for the following tutorial.

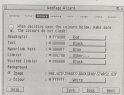
Web.Wizard Tutorial

Before you run Web.Wizard decide what you'd like to display on your home page. You'll probably want to include some text to save the ready-to-load in ASCII format. Any images should be prepared using GIF format for images containing up to 256 colours and JPEG format for everything else.

Once you have the raw materials prepared you should be able to assemble your first web page in less than minutes. Don't worry about making mistakes because you can step forwards and backwards through each step and, after saving your efforts to a W3D project file, you can go back and make changes later.



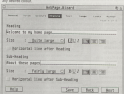
• Run Web.Wizard, select Expert mode, and if you'd like to learn more about HTML format, include the include comments in HTML source option - you can always delete them later.



• The default colour settings are fine but the choice is yours. You can turn off the pre-defined hexadecimal settings, the popup includes a selection of standard colours and there's also a nice RGB colour mixing dialog to generate custom colours and take care of the maths. If you have pre-prepared a suitable background image click on the suitable field and select it using the file selector. Alternatively you can set the background to any desired colour.



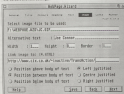
• Fill in the options - nothing enforced will happen if you leave them all blank but it's worth thinking up a suitable title for your pages and the help file gives you some sensible pointers.



• Start web page display: headings, sub-headings and body text in different heights and this screen takes care of this structure. If you'd like to enter some headings enter some suitable text and select its height relative to the body text.



Although some web pages can be entirely graphics-based they are much slower to load so most people prefer to include textual content where possible. If you're prepared some text earlier select it using the file selector. Body text can be styled, justified and optionally split across two columns. It's normal for HTML documents to look slightly different in each of the various browsers, one way to minimise this difference between browsers is to specify a font which, if the font is available, will be used in preference to the default browser settings.

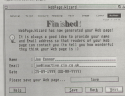


This is the most complex screen - but you can skip it if you don't want to display an image. Click on the upper selection line to select an image using the file selector then, optionally, enter some text into the Alternative text field. This text will only be visible if your page is forwarded in text only mode. The Width and Height fields set the size of the image on the page. Pixels, entering pixel sizes larger or smaller than the actual image size distorts the image which can be used to good effect to create frustration or special effects. If these fields are left empty the image is displayed at full size. If the image is a thumbnail or a placeholder link to another page/image it's customary to add a border to the image as a prompt for the reader and the border thickness in pixels and associated URL can be entered in the relevant fields. The image position relative to the body text is selected using the radio buttons. If used it isn't to visualise the final result but the description text it's easy enough to try several options by saving the file and previewing it in a browser until you get a result you're happy with.

The HTML source code generated by Web Wizard with the include comments in HTML source option enabled - very informative for anyone new to HTML coding



Web Wizard is geared up to produce single HTML pages but most websites consist of multiple pages. Use this screen to add links to other local pages or remote URLs, addresses online. If you plan to construct a multi-page website it's worth sketching a site map on paper to establish sensible hyperlinks between pages.



By this final screen explains you can add your contact details and the date the pages were last modified here if you like. Finally click on the Save button to save your web page in HTML format using the file selector. Any image and sound files used are copied to the same destination as the HTML file along with a MOD format project file and it makes sense to save these in a dedicated folder. The MOD format file can be reloaded to modify your page as desired or to use as the template for another page.



Here's the result of my efforts which took less than five minutes to assemble using Web Wizard

Conclusions

WebPage Wizard should appeal to anyone new to web page design and offers a gentle introduction to HTML coding. I'd like to see the individual programs integrated so they can all be accessed from a single application and, with the addition of CGI support, the ability to view your work on-the-fly. Happily WebPage Wizard development is headed in this direction. ☺

Frame Wizard



Some web pages divide the screen into separate areas, called frames. Each frame contains a separate HTML document. Frame Wizard includes a selection of templates and a point and click interface which supports up to six separate frames ready to fill with HTML content.

Table Wizard



Apart from creating tables with visible rows and columns of data many web designers use tables without borders to invisibly sub-divide the screen into areas. This method of working is similar to the frames concept pioneered by DTP applications such as Calamus and Timeset, however, HTML tables are more limited. For example, although individual table cells can be any size they always remain rectangular and cannot overlap each other. Naturally Table Wizard understands these rules and can effortlessly create table structures containing up to 144 cells.

WebPage Wizard

Web Wizard v3.10

Publisher: Cadenza Software
49 Douglas Road, Surbiton, Surrey,
KT5 9EJ, England
Email: cadenz@cybertrader.org
<http://www.cadenzasoft.com>
Distributor: CyberTrader
PO Box 2013, Wokingham, RG12 9EX,
England
Email: dw@cybertrader.org
<http://www.cybertrader.org/> Tel: +44
(0)753 441 035

There's an Italian version available now with German, Polish, Spanish and Dutch versions under development. Costs £15 + Post and Packing (UK £3, ROW £5) Get-test purchase now available via CyberTrader web pages.

System requirements: Any Atari or TOS running 640x480x25 (25 high) or above, 1MB recommended.

Pros: Looks great, offers good value for money, actively under development.

Cons: No CGI support (planned for v4), no integration between programs, limited scope with just a single image and three tabs per page, skimpy documentation.

77%

WebPage Wizard

WebPage Wizard FREE Prize Draw



Cadenz Software has kindly donated three copies of WebPage Wizard v3.10 for us to give away. If you'd like to enter this FREE prize draw just send your name and address on a postcard to:

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Alternatively you can bring your postcard along to ACC'99 on Saturday November 13th and hand it to us before 3pm.

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<http://www.ataricomputing.com>



Sultans of Scribble



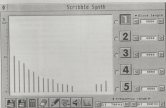
Doodle your way in the sound synthesis game, Shuiming Lai reckons it's easy...

If you want to have a go at creating electronic sounds but don't quite know your VCA from your UFO, Scribble Synth could be what you're looking for. On the other hand, you may be a real synth expert searching for new technology to explore your art, and here Scribble Synth equally fits the bill. Intrigued? Read on...

Last issue we looked at Whipl by Escape, which takes sound and turns it into graphics. Scribble Synth can be thought of as the opposite - you give it visual input to create sounds, by means of additive synthesis. The difference is Scribble doesn't operate in real time, so don't expect to read off a ribbon file and hear great music come out at the other end. Graphics data inherently requires much higher bandwidth than audio, so Scribble binds its input parameters with a simple set of rules and synthesis model, otherwise with the extra processing involved, the sounds would take ages to render.

Scribble's user interface is a simple, unadorned affair. Its control surface is dominated by a large blank space, this is your drawing pad. Here you define a spectrum envelope (Figure 1) for a sound slice, of which there may be up to five in series with respect to time (Figure 2). During sample rendering, each frequency band's amplitude value is interpolated over time, then they are all summed. This gives the potential for very complex harmonies.

Furthermore, the time between each slice may be varied, and if you're feeling really adventurous, the Custom Frequency Map (CFM) designer allows irregular frequency band increments and ranges. CFMs may be embedded in the sound path files or saved separately as a template, for your own sonic signature. You may also choose from four different oscillators (sine, sawtooth, square and triangle) to make those unique sounds.



▲ Figure 1: The main screen

That's the theory out of the way, let's see how it measures up in use.

More clock cycles, Jeeves

I like the consistent look and feel of Electronic Cow products. Scribble is no exception and operates with a reassuring smoothness. Informative progress bars and clear labelling ensure you're never left in the dark about what's going on inside. Running on a fast machine is desirable in order to cut down the (off-line) rendering time, though as I found on my accelerated Falcon, all the toggle switches then change state so quickly they make several revolutions, often ending up as they started by the time the mouse button is released.

Undoubtedly the most crucial aspect of Scribble's function is its drawing pad. Strangely, in contrast to the toggle



▲ Figure 2: This diagram shows a sound being made up of five frequency slices, with varying lengths of time between each

switches just mentioned, even on a quite fast machine the cursor sample rate isn't sufficient to capture every movement and I find myself re-rendering steps to get some continuity, rather like trying to write with a pen that's starting to run dry.

Programmed lines into a useful attribute in their own right so it's difficult to strike a balance; personally I'd prefer the computer to keep up and if I want regeneration I'll make it myself. Perhaps some global envelope filters would be useful here, such as an arpeggiator (it could then evolve into Deluxe Envelope or Apex Doodle).

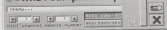
There's also a "memory effect" which is a double-edged sword. Each time you select the pen to draw a new envelope, the pen displays a copy of the last one drawn. Useful for creating true domain envelopes, a little frustrating if you then decide you didn't want to alter the frequency envelope at all, because cancelling the draw proceeds to paste the cached parameters into the current slot. No undo is available here, so use with caution!

Some tidying up of the control logic in other areas would be nice, too. Scribble doesn't check to see if you've made any edits on your current sound, so if you inadvertently hit the calculate button it will recalculate the same thing all over again. Press the [Esc] key in time and you'll abort the calculation, but even then it's not too late because the old sound is already flushed from the playback buffer.

It's entirely possible to design some interesting sounds with total spontaneity, as suggested by the program's title. However, as we've seen, the sound schematic is described in 3D space; if you want to be a little more structured you must rely on your spatial visualization to estimate the sound's characteristics. I'd like to see an enhanced view mode window, where the same 3D schematic is calculated from current data set, and can also be altered live; for example, dragging the tree lines to new positions. Missing around with buttons is slightly fiddly in the scheme of the visual abstraction concept. That's not to say I'm completely against them, only in this case they'd serve better as a fine-tuning device than primary input needed.

In a similar manner to other Electronic City systems products, sounds can be exported as sample files to disk, via MIDI, or as patches. A folder of example patches is provided, demonstrating some lovely marimba timbres and some modulation, working 40-Hz ports.

MIDI sample dump



▲ A review of an Electronic City program not showing its MIDI Sample Dump! That's like chicken pie without mushrooms.



Options

Audio



OSC



Exit

▲ Set your own sample reference frequency, if the system hardware options are not flexible enough.

Overall I find Scribble a useful tool with a novel approach to achieving its goals, although it seems to feel restrained in the way it conveys the model of your sound. I'd say there is far room for exploration and refining of the input-specific implementation, and that would immensely improve its ease of use. Besides that delicate issue, Scribble bears all the hallmarks of an Electronic City release, namely enthusiastic presentation

and value for money. Looking to the future, I hope all these dots will be taken to a level where we can plug in a master keyboard or slave to a sequencer and play away as the sounds are generated on-the-fly. ☺

SCRIBBLE SYNTH

Publisher

Electronic City (Note new address)

1 Exall Close, Reddish,
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Requires

ST/TT/Falcon, 440x480 resolution,
minimum

Pros

Falcon DSP port output, plenty of
options to investigate

Cons

Needs more tool-proofing

74%

IConnect and its clients

Derryck Croker is your travel guide for this tour...

Many Americans distrust Comcast (NASDAQ:CMSC), as supplied with C&B, is known as STC.

Until recently there were only a couple of client programs that could be used with an iConnect connection to your ISP. Now that situation is changing so it's well worth taking another look at iConnect. The language barrier is also being broken; there are English RSC files available for download now or soon for 4.1.1, also clients maintained for

Although iConnect itself does function under single TOS, the clients reviewed here need to sit out under PlugC, together with an X-Server such as the replacement desktops from Thing or PlugXDesk coupled with Alexander's *Beagle's* X-Macros add-on.

All these programs work fine in monochrome BT. High, but they really come to life displayed in colour at higher resolutions such as 640x480x24.

With iConnect properly registered in the desktop, all the clients registered are capable of automatically dialing and logging on to your ISP if so configured. I could verify this to some extent if iConnect was already loaded into memory but I'm still experimenting to let's get on with the show.

Connect is the passport to all the programs covered in this article. Getting up a connection with an ISP is merely a matter of selecting options from popups. There's some additional trouble stuff tucked away under a Fiddler button but most users can safely ignore these options. A handy terminal option helps debugging a difficult connection by allowing a manual logon - make notes and reply with a "yes" for "yes" and "no" for "no" sequences and break off with the "done" option. Unlike the latest version of STing (there's no provision for the automatic negotiation of a Domain Name Server (DNS) address, so check your ISP for details.

Microsoft's approach of centralizing group server details in its configuration file makes using multiple IPs a breeze. Pick an IP from the popup, and any client that requires those specific details will be treated well automatically adjust itself accordingly. Once online, a windows client can connect to a new group.

Current UK release: v1.0
2006.

files can be up and downloaded or deleted by a simple mouse-click and drag or by the traditional buttons on the side of the window, if you prefer. Couple that with the ability to open many simultaneous file windows and you've got a winner. URL's can also be Drag and Dropped and support for automated sensors using Scripter has been introduced - they can only be deleted after deleting any files inside the folder. It's only an issue if you want to use FHM to uploading files to maintain your own Web site, FHM also doesn't support variable forms or windows/backgrounds and other bells and whistles but it more the norm for me.

Status:
Included with CMake 3.7
Current LW release: v1.10
2014

E-mail: Time spent exploring the capabilities of the combined reader and news reader brings many rewards but you'll find up-learning when you discover the n's currently no means of selecting which newsgroup articles to download for

sending later. Greater
already collectives, even by
including the features and
body of articles sequentially
on. Importantly, this feature will
be implemented soon. On
the plus side Gmail can
perform a range of advanced
actions including the ability to
download a user-specified
number of messages, which
makes it easy to get the
history of a new group
before downloading
hundreds of messages.

Breaker's ability to decorate window backgrounds to taste with drag'n'drop or PNG-format graphics helps, too. In addition, there's plenty of options to set font size, style and colour. Close rate touch is "real" analogs - Breaker can convert the usual ASCII representation of

Figure 1



👉 The principle of the left makes setting up a script a breeze - this is a logical one that's worth trying with your 1024 too. The entry out of sight at the top of the scrollable window is the modern equivalent. [137](#)



► *Public health officials are concerned about the possibility of a new outbreak of the disease.*

Despite the icon in the About window, this isn't a dog-it's a well-featured zip client. There's full Open and Save menus, a



✎ E-mailer's message window's icons provide complete control. Not so obvious are the dividers between the name, subject and date fields, just click on the lines and drag to adjust the column width. The four arrows pointing to the points of the compass work in the same way. This pointer's open message contains the same text appended as HTML code which Eudora has responded (note the paperclip). Clicking on this and choosing New from the popup will launch DIAL, if it has been correctly installed in the desktop.



✎ This (pretty) terrible filter list has some very serious advantages!

an extension such as :-:) to a clearly bright yellow sending face icon!

Eudora uses the AOLserver to handle attachments. Clicking on the paperclip symbol offers a range of options, of which View and Open require setting the desktop to recognise file extensions and launch the appropriate utilities. Naturally this works the other way too, sending a file to someone is as easy as dragging the file to the paperclip at the top of the editor window.

Try to send a file to a new binary newsgroup though, and you'll be usually admonished - it will more than reward you the capability, along with the warning one receives if there's a larger proportion of quoted text to reply in your message! **Pros:** Easy to use, nice interface, newsgroup handling is slated for improvement in the next release. **Cons:** Using quoted text to reply is quirky, defaults to the Private message base on startup and on-exiting functions. **Status:** Commercial, currently only available direct from AOL in Germany. **Price:** MCM (around £15). **Current release:** v2.8. 80%



✎ Browse the newsgroup list with the usual window slider (scroll) or by typing the name of the group that you're interested in - Eudora will start to match names as you type.



✎ Creating a session with Tel - it's not all work with Telnet!

Tel
Telnet applications enable the remote computer to be controlled via a terminal window as if it were in front of you. Telnetting sessions aren't with any prices for ease of use but at least the Tel interface allows the background and foreground colours and fonts to be selected directly in its Drag and Drop using Holger Weier's Colors and a suitable dialog utility. Each server accessed is displayed in its own MVI, VT100 or VT100 terminal emulators.

Tel's file transfer ability offers an extremely neat result - click on Update in the About window, and Tel can log on and check if a later version is available - and it even offers to download it for you.

Users of CIX conferencing will be disappointed there's no existing support, although that disappointment could turn to give for overviews

subscribers who can log in and interact manually with the conferencing server through a local IP for potentially less cost than a fully scripted session from a dedicated program via a long-distance phone call.

Tel is "try before you buy" the demo version is fully functional but has a 28 session limit. Tel is also keeping its options

open - there's a version in the archive that runs under the Dragon's stack.

Status: Shareware.
Price: 300M (around £11).
Current release: v1.10.
Author: Jürgen Kromm.
70%.

Chatter

Chatter brings our readership nearly to an end, adding IRC (also see Relay Chat) capability to KConnect's repertoire.

Continued overleaf



✎ Spouting an IRC session with Chatter - try to find a server close to home for the best results

Continued from page 12

It'll be the first to admit IRC isn't my cup of tea, however within a couple of minutes I was holding a conversation with someone on the # Atari channel and I can imagine many people will enjoy this added source of knowledge and amusement.

Same knowledge of IRC would be useful before you start so its worth running a copy of GEMT code over the German hypertext before you make the plunge and <http://www.ircwhy.org> is also worth a look.

The version tested is a time limited 30 minute demo of a commercial application, it's fully working but it's not possible to save the history or any settings. English Resource file and BubbleGEMT translation is nearing completion.

Platform: Commercial

Price: N/A

Current release: v1.0

Author: Jürgen Krennery

BBN

English resource files?

Increasingly Atari applications are only released in German or French so Derek Wharmby and myself have launched an initiative to make at least the resource files and BubbleGEMT help files available in English. Although the manuals and hypertexts remain in German most users

can now have the programs up and running. Although most of these releases are unofficial and unapproved the companies and individual programmers have given their tacit approval of our efforts, with Jagers already including the language support in his programs. TransAction have also turned their attention to similar projects.

ICConnect - the future?

Web DTK, ST40,

ICConnect and the

Discussion (as used by The Light of Adams browser) stacks all competing for client applications, it's good to hear about a new project called iFusion which is currently being developed as a bridge between ICConnect's main and DTK (and hence ST40), and Openbox clients.

This should make it possible to make a single IP connection using ICConnect, and then being able to use any Internet client whether it be CAB or Look, NetWide or Emailer, FIM or eFTP, and AtariIRC or Chatster. ☺



Not too many participants in the Atari channel today. Note that the columns can be adjusted in width in the same fashion as with Emacs.

Contact URLs

ASH

<http://www.application-systems.de>

Jürgen Krennery

<http://www.transact.de/~jagers/>

Translated RSC files

<http://www.stic.co.uk/~derryk/ash/>

TransAction

<http://www.stic.co.uk/~inacore/>

TransAction/



The Studio In A Box book is written by Atari Computing contributor Mark Wharmby and is aimed at anyone interested in "desktop music".

The premise for this book is the idea that a computer, or to use Mark's metaphor - a box, can be used for all aspects of music production, from recording to mastering and distribution.

The book is clearly targeted at the Mac/PC audience, but it should also appeal to Atari enthusiasts with a general interest

Jonathan Adams discovers a studio instead of a jack...

in music technology or anyone looking to either add to or replace their current setup with a Mac or PC based system - Mark's background in the Atari scene makes him the ideal candidate to provide the information so you can make an informed choice.

The opening chapter takes you through various computer specifications, explaining what they do and why they are of relevance to a computer-based musician. A detailed look at additional audio cards with an explanation of the features and why you might need them is also included, as is a guide to the various software plug-in real-time effects available. CD-R recording is also discussed, as is the Internet in a musical context, particularly for those interested in the music for distributing your music on-line or collaborating with others.

My favourite chapter was titled Using Technologies and this covers the latest developments such as USB, FireWire, software synthesizers, RealTime, Image's EAS and AMT technologies and Steinberg's RAS 2 and VST 2 specifications and their new generation Mando systems. If you're not clear what I'm on about here and you're not prepared now's the time to order your copy!

The Studio In A Box Book can be ordered directly from Mark, from Chris Cullen, or via the mail order department of Sound On Sound, a leading UK magazine for hi-tech music recording, with the added benefit you can order a copy from their on-line store (details in boxset).

THE STUDIO IN A BOX

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Mark Wharmby

ISBN 0 9511609 0 7

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ash@comp.sus.ac.uk

www.stic.co.uk/stb

Order online

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

Price: £8.95

Free

Up-to-date and packed with details

Cons

Not aimed at dedicated Atari-only musicians

87%

MagiC 6



O/S

MAGiC STUFF!

Mark Wherry, Shiuming Lai, Rod Eggleston and Joe Connor team up to survey this latest version of MagiC across ALL the supported platforms...

MagiC 6 is arguably the most important MagiC release since the first release because for the first time the same version is available for Atari, MacOS, Windows, Hades and Milan. We've covered MagiC before so if you're new to the subject it's worth reading Mark Wherry's primer of MagiC 5 in ADPi.

MagiC 5 was released last summer in Germany after six months of intensive programming and English releases, apart from MagiC Milan, were available at the Spring AMS show in the UK show back in April. Most of the improvements are "under the bonnet" so let's take a closer look.

Shared Libraries

Many new features of MagiC 6 have been implemented as shared libraries, which have been supported since MagiC 5.2 - a release that never made into English.

Shared libraries add new functions that can be used by any programs running with MagiC. The idea is not dissimilar to the Auto Folder programs we have been using for years, but unlike those Terminators and Stay Resident (TSR) applications, shared libraries are loaded and unloaded as required. Other platforms have supported this concept for years - you may be aware of DLL (Dynamically Linked Library) files on Windows, and it's great to see MagiC taking up good ideas from other platforms.

For programmers, MagiC's shared libraries offer a standard way of implementing a clean plug-in architecture within their programs, which is most welcome. For non-MagiC users, Julian Reacher has released a special beta version of MacDOS that allows MagiC shared libraries to be used on machines not running MagiC. It should however be noted that any MagiC enhancements implemented as shared libraries will be of no use to non-MagiC users, as programs must specifically call a shared library for its abilities to be harnessed.

New Look

On start-up we're treated to a user (predefinable) MSG file - the MagiC logo by default, and tiled background. The text

the previously whizzed up the screen is now written in a text file called BOOT.LOG which resides in the root directory of the boot drive which makes it much easier to read.

The window management routines have been rewritten for better performance and sport a new look. If you are running at a resolution supporting more than 16 colours. The new look window design is implemented by a shared library and the individual elements (the closer, title bar, scroll arrows, and so on...) are stored in a standard GEM RSC file. This has opened the door for hackers to redesign MagiC's windows and already we've seen the emergence of MagiC "skinner" which are similar to themes for MacOS 8.5 and Windows.

Currently these have to be installed

piecemeal but it would be easy to program a desktop manager style utility to reduce the procedure to a point and click affair.

MagiC 6 now allows vector and proportional fonts to be used as system fonts, which means they are displayed on menus and in dialog boxes. Menus and sub-menus also gain a new, modern 3D-look.



the improvements is a progress indicator in HSCOPY (the file copier) and FIDELBENCH (the file searching tool) is now Year 2000 compatible.

MagiC Platforms

One of MagiC's greatest strengths is its ability to run on a variety of systems apart from "real" Atari machines including MacOS and Windows based machines. One of the advantages to running MagiC on one of the latter systems is that powerful machines are available at a lower price point, and include all the upgrades you'd ever need for your real Atari including massive hard disks, high-resolution colour display, memory and so on. You effectively do get two machines in one box and the ability to switch between them on the fly.

We've previously covered both MacOS and Windows versions of MagiC so there's no need going over the basics again. But there are already established a reliable replacement/upgrade to the real thing and are used by many serious programmers, writers and enthusiasts within the Atari community. For MagiC Mac/PC users, the version number jump to 6 was unusually large but at least now MagiC version numbers are consistent across all platforms so let's take a look at the individual MagiC implementations.



MagiCDesk

MagiC 6 includes MagiCDesk 4 which is a compact, fast and memory efficient desktop with many loyal fans. Arrange

MagiC on a Falcon
When MagiC 6 runs on a Falcon, it really starts to look attractive, with clean, elegant colour graphics. The dynamic, solid image window dragging and sizing is clean, but starts to feel lethargic with bigger windows or as soon as the graphics mode is raised from 16 to 256 colours.

The good news is MagiC 6 runs with real gusto on Canan's GEMTurbo II Falcon accelerator. Screen updates have a fluid response, making this multi-tasking system a real joy. If your monitor can handle it, install the



▲ Control Screenshots number 31. Even if 640x480Hz, Magic feels awfully easy.

CENTScreen software display enhances the native resolutions, run huge visual screens and 640x480 in 65,536 colours, all under Magic! Check our advice below.

For the purpose of this article

Showing out to see how far he could push his Falcon under Magic!... First of all, I set it to 640x480 in 65,536 colours, to look at some photographic images. Crop and coloured, but static. Quickly load up CEM-Demos to show off some slick animated effects, though with something missing... Sound! My built system is downstart, not a great problem because

most of my CD collection is also stored in perfect digital copies on my Falcon (Mac software being so economic on space, I have to fill those drive partitions with something, right).

Fire up an Aiff player and shake the walls with glorious stereo sound coming straight off the harddisk. Wonderful. Log on to the internet and collect my email. Lots of messages, from CAM and surf the web. Check the time, must remember to take a screenshot of it all for the magazine. Done, saved, and the music never faded once.



Magic in action on a Rebel. ▲

Magic Hides

Rod Eggleston's interest in graphics, coupled with his daughter's art talent, demanded a serious image manipulation, multi-tasking environment with loads RAM and maximum processing power - reason enough to buy a Hades.

As I am totally committed to the Atari platform, Hades 680 was the only solution. Having heard of Magic for Hades and being in touch with known followers regarding Colours upgrades and associated modules I was prepared to accept the fact that it would have to be in German. As the English version of the group desktop was about to be released by System Solutions the whole hardware and software configuration fell into place. And what a combination it has turned out to be!

Another advantage of Magic is the AIS which is essential for certain programs' display, such as Hi-Mul displayed in the screenshot. Also, additional features are accessible in CAM and background and faster printing is possible using HD-Driver and NWC.

Just three minor niggles - unless it's my magnitude:

- 1. It is essential to always manually turn on the data and measurement tables in Hades control accessibility.
- 2. I can't get Phocline to run under Magic.
- 3. The best procedure for the ATI Mach 64 graphics card uses Hades drivers and an options menu should be displayed to choose resolution. However, under Magic this disappears, but if you remember which key to press when presented with a Mac screen all is well!

hades 060

© System Solutions

TOP TIPS!



▲ Figure 1. Centri's Video Mode gives access to CENTScreen's parameters.



▲ Figure 2. Magic! resolution selector.

CENTScreen under Magic!

Using CENTScreen's enhanced graphics modes in TOS is very simple. When ten slides... is selected from the desktop menu bar, up comes a greatly improved settings dialog (figure 1). This doesn't work with Magic! (own resolution selector, so Centri provides a utility called Video Mode, which is a stand-alone version of the CENTScreen control panel. It can be run as an accessory and lets you set the attributes for each colour mode. For example in figure 2 you can see we've chosen a dimension of 800x600 pixels for 16-colour mode. Apply, or save, then open Magic's resolution selector (figure 3). The default mode is the highest resolution, and this is the one that gets patched for the enhanced mode. Simply click OK.



▲ Figure 1. CENTScreen's replacement control panel for TOS.

Magic Milan

MagiC Milan is fundamentally different to the MagiC versions for Atari, PC and Mac. It doesn't include built-in VGA functions, it only includes a rudimentary (2)BICS and accesses all hardware-specific functions via the Milan ROM.

This concept should ensure the Milan remains 'future-proof' leaving the Milan developers free to develop future enhancements with confidence they should also work under MagiC. For example, if additional serial interfaces were added these could automatically be available under MagiC. The same applies to specific BIOS calls which are automatically executed from ROM if they are not handled by MagiC.

This pragmatic combination of MagiC and the Milan flash-upgradable BIOS ROMs does make sense but leaves some limitations compared with MagiC Atari/PC/Mac, specifically:

- Any boot image specified in MAGK.INF is ignored. This feature uses the LOAD_HIG.SLB library and would require changes to the Milan ROM/VBI.
- Some programs, for example, HXEDIT and HXGNOTICE, require NVBI to be installed because not all the functionality is included in the Milan ROM/VBI. For many years NVBI used to be a common rendering routines were unshared and it gradually established itself as the best BIOS replacement at least in part due to its ongoing support for the latest printers. Although NVBI is now an essential add-on for use with MagiC Milan you have to manually disable the screen drivers and allow the low-level Milan screen drivers to be used instead. This quirky situation remains to be resolved satisfactorily.
- [Control] + [Alternate] + [Delete] leads to a warm-start from the Milan BIOS-TOS but not under Milan MagiC.
- The type and number in w/dp don't actually correspond to reality but may be rectified in future releases.
- Background-DMA is not supported.
- Resolution change using CHGRS.PRG is not supported. Instead, device ID should be entered in MAGK.INF and the resolution selected using Milan's own low-level VBI driver.

Joe Connor has been using the German release of MagiC Milan for some time...

MagiC Milan has given my Milan machine a second chance. Although I'm fully aware a properly configured HANT, N, AIG and desktop combination is a powerful working environment, I personally became frustrated after weeks of tinkering with setup files and the machine sat idle for months (just one of

the reasons I never wrote a follow-up to my first Milan article) until the release of MagiC Milan. Milan owners can now make the same choices as other Atarians between TOS, MMIO and MagiC.

Magic Mac



Many Mac-specific features have been implemented in MagiC Mac & thanks to leading MagiC Mac programmer Thomas Tempelmeier. To begin with, compatibility issues have been resolved, including those concerning MacOS 8.1 and the newer HFS+ Mac file system.

For anyone using a printer, the direct output using the serial interface has been improved and further enhancements will be noticed if you are using an Epson Stylus Color or Photo model. Networked printing facilities have also been updated and MagiC Mac & now implements proper background disk access, as on other MagiC platforms.

While there are more changes than we have space to cover, existing MagiC Mac users will welcome the configurability of special key combinations like [Command] + W, and the fact it is now possible for 37-Hi resolution to be emulated on Macs that don't support mono-display modes.

Magic PC



A big advantage to version 6 of MagiC PC is the inclusion of Falcon compatible BIOS sound emulation routines, so that PC users can now also benefit from applications such as GIMPing and experience a rather different sound. Other minor improvements include better handling of the mouse pointer when switching between MagiC and Windows, enhanced clipboard conversion and the removal of the WAPs limit on Atari memory.

Which Mac/PC?

The quoted requirement for MagiC PC is a computer running Windows 95/98/NT (3.11a) with 16Mb RAM. Although not mentioned, you will need a powerful processor too - I tried running it on an old 100 MHz Pentium and it was sluggish. Pretty much any current PC will be suitable to run MagiC PC.

The quoted Mac requirements are for a Plusintosh with a 68030, 68040 processor with 16Mb memory or a PowerPC processor with at least 16Mb memory.

The Plus situation is of more interest to Atari enthusiasts looking for more power because the older Plus machines used the same Motorola processors as Atari machines so MagiC runs particularly well on these machines. The thing on the plus here is that most Mac users can barely give them away because they are out of date as Macs, so bargain prices are the norm. This is even true of old PowerBooks where the Apple Duo models, which offer less than portable computing than any real Atari machine, can be picked up second-hand for around £200.

Macintosh fitted with the first generation of PowerPC processors like the 601 are best avoided because their little scale emulation is too slow. Later PowerPC chips like the 603 and 604 are best, but for blurring performance it has to be the Pentium running BIOS-TOS mode.

Conclusion

MagiC 6 is a mature product which brings the latest OS concepts to all Atari enthusiasts and its continued development across a variety of platforms makes it one of the key products in the Atari marketplace. □

Magic 6

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?

Pre Millennium Party

Report compiled by:
(MC) Mr. Laser! TSG & PGB
(MR) Brad Ruttsche / Foundation Two
(JA) Parinoid / Parinoid

OK, where to start? The whole journey was an odyssey. I left my little village at around 10 O'clock in the morning on Friday 20th July and drove to Winchester city where I met up with Matt Boucher on the travel to coffee-shopland. At around 12.30 we left Winchester and headed north-westwards. There were some traffic jams and it all took much longer than we expected. When we finally arrived at Liphrook, where the party was held, we drove around for ages, but couldn't find the party venue and we were going crazy. Suddenly, down through we went surely headed in the wrong direction we spotted Greater's 33, driving behind of Alan brother (not driving around we parked our cars and walked into the party and... THERE IT WAS! - very well hidden but displaying a large Atari banner at the entrance. When we entered there were around 20 people there. (PC)

We've described finding the party in detail because, as it turned out, we were amongst the quickest people to find the party place in best time. The Parinoids car over an hour, Splash took four and a half hours, and a French sister couldn't find the location so returned to France, called the organisers then travelled again from France to the Manchester (PH)

Gaps from: Computer, Foundation 2, Parinoid, Classic, Atari magazine, Sector 1, Los, Lead, Fun (all correct), Teenage, Tintin, Midge Team (Avalon) and Whiffles were there. All the usual Atari machines could be found there: BB (AL), IT and Falcon. I got me a copy of THE BLU, GATES which I'd wanted for about a year to go. (MC) (see you will me why?) (PH) (because it's hot) (JA) (how do you describe hot?) (MR) (Falcon Users, Manchester) (JA)

After we set up our computer I chatted with the four guys from the ATARI Classic. They had to leave just one hour later, but it was still nice to see people from a magazine attending a convention. After making a hole in on my Falcon and seeing all the guys there Canada showed me their forthcoming Resource Builder which looks very promising. It includes the contents of TOS, HX402 and Magic, and also offers some nice-effect controls. They also told me that they're working on an HFS player, so we can look forward to see what comes next from France. After a while the last Classic like Atari machine arrive. They showed their HX

operation which works with a standard SIMM. Because another Classic group also created a new HX operation hopefully we will see both of them loaded at the next ABUC (HY) in October when they won't be coding in ROM assembler they showed 8-bit demos and games to the HX bit around. It's good to see that more and more people who only knew about the IT and Falcon became interested in the HX 8-bit machine, after the last convention in October I saw an HX machine in Scotland and this time Fran had got some 8-bit equipment from somewhere. It became more and more normal to see a IT or Falcon alongside 8-bit machines in conventions. So it seems that games together belongs together still! (MR)

Fran showed me a preview of the new for the new CEMH production, which will be a universal Atari music player. It seems that some of the gaps are working on small devices. Exp/Force 1 showed me some concepts from his upcoming demo and I looked quite promising. Exp/Force was working on a module compatible for Falcon featuring lots more for Comp3 and G-Force.

The morning after
Monday, next morning. Well I slept quite well as the leather couch I sat in the day the night became really crowded with everyone engaged in something or other. The deadline for music and gap-computer was a clock in the evening. Someone kept playing WHOLE all the time - now that really suited!

Richard Karamanidis made an appearance at the party late in the evening which was great and as a gap artist outside they fit a single line - man, that really felt good! It was great to sit around the fire talking about our Atari experiences and opinions from the past, it felt like home. (PC)
I am getting a little tired of arguing why I still use Oxygen like to create. It colour graphics but apart from that I really had a lot of fun, meeting the friendly and funny Classic people and I also got for a Pre Millennium Party. The place was really well organised for sleeping in a tent and thanks to Moniker, my girlfriend, who brought a



tent, we even had a tent to stay in. I've never slept better at a convention before - wow! (JA)

We around midnight the first competitions were held. There were eight mini knowledge, 4Charon and MultiChannel music competitions along with the HX colour G3 competition which lasted mostly good scores. Right after that I went to bed. It was a pity we had to leave today at 1 O'clock - even before the demo competitions were held and unfortunately, at the time of writing this article, the results will not be available. C'mon guys, what kind of organisation is that!

Finally it's the day it was really worthwhile travelling to Holland for this event, and it would certainly stand again as long as I can afford it. The only downside was the atrocious loss of 18 guilders (11 Euro, 1994, around 14). The 18, however, for now only DMG which is a big difference. (PC) Keep on partying. ©

PMF Party Unravel (MR's review)

Location: Nice

Tickets: Cheap, but dirty

Food: Expensive but good range

Fun factor: Extremely high

Directions: Near impossible to find - extremely stressful

Co-driver: "Hoolaho"

Score appearance: Average

Competitions: I only saw the music competitions (and I was glad when that was over) and the graphics competition which featured some good entries.

Overall: 8.5%



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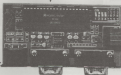
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ENCHANT

revision 2

Chris Higgins reviews the updated H!Soft BASIC Toolkit by Atari Computing's dynamic duo...

ENCHANT (ENchantEd H!soft Application Toolkit) is a collection of programming routines and libraries for use with H!Soft BASIC v1.00. It is the result of many months' work by Matthew Bazan (Cadence Software) and Paul Jones (Atari Computing's resident BASIC guru), both of whom have been H!Soft BASIC users for a number of years.

Using their combined knowledge and experience of H!Soft BASIC, Matthew and Paul state that their aim was to create a replacement for the GEM Toolkit provided with H!Soft BASIC v1, which was written in 1993 and more than 10 years ago, with more flexible and up-to-date routines. Have they succeeded?

ENCHANT consists of several hundred programming routines (over nine thousand lines of source code!) that have been divided into two categories, the ENCHANT GEM Toolkit and the ENCHANT Modules. Both the GEM Toolkit and Modules have been written in a modular fashion (which helps to keep program size and compilation times to an absolute minimum) and are supplied with clear and comprehensive manuals that cover each and every routine.

"The ENCHANT GEM Toolkit handles the complexities of GEM for you."

The ENCHANT GEM Toolkit

The original H!Soft (H!Soft GEM Toolkit) supplied with H!Soft BASIC v1 was a collection of routines that enabled the programmer to handle the complexities of GEM through only a few lines of code. ENCHANT does all this and more besides.

The ENCHANT GEM Toolkit is based around four main toolbox files and a GEM constants file. These are supported by a further fourteen toolbox files that provide the programmer with everything needed to quickly and easily produce a GEM program or accessory. The Toolkit supports all the features found in the latest GEM programs including non-modal



dialogs, modal dialogs and alerts, code and check buttons, popup menus. Not only that, the Toolkit comes with shell scripts to help you create programs and disk accessories with ease.

"The ENCHANT Modules give your programs that professional touch."

The ENCHANT Modules

Where do I start... the ENCHANT Modules are a collection of handy (this figure is still growing due to its continual development) files that allow you to include everything from CD-ROM support to disk copying from within your own programs. A module is even included to exploit the features of NVCI v9! To give you a better idea, here is the current list...

- **BUBBLE.BAS**, include BubbleGEM support in your programs
- **CALC.BAS**, a routine to handle general arithmetic
- **CD.BAS**, control a CD drive from within your program (uses CD-ROM)
- **CLIPBO.BAS**, provides GEM Clipboard support
- **CURSOR.BAS**, animates your mouse cursor for you

- **CYPTHE.BAS**, provides a rather sophisticated encryption routine called ENCRYPT
- **CYPTHE2.BAS**, provides a 128-bit binary encryption routine
- **DATETIME.BAS**, handles the Y2K problem
- **DISK.BAS**, include disk copying and formatting routines from within your own programs (pay for real)
- **ERROR**, provides comprehensive error trapping (a real must!)
- **FILE.BAS**, copy and delete files and more besides...
- **FILE2.BAS**, play and record MIDI input/output from within your own programs!
- **NVICI.BAS**, gives your programs full NVCI v9 support
- **OLGA.BAS**, include OLGA (German Class) support easily in your programs
- **PRINTER.BAS**, control your printer
- **PROTOCOL.BAS**, a user definable protocol routine
- **SAMPLE.BAS**, playback AVR samples and more using SAM
- **SORT.BAS**, sort data quickly and efficiently

- **IT-CLUES.BAS**, indicate IT-Clues support from within your own programs.
- **SYSTEM.BAS**, provides many routines that give feedback on your system. If all that wasn't enough, ENCHANT also includes some useful extra tools.

commercial software including the CD-ROM, MODPLAY, NETWORK and WAREPLAY libraries and programming tools, covering HDL/HDL, Graphics and audio file formats.

ENCHANT is advertised as being suitable for both novice and advanced users of H8008 BASIC. I am usually wary of such statements, but am pleased to report my worries were unfounded. Suffice to say, if you are a H8008 BASIC user (and as only £5.00), ENCHANT comes recommended.

Revision 3

Once the updates arrive and of last year, ENCHANT revision 3 includes several new routines and updates. Current users are now being invited to return their original master disks to Cadence Software for a free upgrade.



Cadence Software has also recently setup a message board and user group aimed at H8008 BASIC programmers. If you have a problem and wish to exchange source code and ideas, dial up the web pages today. ☺

ENCHANT Revision 3

Publisher

Cadence Software
49 Douglas Road, Lutterton, Lutter,
G75 7PZ, UK

Email: info@cadence.org
<http://www.cadence.org/entire.org>

Price: £15.00 plus P&P
(£3 UK, £5 ROW).

Alternatively ENCHANT can be purchased with a brand new copy of H8008 BASIC v3.10 for only £45 plus P&P (£7 UK, £15 ROW). UK P&P includes courier service. Please make cheque/postal orders payable to "Matthew Bacon".

Pros

Essential for all H8008 BASIC programmers. Detailed ASCII manuals, comprehensive examples provided, excellent value for money, in continual development.

Cons

This specific routine to handle TurboDOS or Falcon's GMP, can be a little cumbersome to learn with.

91%

3M Precise Mousing Surface

Yet another mouse mat had taken on a tatty look so it was time for a new one. 3M's offering was an special offer for £6.45 and although I couldn't help thinking it was still a lot of cash for a mouse mat I liked the shape, it wasn't much thicker than a credit card and it's pretty! Sorry. The manufacturer doesn't call it a "mat", it's a **Precise Mousing Surface, PMS** from now on.

"Innovation You Can See And Feel" is sgn on the packaging. Read on and you find that it has an advanced microstructured surface which provides unparalleled tracking control and pinpoint mousing accuracy. I found so intriguing I immediately inspected it with my highly polished 2.5x magnifier and can indeed confirm it does have a microstructured surface and I've actually seen it, in fact it's identical to the enlarged picture 3M provide.

The packaging also explains its "low-profile design integrates smoothly with your work surface" and indeed it does - much like place mats on my dining

table. I suppose it's an advantage in so far as the mouse doesn't have to lie so flat when you accidentally roll off the edge onto the table.

The special shape "conforms to natural hand movements, and so provides maximum comfort and control" but I do find it odd I never noticed a problem with my old-fashioned rectangular job.

3M also claims the PMS will keep your mouse cleaner, the fact I presume, but since I haven't needed to clean my mouse ball for at least a couple of years that's going to be tough to prove!

It's the "unparalleled tracking" I had a problem with. Everything is fine when moving the mouse pointer across the screen but as soon as you apply any extra pressure to depress one of the mouse



buttons it seems to feel "draggy" and I didn't like it.

I persevered for a day or so then reviewed my scruffy old blue one from the bin, which is where the low-profile design of the PMS really came into its own - I just gloomed the old one over the top and left it as was.

Jack Doolley

The Atari mouse port - A touchy subject

Matthew Bacon reviews a PC replacement for your Atari, mouse that is!

As most Atarians know the original Atari mouse wasn't the best design in the world. It was slow, unresponsive, not especially ergonomically designed, but nevertheless loved just the same. Since the time when Atari was one of only a handful of computer manufacturers to use a mouse within a GUI (amounting as this may seem), "pointing device" technology has moved forward...

Pointing devices now come in a wide range of shapes and sizes, including trackballs, touchpads and track mice besides. Over the years, the Atari platform has seen quite a number of replacement mice, some good and some bad. Just before the Spring AME III show in April my handy mouse gave up the ghost so I took the opportunity to browse around the Atari stands to pick up a replacement.

My search took me to the ASF stand where I found two existing products, the Touchpad and MousePorter. Touchpad is a PC/serial replacement mouse with a

difference. It employs the latest pointing technology, a touch sensitive pad approximately 4.5cm², which translates movement (via your finger, pen or any other solid object) into cursor movement on screen. Although it does take a little getting used to, the Touchpad is subsequently intuitive in use. You'll soon forget the days when you had to move your wrist and arm halfway across your desk just to move the cursor from one side of the screen to the other.

The touch pad not only registers movement but also mouse clicks. A single tap registers a single left mouse click while two taps in quick succession registers a double-click. Alternatively to register mouse clicks you can use the three microswitch buttons below the touch pad - whatever you're comfortable with. The left button acts as the left mouse button, the middle button acts as a double-left mouse click and the right button acts as the right mouse button.

Unlike a traditional mouse, the Touchpad doesn't have any rollers to get clogged up so it doesn't need any maintenance. Its small size and stationary

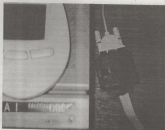
location make it ideal for anyone with limited desktop space (mine sits quite happily above my disk drive) and anyone with small hands - such as children.

Only two things stopped me buying the Touchpad a higher mark is

- The high price (although there are plenty of cheaper and more expensive pointing devices on the market).
- I found it to be rather cumbersome when using as an em package or resource editor.

MousePorter

MousePorter's MousePorter adapter has made it possible to use almost any PC serial pointing device on any Atari machine. For some time there have been software solutions to allow the use of serial PC mice on Atari machines. However, these mice usually plugged into the serial port, which meant other serial devices such as modems couldn't be connected, and also required configuration and driver software which may or may not be compatible any other software you may run.



I am pleased to report installation could not be simpler...

- Turn off your computer (very important)
- Remove your Atari mouse
- Connect one end of the MouseBusterTie to your mouse port and the other to your new PC mouse
- Turn your machine back on.
- That's it, true Plug and play.

TOUCHPAD

Supplier

ALP
40 Evelyn Road, Abingdon, Oxon,
OX14 1JA, England
Tel: +44 (0)1235 541192
Email: info@alp.co.uk
Cost: £17.00. ALP reports stock at
the current price is low!

Pros

Extremely smooth, users work spaces
conformable to use (ergonomically
designed), reduces repetitive hand
movement around your work space

Cons

More expensive than standard mouse,
takes a while to get used to.

79%

Clever stick

Although in most cases the MouseBusterTie
will work first time there are (typically)
two different standard PC serial pointing
devices, Microsoft compatible and Mouse
Systems. Both are supported by
MouseBusterTie which can be configured
by means of 4-ny DIP switches which are:

- **Switch #1**
Configures the type of mouse OFF:
Microsoft compatible mouse (MS)
ON: Mouse Systems compatible
(PC)
- **Switch #2**
Middle button (or wheel button)
mode OFF: Middle button works as
real button ON: Middle button
works as double click
- **Switch #3**
Mouse wheel mode OFF: Wheel
does nothing ON: Wheel acts as
double click (for Games/Navigation)
- **Switch #4**
Analogous mode

Should you experience any difficulty
configuring MouseBusterTie, a FAQ
(frequently-asked-questions) section is
thoroughly provided which suggests
possible solutions.

All things considered the
MouseBusterTie is an excellent adapter
which enables Atari to use a wide
range of PC compatible pointing devices -
at a price. **D**

MOUSEBURSTER

Designer

Maris Inc
PO BOX 332, Karori, Auckland
1290, New Zealand
Tel/Fax: +64 9 111 9700
Email: info@maris.pl.nz
<http://www.plplanet.net.nz/~maris/>

UK distributor

ALP 40 Evelyn Road, Abingdon,
Oxon, OX14 1JA, England
Tel: +44 (0)1235 541192
Email: info@alp.co.uk
Cost: £19.00

Pros

Access to inexpensive, high
resolution PC serial pointing devices,
no software drivers or patches
required, easy to install

Cons

Poor packaging rather ineffectual,
although documentation is well
written and informative

82%

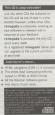
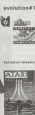
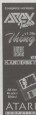


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the latest versions are available. Once you are a registered renegade
owner you can return your copy and exchange it for the latest version
at any time for just £4.99 including UK delivery. Please use the order
form on page 16.

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Basic BASIC!

Paul Jones continues his series with a look at some useful features...



EXECutions, yay or nay?

An execution of a program is achieved by double-clicking on a program at the desktop. However, as you may already know, your HiSoft BASIC programs can also run when external programs when they themselves are being executed. A command line (remember those?) can also be sent to the program. This is very useful for POO because instead of writing a dedicated display routine, the user can specify any editor to view the file instead.

You'll find the execute source code on the **Reader Disk**. I suggest you see these in preference to the built-in execution subroutines of the basic library. This routine is 'clean' - it hides the menu from view before starting the program, so GEM doesn't get confused and try to display two different menus at the same time! Much better execute routines can be found in the HQT's and ENCHANT.

For the execution we use the GEMDOS command EXEC. Check your HiBASIC external reference for more information about this command. The first thing it does is to change the current directory and drive to that of the program to be executed. This makes it possible for programs to find auxiliary files, such as a resource file, in its own directory. If the current directory and drive was not

changed, the executed program would look in the directory of the HiBASIC program, and not find the file it requires (or maybe even the wrong file). The next thing is to ascertain the current top-most window (using `wind_get_WF_TOP`) and the dimensions of the screen (using `wind_get_WFWMODEXWH`) so the top window can be restored after the program is executed and the whole screen is redrawn.

This method works well in a single-tasking environment but in a multi-tasking environment a better solution is needed: the AV protocol.

AVING around

The AV protocol was first developed for use with the GEMINI replacement desktop. The idea was to provide a way for individual applications to communicate with each other. Consider a MOD file player running as a desktop accessory with a different program file assigned to the MOD file extension. When double-clicking on a MOD file on the desktop, the program assigned to the MOD file extension is executed and sends the path to the desktop accessory which plays the MOD file.

For experienced programmers I have created a series of disks called The HiSoft BASIC Useful Routines and Documentation Guide (THIBURDGS) which includes the MOD file player software and library. The disk can be ordered using the Reader Disk's order form on page 18.

We'll be concentrating on a simple example. The EXEC routine is run as an accessory. Accessories work slightly

differently to programs, as can be seen if you look at the source code. The same menu must loop exist, but this time, the routine will receive an AC_OPEN if the user has selected it from the desk menu. The AV message can also be received, and will display the filename sent to it by the other routine when appropriate. The message is actually a number representing the function, where the following information is in the message space accordingly.

The sending application must also conform to the protocol in order for the command to be successful.

Sending is slightly more difficult. First you have to establish the GEM identification number of the program you wish to send too, this is done using the `api` find command then building up the message to be sent. The message is sent via the `api_write` command - refer to GEM documentation for a more detailed description.

As discussed in previous issues the AV protocol can be used for multi-tasking operations.

Both elements can be incorporated into a single execute routine. In a multitasking environment we can perform a series of checks to determine which routine to use:

- Is the system single or multi-tasking?
- If single-tasking, execute program: EXEC
- In a multi-tasking system, is the program to be executed already running?
- If NOT then terminate with parameters
- ELSE issue AV protocol

This series of steps can be turned into a program, check out EXEC2 on the **Reader Disk**. This routine could also be incorporated into POO but since the next column will also be the last I'll concentrate on programming in general rather than further development of specific programs.

Next time I'll let you know how you can keep in touch with HiBASIC developers and offer some insights into Virtual Language. ☺



GEMDOS errors and meanings

When a program terminates, it returns a number representing the success or failure of the program. These are the most common returns:

Code	Hex	Meaning
ERR	0	Success
EPFILE	-33	File Not Found
EPTRNF	-34	Path Not Found
ERRSHR	-39	Insufficient Memory



Program ended
Returned 0

OK

Contact

Paul can be contacted at:
Email: Paul.jones@virgin.net
http://www.virgin.net/paul.jones/

Suggestive Remarks

Mike Kerslake with some suggestions for better Atari computing and some ideas for programmers...

This issue we open with an email we received from Gavin Miller in New Zealand:

"While reading the *Suggestive Remarks* column in AC#12, I noticed there was a call for someone to come up with a System 3 equivalent.

As such, I have started writing a stack control type of programme this week. (It's a bit simple-minded at this point in time, only allowing you to enter supplier details and stock-item details, and is a bit clunky in its user interface with no real user configuration ATM - this will be fixed in the future.)

I'm afraid of System 3, but never again it, so I may not be able to make it a smooth transition for anyone who may end up converting from System 2 to 3. Given the discussion in the letter published in the issue, I can probably make it a feature-for-future matches, however.

I wonder if Digra would be willing to release the source to System 3 so someone could work on it to make it TOS compliant? With appropriate royalties etc. going to Digra, of course."

Gavin has also told me quite recently that he has developed the program quite a bit more and I'm looking forward to receiving a beta copy in due course. Sadly, with regard to Digra releasing the source code to System 3, I think that's a non-starter. For various reasons, some understandable, some not, many software companies never release code. Sometimes it's to do with the original author's copyrights, sometimes it's because the code could still be of commercial value, but more often than not it's probably because a lot of companies just can't be

bothered with the hassle of releasing the code and handling the copyright situation. If the original author of the software was aware of the situation it's quite possible he might be interested, but making him aware is probably the biggest hurdle to overcome!

Going back a couple of issues I talked about a database program for my record collection. Sadly, no one has come forward offering to write something suitable, so after seeing a friend use Atari's database functions I'm going to give that program a whirl. I'll report back in the next issue and see if that's an option. However, if anyone is up for writing a dedicated program, I'm willing here with help, advice, and maybe even some beer tokens!

Moving onto customs, now (don't you just love it?), AC reader Jerry Martin in County Galway, Eire emailed us the following:

"First I'd just like to say what an excellent magazine Atari Computing is, and keep any it continues. [FX gulp - Ed] Here's a suggestion for programmers out there. The way it may not be familiar with ICQ - a free chat service offered by Mirabilis (<http://www.icq.com>). It has been described as a mixture of IM and email. However, with ICQ two users have to be logged onto the same IRC server and in the same channel - with ICQ there is only one server. An ICQ client connects to ICQ when you connect to the internet, and if anyone in your contact list is also online, it will let you know and you can send them messages. You also appear online to the people on your contact list, so it's a great way of keeping in touch with people everywhere. OK, enough ICQ propaganda!"

Don Bakerman has posted a version of an ICQ client to our platform, and it works very well - thanks Don! However it is a text only port, and could be so much more. A challenge (proposed by Don himself in the documentation), is to put a GEM front end on all of this. Here's an extract from his idea:

"If you are a programmer that is interested in making a GEM ICQ client from my back, then please do so. If you have any questions about any of the changes I have made, then feel free to email me at balbain@netnet.com. I don't guarantee there aren't any bugs left in the code, in fact

like the actual author, I make no guarantees, nominations etc (or it's use in any purpose, but I am willing to help anyone sort out any problems with anything I did to the code. Enjoy and remember, please find someone else to carry on with this project. And don't forget if you really like this, the original author has some statements about liking to get a beer in remuneration."

Can this alone most of the 'dodgy work' to putting a GEM front end on it shouldn't be a major problem. All of the source code is provided in the archive. One possible implementation might be a window which opens as a background process (started) from ICQ's login box via Spawner perhaps) with icons showing the people in your contact list. They could be arranged in a scrollbar. Send a message by double-clicking on a contact's icon. Right click for a menu offering other options such as user info, last online, etc and so on. A message from a contact could be displayed in a speech bubble from the user - maybe BuildGEM could be pressed into action here? It would be great to have a nice GEM front end so everyone using ICQ can hold their heads up high and make the most of the FREE service.

The archive can be downloaded from Don's homepage at <http://www.netnet.com/~balbain>. Contact: Don Bakerman Email: balbain@netnet.com

Well, Jerry, I do hope there's someone out there willing to take up the challenge. There will be a lot of Atari users willing to help, not and maybe even buy a beer or two for whatever comes up with something suitable. It's a great idea for a project, so let's all encourage anyone that offers to have a go at it!

First issue I'll take a brief look back at some of our successes, as well as catching up on projects currently underway, and hopefully a final leg bit of ideas for future Atari software to keep the scene bubbling away for a long time after AC closed! Ideas and suggestions are always welcome at the usual editorial contact points. ☺



You've got a bright idea for a program, but you don't know your C from your Basic!



Well, we have tame programmers wanting these very ideas, so send them in and we'll let the compilers loose!

You spin me right round...

A treat for Jaguar owners, as Xav presents a T2K-compatible controller

Although the original arcade version of Tempest featured a spinning handwheel, its Jaguar incarnation, Tempest 3800, uses the left and right directions on a joystick to represent clockwise and anti-clockwise movements on a screen. The trouble is that, without practice, this is a far from intuitive arrangement. Thankfully Jeff Minter had the foresight to include code for a rotary controller - like an infinitely turnable steering wheel.

Is there a joystick rotary movement? The answer, if all you want is an clockwise/anti-clockwise signal, is to use a rotary switch. In the case of the T2K controller, a third of the positions (1, 4, 7, 10, etc.) appear as a press of the joystick "Left" button, another third of the positions (2, 5, 8, 11, etc.) appear as a press of the "Right" button. The remaining third are not connected at all.

If you want to monitor the outputs from such a device whilst turning the controller, you would see the following patterns:

Clockwise:
Left, Right, Neither, Left, Right...

Anti-clockwise:
Right, Left, Neither, Right, Left...

If you want to offer the option for a rotary controller in your own software, therefore, you just have to read the joystick using the standard joystick code, and remember the state of the inputs. Each time you read the inputs you simply compare the current value with the last value, work out which of the two sequences the value corresponds to, and store the current position in place of the last one.

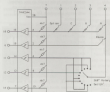
If you want to make your own controller, it's a simple variation of the joystick circuit diagram presented in issue 4 (and still available on the Renegade CD). If it's purely for use with T2K, you might choose to omit the numeric keypad. In use it will be handy to have a reset facility, however, and this can be implemented using a single push-button which pulls pin 14 on the joystick low. The fact the Jaguar is thinking that the 1, 4 and 0 buttons on a joystick are being pressed simultaneously.

This simplified version of the controller is shown in Figure 1. Depending on the switch and wiring, you may need to swap the two wires leading from the switch to the 74HC244, pins 8 & 13. There's no reason why you can't expand on this to add the full numeric keypad back in again, but unless any programmers want to support it, it seems like a wasted effort. If you do write a program which needs additional buttons, however, give the user the option to use the keyboard, or a joystick plugged into one of the other JPHs.

Which brings us to one further point. Because the rotary controller is essentially a modified joystick, it can be used in conjunction with a Team Tap. There is no software to support this at present, but it offers great possibilities for a multi-player overhead driving game (in the style of "Indy 500", or "Tapscram") using up to 8 players.

Possibly the hardest part of this project is obtaining a suitable switch featuring:

- Ability to rotate continuously in either direction, without stopping. You may find that you need to physically modify the switch to remove any locking pins, lugs or stops in order to manage this, which may well involve a complete dissection of the switch.
- Low resistance to turning: I imagine call a "clickless" switch (X004PC, about one pound each) which does the trick - but it does need to be disassembled, and a plastic lug cut out.



Inside GEM

Mark Wherry investigates the latest developments in the GEMScript world...



New GEMScript Interpreter

Harald Blocker has programmed a new GEMScript interpreter called GSExec, which has been released as far-ware. Like Scripter, GSExec is based upon a C-like syntax and supports many powerful features such as variables, macros and an include directive. Although the package is German, the program itself is pretty much language independent, although you may struggle with the comprehensive German help-text - come in TransAction!



Several example scripts are included to show what is possible, including a version of the popular 'Disc compiler' 'psychoscript'. If you have a bit of programming experience, you should have no problem in getting to grips with the syntax whether you speak German or not! Harald can be contacted at: blocker@atari-computer.de

OS CLI

MacOS guru Julian Reschke recently released a beta version of a command line utility called GUC, which enables GEMScript aware programs to be controlled from within a command line shell such as Piplist. Both GUC and Piplist can be downloaded from Julian's web pages at: <http://www.muser.de/~reschke>.

Simple Script News

I'm embarrassed to admit the German release of one of my own projects, Simple

Script v1.3, has been available for some time while the English release languished on my hard disk! To try to make amends I've posted an English beta of Simple Script v2 on my webpages at: http://www.six.es.de/~mark_wherry/scripts/

Simple Script, as the name suggests, is a simple GEMScript interpreter made available as freeware. Previous releases featured a C-like scripting language but, because there are now two other similar programs available, I've adapted Simple Script so it features a BASIC-like syntax. Simple Script has also been re-programmed for development using Pure Pascal and I've also watched GEMTide development to Pure Pascal - which happily fixed a long-standing bug.



Simple Script v2 also includes some useful built-in commands for the AT protocol so the non-GI aware applications can still be controlled, to a degree. Color commands include support for a text feedback window via the standard BASIC "print" command.

ENCHANTING

Paul Jones is considering adding GEMScript support to the ENCHANT project he jointly developed with Matthew Bacon for HiSoft BASIC programmers. This would be a great step forward in the acceptance of the protocol, so if you'd like to make encouraging noises email Paul at: paul.jones@virgin.net

Macro Madness

Arguably one of the most fascinating features of the GEMScript protocol is the macro support. In the past, we've talked about how you can write scripts containing a list of instructions that via a GEMScript interpreter can control applications. All very well but I can bet there are some people reading this who break out into a sweat just thinking about writing a script (Ble: You don't say!)

What we need is a way to generate scripts automatically - ideally just by using the program as normal...

Word 77 (or later) users may have noticed it (and some other applications) can record a set of user actions and replay it subsequently to carry out repetitive tasks. And before I get flamed, I know there are a few Atari applications which offer this capability, so why did I mention Word?

In Word recorded actions are stored in a user-editable format - a set of instructions written in the 'Word Basic for Applications' (WBA) language. The resulting script can then be edited by the user or stored away for later use.

What we need is something similar on the Atari platform. I'm pleased to report Scripter and a utility called GS-Record can record instructions in a script format that can be replayed through Scripter. However, in order for this to work, the application has to be able to send the user's actions to the macro recording program. For the programmer of an application, this is easy to implement - essentially, when a user does something, all the programmer has to do is tell the recording program what has happened. When Scripter (or similar package) replays the recorded macros, your application merely handles GS commands in the normal way and no additional coding is needed.



I'll be adding this to the next release of GEMTide, coupled with a little utility called the Simple Script Macro Recorder - I'll leave you to figure out what this does in the meantime it would be great if other application developers joined the fun. Finally, if you have any comments or questions please do get in touch with me at:

mark@atari-computing.com
<http://www.ramp.usa.atari.com/>

SITE SEEING

The Place 2 be

90%

<http://www.place2b.de/>


Here's another portal style website which covers all matters Atari, formerly known as The X. The site, which weighs in at around 800Kb is maintained by Jan Galsburg in German and English - with a French translation maintained by Sylvain Perchaud. The site is divided into five main sections which are navigated from buttons displayed in a sequence frame across the top of the page. There's also a no-frame version of the pages and the site can be fully navigated in text only mode so they should be fully accessible using any browser. Here's what each of the main pages offer:

Home: This page features site news, Atari events and reports, a most wanted section (unsurprisingly a newer C&B release tops

this poll), news of new software releases and postings from the Atari Computer - Atari News newsgroup.

Features: Includes articles about the Atari demo scene along with a Meet the Press section which includes a cover story and article overview of in ST Computer, ST Magazine and Atari Computing magazines (Journal).

Files: Instead of competing head to head with major software download sites this area has instead carved a niche for itself offering downloads of Atari commercials in AVI and MOV format along with screens, shapes, fonts and objects for use with MacDraw.

Releases: Classic action, reviews, first impressions, help, tips, level editors, cheats - they're all here if you want 'em.

Links: This "Around the world in 80 links" section is subdivided into Computers/Connectors, Atari on the web, Games, Software, Magazines, Scene, Search/Whois and Miscellaneous and each link includes a description - excellent.

There really is something for everyone on this site and since Jan mentioned he hasn't won any awards he should be pleased to accept our prestigious "Atari Computing Harvest Moon Website Award".

Jon Connor

SITE NEWS

The ST News site
stnews.atari.org

Del & the Doel

Check out my Atari site at:
www.finet.com/~delmad/

Floppypop Commemorative Site

This site is Floppypop's way of thanking the Atari Community for their support over the years and includes information concerning the ongoing availability of most of their former releases.

<http://www.floppypop.com/strider.asp>

Magic OnLine OnLine!

This excellent website is in danger of stagnation following Benji Collins moving to Calgary in Alberta. He's decided to take a year off before going to school and is currently working at a 7-11 convenience store. Currently he cannot afford a computer or internet connection and is looking for donations. If you can help contact: <http://benji.atari.org/>

Classic computer article

If you're into classic computers such as the Atari 800X, or the Commodore 64 and would like to read an article on classic computers, check out the URL below. Michael A Martin wrote the article as a counterpoint to articles looking at writing using PC/Mac and listing a writer and fan of classic computers he submitted the article titled "Forward" writing on a limited budget!" <http://www.writers-lbs.com/html/PaidGap/classiccomputers.shtml>

RailTrack Travel Planner

75%

<http://www.railtrack.co.uk/travel/timetable/index.html>

This site is operated by RailTrack, the company responsible for the upkeep of Britain's railways, as well as making sure that your local train company is allocated time and space on the network.

Going to the url should eventually give you a selection box (Figure 1), however at the time of writing this review Rail Track were reorganizing their site, so an automatic redirect was in operation. Once at the selection box, it's just a simple matter of typing in a "starting station", a "destination station", and an optional "via station", just in case you want to break your journey somewhere. You then type in a date and time of travel in the boxes provided and click on the "submit" button. A subpage (Figure 2) will then show details of services available at that time and date. You can use the buttons below the info to



Figure 1

check earlier, later and return journey times, as well as being able to start from scratch again. The "details" button gives you more info on a particular service such as train operator and what accommodation is provided. The only real problem I encountered is that should you choose a destination that has more than one



Figure 2

stations, the pop up that defines the exact station didn't work! Type in manually the station name - though and all is well. Without graphics the site is usable, though a bit messy.

Not an ever existing site to be honest, but it does do what it intends to do, and the fact that Atari users can use it to plan rail trips to ADOPT9 is a bonus!

Mike Karolake



Around half our subscribers take the Reader Disk. The combination of tutorial files, listings, GEM/Shareware and exclusive software is unbeatable and not available anywhere else. Individual back-issue copies of the Reader Disk are still available. Please refer to page 9 for ordering details.

MagiC Desktop Themes

All Atari, Shareware, Jan Norton (Jordrolf)
The English MagiC 4 release (and we understand some earlier German releases) controls the appearance of GEM windows using a standard RSC file called **W03PRAPB.RSC**, typically located in the **MagiC\XTENSION** folder. This RSC file can be edited to create Windows style Desktop themes and we've included a selection for you to enjoy. To complete the new-look of your desktop some themes also include replacement **Apple** and **Scan** file type RSC files and desktop background images.

CD-Labeller v1.0

All Atari, Freeware, Alexander Clausen
CD-Labeller is a simple script which can be used to create CD labels using a suitable GEM/Script interpreter such as **Scripter**, **Simple Script** 2 and **GEMbox**.

Accent

All Atari, Freeware, (c) Ken Badertscher
Accent takes a text file and reprints it to appear as if it were being read with whatever accents are specified. There are ten "accents" to choose between (Japanese, Chinese, German, Italian, Pig Latin, Cockney, Russian, Upp, Hindi and Chaucer).

Format 1.7 EXCLUSIVE

All Atari, Freeware Matthias Jaap
Converts between Arabic (decimal) numbers and Roman numerals. The fields can be copied to and



from the clipboard and includes English, German and Dutch language options.

VISION v3.0a



All Atari, Shareware, Jean Lussier
VISION is an intuitive, fun to use art package. The unregistered version is fully functional with occasional 15 second shareware delays to encourage registration. **VISION** is still under development and supports most of the popular image formats are supported including: **TIF**, **PGM**, **GIF**, **Targa**, **BMF**, **X-IMG**, **Djvps**, **NEO**, **Art Director (AMT)** and **MacPaint (MAC)** and also features a batch conversion option.

Newton v6 Whelan

All Atari, Mikael Polveroney
Newton is a graphical calculator which can be run from the desktop or connected with the ACC extender and installed as a desktop accessory - it's a huge improvement compared to the boring calculator GPE.



Simple Script v0beta1

All Atari, Freeware, Mark Wherry
Simple Script 2 is a GEM/Script interpreter. This release has been reprogrammed in **Pure Pascal** and includes some built-in commands for the **AN** protocol which enables non-GEM/Script aware applications to be converted to some extent. The previous release used **C** style syntax but to avoid direct competition with **GEMbox** **Simple Script** now features a **BASIC**-like syntax.



Enhanced Joybed tutorial

EXCLUSIVE Copyright Zan/Atari Computing 1989
Colour enhanced of the **Tix** controller in GEM Plextile format.

HiSoft BASIC tutorial EXCLUSIVE

Copyright Paul Jones/Atari Computing 1989
BASIC source code to accompany the tutorial including alternate source code to replace the built-in execution subroutines.



CD-ROM Subscribers!

Although there has still been no official confirmation concerning the future of the **STnTOS** magazine we have now decided to close our **STnTOS** CD-ROM subscription offer. If future issues of **STnTOS** do appear you can make them available in separate Reader Offers. This means existing CD-ROM subscribers have a choice to make from the options below.

Please indicate your preference then complete, sign, and return the form and we'll do the rest.

- ☐ Please send me a copy of the **renegade** CD now and refund my invoice for the difference.
I agree to pay any outstanding balance on receipt of invoice.
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Shareware and PD

NEWS



Eureka is a shareware program, programmed by French author Francois Le-Cast, which is useful for designing and modelling mathematical shapes. In 2 dimensions you can plot graphs, perform numerical analysis on series, sounds, images, fractals and so on, in 3 dimensions Eureka can design and model shapes - MESA 3D (OPENGL) done by Brian Paul is used for rendering.

Export options include vector graphics formats and 3D image synthesis formats like Persistence Of Vision and Virtual Reality Modelling Language (VRML). Using the "time" parameter it's also possible to animate shapes extending to 4D evolutive shapes. These object animations also have an equivalent in POV script format - you can find some examples on the authors home page.

Eureka has been tested on nearly Atari systems, runs under PlayG, and on TOS done machines.

The shareware release, supported in the US by CyberTrider, is fully functional with no restrictions and includes both French and English documentation and resource files. Francois is looking for feedback and help to extend the documentation based on your experiences and you can contact him at <http://eureka.atari.org> mailto:lecast@atari.org <mailto:lecast@atari.org> <mailto:lecast@atari.org>

CyberTrider News

CyberTrider can now accept payments online Credit Card/Debit Card at no extra fee subject to a minimum order total of £10. Payment in US Dollars at no extra fee are also now accepted in cash or cheque form. To calculate the dollar total simply multiply the sterling balance by 1.45. Please make US Dollar cheques payable to "CyberTrider Inc" <http://www.cybertrider.org/computing/sgn/> Email: danesh@cybertrider.org

Nemesis Indicator v1.0

Nemesis Indicator, programmed by Daniel Hedberg-Hen Best is a small memory resident program for Atari Falcon300 compatible computers equipped with the Nemesis accelerator from Cortex Design (formerly Titan Design) which displays the current Nemesis state (1602, 2004, 24/88) in the upper right corner of the screen. Nemesis Indicator can also be used to change the Nemesis state by clicking on the mouse buttons while the mouse cursor is within the display area. <http://home.noripost.se/nembest/>

Willis's L-O-N-G Adventures

Henri Best are still working on Willis's Adventures (programmed in AGF's way back in June 1997). Three and a half years after the first previous release both the authors are at university and spare time is at a premium but they are still working on the game along with some other projects including a demo called Cosmos On Reality and PlayTime - a soundtracker.

Daniel said "Willis's Adventures has progressed very much since the second previous release in the first quarter of 1999. The game engine and programming is about 100% ready really. All that's missing is graphics, some music, an intro, score..."

You can read more about Willis's Adventures and Henri Best's other projects on their homepage at <http://home.noripost.se/nembest/>

Pixelon



Pixelon is a project which acts as a bridge between KConnect and ST/STnG which means client applications previously only usable using ST/STnG can be used via KConnect. The screenshot shows Pixelon in action with FIB and aFTP both downloading an identical file simultaneously using a single internet connection.



HTML2TXT

HTML2TXT, programmed by Thomas Soltis in Sweden, converts HTML files to ASCII text files. Apart from the name, this new release of HTML2TXT doesn't have much in common with previous releases and is packed with new features including:

- Better user-interface, can be controlled and driven BubbleGEM and online help in ST-Quote format.
- Better HTML support. HTML2TXT has been completely rewritten, and now produces much better results when converting HTML files into text files. There's full support for lists and indentation, and it recognizes the CSS property text-align and formats text accordingly. Width and align properties of <HR> tags are now used. There's still no real TABLE support, but tables are turned into lists, which usually increases readability.
- Conversion options. For example files can be converted between Atari and PC format by selecting to only convert characters from the Atari character set to that used in Windows - or vice versa.
- Batchfile edition. HTML2TXT now has a real batchfile editor with save, load and merge features. Batch-files are now automatically saved, which saves time if you regularly perform the same task.

HTML2TXT is now "Registerware" instead of freeware which means that if you like the program, all you have to do is register it free of charge by visiting Thomas' homepage at <http://user.inet.se/~jssoltis/software/Mn2Txt/>

Go on, it's worth a visit!

VISION v3.5a

Joe Connor gives us a glimpse of this Anglo/French art package...



There have been a steady stream of art packages over the years but ask yourself how many of these are relevant to your current image-editing requirements! My guess is not many and, in my experience, no single art package is a one-stop-solution so let's see how VISION measures up.

VISION is a shareware application, programmed by Jean Laurent in France, which includes both French and English-RSC files - English is selected from a popup in the Preferences dialog but you have to run VISION in French first in order to select a different language - a costly but culturally important!

Unlike Positive Image VISION cannot work on images which have a greater colour depth than the current screen depth so editing 24-bit colour images in most mode isn't possible but, to be honest, it was never really a practical method of working anyway. Images with a greater number of colours than the current screen depth can be opened but they are either dithered or converted to greyscale. There's also an option to protect the RGB colours used to display the interface - no more black text on black menus and dialogs (even there, done that, get the T-shirt!).

The Toolbars window is traditional and works well, left click on an icon to select each tool or right for (Alternate) + left click to display the relevant options for each tool. All the tools and options can also be selected from the Tools drop-down menus or via F



key combinations. The comprehensive Replace, Transparent, WCR and Invert transparent drawing modes are supported along with a rectangular and free form block selection tools although the block functions seem limited - but there's a most recent dialog.

Most of the popular image formats are supported including TIFF, JPEG, GIF, Targa, BMP, X-PM, Carga, NEO, Am Cinema (AMT) and PictPaint (MAC) and there's also a batch conversion option.



There's an unusual feature. Images can be automatically dithered into sub-steps and saved as separate files which can be useful when generating areas for HTML pages.



VISION's real-time zoom window makes post-perfect editing easy



VISION includes its own built-in erasor, clipboard, snapshot, text window and bubble help windows which all work fine but I can't help feeling some external utilities would have saved considerable programming effort.

There are a range of really variable filters but unless your French is better than mine you'll have to try them to see what happens - the anti-alias filter seems particularly effective.

VISION is intuitive, fun to use and on the Reader Disk. The unregistered version is fully functional with occasional 15-second slow-down delays to encourage registration and you don't need me to tell you what to do if you like it. ☺

VISION v3.5a

Status: Shareware

Cost: 180 FFs (around £18) or 230 FFs (around £23) with printed

French documentation

System: All PCs, 640x480x2

5T/high resolution or higher

Contact: Jean Laurent

<http://www.multimedia.com/jlaure>

Email: vision@star.be or

jlaure@multimedia.com

Price: Inactive, flat, works from moment all the way up to TrueColor resolutions, you can never have too many art packages

Comments: No documentation provided with unregistered version, any NVidia 5 pinport driver were not recognised

87%

Game, Firmware, all Atari which support ST-H-Les, joystick Publishers: The Match/F.A.M. (Falcon User Netherlands)

Trox style games are based on the famous Walt Disney movie Trox. In the movie there were two programs each controlling a light cycle. These light cycles trailed a solid line of light behind it and the aim was to trail a line that your opponent would crash into.

In the game points represent the lightcycle and the trails are coloured lines - the idea being to force your opponent to crash into it. It's also important to stay in the game arena and not to crash into the screen border - all familiar stuff isn't it? remember programming a Trox clone on an Alpha64 Computer in 48 minutes without every having programmed a computer before! (FX applaud)

The Match has added some new features to the gameplay. Across the top

of the screen there's a timerbar. When it over-runs, various extra's appear on screen and remain displayed until the next extra appears. If you can run over the extra you'll receive one of the following:

- **Extra life**
- An obicle appears, don't hit it!
- Your opponent loses a life
- You crash motorcycles with your opponent, you continue for less, and he continues years
- You can cross your own line
- You can cross your opponents line
- You cycle stops trailing a line but your cycle keeps going
- Your trailed line disappears
- Your opponents speed is decreased
- Your opponents speed is increased
- You receive extra points
- Your subsequent points are doubled

These extra's add a lot of fun to the game, especially when playing against a human opponent. You can also play against the computer where your aim is to stay alive as long as possible and accumulate a good score and even in this mode the extra's make this task very challenging. The graphics are average, with a nice side screen followed by a total intro.

Pro tips

Munzel and Grunpf from Wolkeol said:

"The no line extra is a **DISADVANTAGE** for the one who collects it because now your opponent can head straight for you because, even when both light cycles crash, the one still trailing a line wins. If you lose your light trail RUN, and keep on running - and watch out for those light trails!"

There's also a soundtrack which plays continuously throughout the game, and, so far, it hasn't got on my nerves.

Trox II doesn't offer any extra addictions over the original Trox gameplay, but there's still plenty to go around and the extra's are fun which is an important factor - an option to turn them off would offer the best of both worlds.

Mark Schuster / Foundation Two



Pros

Looks fast, amusing extra's, challenging one player mode

Cons

No automatic resolution changing. After selecting size from the option screen, the colours aren't restored as you have to reload.

Scores

100% Graphics
100% Sound
70% Overall

GEMTrade 2

Don't struggle with German documentation. GEMTrade is!



From
£7.99

Attractive GEM interface
GAR module to translate
web pages on the fly
Instant BubbleGEM help
On-line ST-Guide help
Clipboard Cut and Paste
Look-up dictionary

GEMTrade has been under extensive development culminating in GEMTrade 2 which is available now and offers the following new features:

- Better case handling
- HTML improvements
- GEMScript compatible
- Redesigned interface
- Extended help system
- English < > German
- User dictionary added
- Viewable Dictionary
- Bugfixes (Mono works!)



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Pie Bill Gates

Shiuming Lai and Mad Butscher couldn't resist this one...



Anyone who's ever spent a day on a PC re-booting Windows (and that's just installing it...) will love this foreground style game. It's an opportunity to recreate that historic moment in February 1998, when Bill Gates visited Brussels and got caught-pied by a Belgian presenter notorious for publicly humiliating the famous.

That's not to say having a lone in play with the Microsoft Supreme is a prerequisite to enjoy this game because in fact, it's actually quite good in its own right.

The action resembles a soccer: the enemy you have Bill's head popping up occasionally from color boxes dotted over the screen, and you have to guide the cursor to the right position before pressing fire to split him. Twofish style!

There are two modes of play (plus one menu) which gradually build up the number of bases from which Bill can appear: the idea being that you clear a spot of him before the timer runs out. If you want to make things harder for yourself, the other main mode deducts points at the end of each round for missed pies.

At first, it seems too easy but later on the pace becomes a lot more frantic. A steady eye and good memory help. The Bill sprites are sufficiently large so as not to make them too hard to hit, and the cursor has a little inertia with just the right weighting. Without this it would require painful concentration and response.

A choice of music is an after thought. Yamaha chip tunes employing advanced programming techniques to produce fat, snappy bass (often called SID music after the old C64's famous sound-chip, which

typically produced such sound) to recreate digital tracker music. The latter is a poly game style during this game, which also plays out of the Falcom's DSP port, firing up my fan PSC box nicely. I wish more games programmers would do this.

While we're talking about sound, my only real criticism is the lack of conviction due to the absence of sound effects. This doesn't really feel like the pie hitting. Some creamy squishies and bursts of regular, with perhaps a few frames of animation of the pie and debris. I'm sure that would make it all the more messy and hot!

Shiuming Lai

Final Opinion

Pie Bill Gates ticks off with some good graphics and there is some nice soundtrack/chip music. Three cakes are displayed and Bill Gates appears at random from one of the cakes at which point you have to target and hit him using the mouse.

If you're successful you're treated to the spectacle of Bill Gates getting a pie in his face, which is very satisfying, if you miss, Bill escapes and you have to try again.

That's the gameplay out of the way now there are three different modes to choose between.

- **Timing:** Hit Bill as many times as possible in two minutes, each hit scores a point
- **Decreasing:** Same as timing, except if you miss Bill you lose 10 points
- **Flags decreasing:** Same procedure as Decreasing mode, except you start with 100 points and you lose 10 points every time you hit escape.

It's such an obvious knock at Bill Gates the gameplay isn't really the point - so I haven't noted it. Then said it's not as easy as it looks so you do have to concentrate to end up with enough points to progress to the next level - before each level you're given a target number of points to achieve to reach the next level.

There are versions of this game available on other platforms (Amiga, PC,

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▲ Sorry, no interactive-shooter style pie-er-up-takers, you'll have to rely on manual skill and single shots

Linux and probably others) which shouldn't come as any surprise - I want it!
Mad Butscher/Foundation Two

PIE BILL GATES

Author

Lester One

Download at

<http://lectroneutral.org>

Requires:

ST(s), TT or Falcom, 128x256 screen mode (ST low)

Pros:

Good control, acceleration-tweaks (player's) affect good timing of gameplay, Falcom external DAC support

Cons:

No sound effects, graphics slightly bland
Scores:
75% Sound
75% Graphics
80% Gameplay

78% OVERALL

Accent

75%

Utility/fun, all Atari
Ken Baderbacher

Recently I was reminded, through a discussion about old PC and Amiga programs in the Free-Online ESP local cluster group, of an Atari program that could turn plain ASCII files into something more interesting. For example a letter to an unwanted bank manager could be given an obscene slant, or a email to a Londoner could be given a rocky slant. Basically a program to add a little spice to your text file!

A quick trawl through to disks archives located up Accent, a program dating from 1987/88, turns out really up to its gills. There's ten "accents" to choose from: Japanese, Chinese, German, Italian, Pig Latin, Cockney, Russian, Lingo, Hindi and Classical!

Using this/these proper program is easy. Just load/unload a new file to "accent" and an output file, and you are a given a text selection screen in which you can click/double one of the/a accents, or opt



⚡ Totally idiosyncratic, but still fun!

for a random selection, double-click on Do It! and you choose an immediate of output, Screen/Screen, Printer or File and so on. It's a little moment you will take an ASCII file quickly accents are extremely fun! (Baderbacher said)

Accent works in 15" medium and high resolution (it won't let you run it in low res), but I've found that it also runs fine under MagiC on a Falcon as long as you

single-task the application, otherwise you get screen display problems, though the program does actually work okay!

It's an idiosyncratic, but a golden moment, which has provided me, okay, with more than a few hours of fun. It's like totally on-PC (Politically Correct), and that much better for it, enjoy!

Mike Korduba

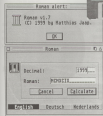
Roman 1.7

* AC EXCLUSIVE *

75%

Utility, all Atari
Mathias Jaap

<http://www.atari-computes.de/mjaap/>
jap/
mjaap@atari-computes.de



⚡ Goes to ASCII/ROMAN - Nah, we'll stick with ASCII

Why back when northern Europeans were living in mud huts the Romans made their way north is a formidable attempt to convert everyone to their way of doing things. Unfortunately, for the Romans, at least, they eventually encountered some stiff resistance from both within and outside their empire and returned home to their



inadequate, proper stone buildings and aqueducts they left us with a seriously whacky form of writing the date! Amazingly this has survived into modern times largely thanks to television producers who often date their work using Roman numerals - presumably so more viewers can't figure out just how old those BBC repeats really are! For anyone who fell asleep during the particular history lesson, "it's up properly Roman" the Romans used letters of the alphabet in place of Arabic numerals to state things, for example I = 1, V = 5, X = 10 and so on. Apart from being

incredibly cumbersome, the Roman system didn't include a symbol for zero, which makes computation very difficult. Anyway, you can now convert between Arabic (decimal) numbers and Roman numerals thanks to this little utility programmed by Mathias Jaap. Simply enter a decimal or Roman number in the

appropriate field, then click the Calculate button and hey presto the opposite format is displayed.

The Roman field can be copied to the clipboard for use in other applications and the program is quite polymorphic in that you can choose between English, German and Dutch languages to appear in the dialog boxes.

It's one of those utilities you'll find a use for once you've got it - although, at risk of looking a gift horse in the mouth, a CPM version would be worth better.

Antonie Pies (Tony Pies)
(jap@XESS.de and a quarter)

Have you come across or even written a useful or cute piece of Shareware or PD software?

If so, then why not let us know about it!

Please contact us at any of the points listed in the masthead on page 4.

We would like to feature as much Shareware and PD software in AC#116 as we can find room for, so now's the time to make us aware of what you've got!

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SHOWTIME!

Atari Computing is delighted to announce its second annual Atari Computing Convention ACC'99 which will take place on Saturday November 13th 1999 at Bingley Hall, Staffordshire Showground, Stafford from 10am to 4pm.

The Showground is easily accessible by car from junctions 13 and 14 on the M6 (see north of Birmingham with ample free parking and they'll be a shuttle bus running from Stafford railway station.

Entry costs £3 on the door or £2 via Atari Computing subscribers, children, OAPs, UMS, students and orange-card holders.

Atari Computing subscribers should claim their discount entry by bringing along a completed AH&W flyer which UK subscribers should have received along with this issue. This time around the AH&W flyers were sponsored by CyberSlider and their ad appears on the fly side of the flyer - it's great to keep it in the family!

Hillbarnum Party

To commemorate the closure of Atari Computing magazine with our January 2000 issue we'll be celebrating the milestone early at our Hillbarnum Party which will take place on the balcony within the main hall during the show and we look forward to extending our hospitality to you all.



System Solutions are gearing up for some exciting new releases at the show. Currently in progress is AntHive 3, the powerful vector-based illustration package from Application Systems Heidelberg. Regnum 3 document processor is planned for its first UK English release, to be demonstrated in person by UK Ramco of B.G.M. Software GmbH. Prepare to be very impressed by this latest version. Upgrades should be available on the day so remember to bring your old disks and manuals.

For hardware enthusiasts, a technology presentation by special guests

from Casali is planned. Meet the designer of the CEN Turbo-Falcon workstation and the new Pharis G40 workstation, have all your questions answered and more! There will be tempting show offers on the CEN Turbo E.

Professional audio, MIDI and CD-recording solutions are on the menu, as well as upgrades and essential accessories to suit all professional serial port applications. Marjet Xtra-RAM Datas, aCo HD-module... an impressive list!

There's also a possibility the show will see the UK launch of Asterix - a brand new printed Atari magazine - fingers crossed for this one!

Atari Computing are pleased to join with Sharward Promotions in bring you the best possible Atari experience. Visitors to ACC'99 and the Spring AH&W certainly enjoyed the main attraction offered by combining the two events - effectively visitors got two shows for the price of one!

In addition to the dedicated Atari stands you can also look forward to dozens of other stands offering general computer hardware, accessories, cables, CDs, books, satellites, telephones, radio and general electronics Clubs and Non-Commercial traders.

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ACC'99 is (the best) part of AH&W which is in its FIFTIETH year at this venue. The AH&W show includes dozens of stands covering all aspects of computing and general electronics so don't forget to also invite your non-Atarian friends along and share your travel costs. We're looking forward to seeing you at ACC'99. S



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**ATARI
COMPUTING**



Any colour you like as long as it's not just black?

In response to last month's letters pages, where a fundamentalist mono-facio was declared, we are reasserting the value of colour (colour?) on the Atari scene, with the following Maggie Page article. Our early version Centurio 2 games and demos compatibility report, and the lovely Runny Pin Ball Games game review both require a fair bit of colour to get the best from them.

To crank up those, where, more means better, and more, is, and please to enjoy yourselves.

Chris Holland

for the Maggie Team

Games and demos under the Centurio 2 thumb!

It is interesting to see Centric/Care 4's major Falcon accelerator, the Centurio 2 marketed almost exclusively as a professional solution. Sure, it will satisfy the deep hunger of the Power User brigade, but have they thought for a moment of the implications of a better than three times speed increase for a good many Falcon games and demos that were crying out for such a jump in performance?

I glanced down the sizeable software compatibility list posted by Centric, when my thoughts first turned to getting a Centurio 2 (CT2). My eye caught one entry in particular, yes running, the one really decent attempt at a Doom game on the Falcon, worked with the extra power on offer. Not that my decision to buy a CT2 was exclusively turned by this single consideration!

When I got my CT2, this was me thinking, wondering what other games and demo type software would also run under this very fast accelerator. It seems that the official list is a bit short on information in that area, the only other game listed on there being Pinball Dreams.

For the purposes of my study, I started to look around for those games which made fullest use of the Falcon's

processing horsepower. These are mainly games based on some sort of 3D graphics engine. Running springs to mind as the most favoured candidate.

This one, with the small box of zoomed-up music in the main menu, but with all sound effects intact. This game is perfectly playable on a stock 16MHz Falcon, but now you can have a permanent high detail mode without suffering a speed drop to Laser and Men levels!



Speaking of which, another big gainer from the extra power is the mountainside Galle classic, Of Lasers and Men, which could be best described as "luggish" normally, but runs a lot more convincingly on the 16MHz CT2 base. Another first person perspective shooter like Running, but darker and more brooding, and able to maintain a genuine atmosphere of suspense and things jumping suddenly on you out of dark corners.

With the addition of the van extra speed, the frustrating frame-skipping antics which resulted from a stock Falcon running out of breath in a particularly fraught close-quarter punch up, magically melted away, making this a much more rewarding game to play.

Next up was the F-Zero styled racing game Moon Games. This always had provision for heavily CPU accelerated Falcons, and worked like a dream here now. Layer smooth racing fun is your reward for trying this one out.

We tried the Wolfenstein style RPG Towers II, and found this worked too. This is another game that clearly benefits from the extra processing power available, although it wasn't ever too shaky on a stock Falcon.

There are still one or two other games I'm still waiting to try out before the AC# 15 copy deadline gets the better of me. For example I'll be taking a look at Grotesc, a fast of mitty Midwestern styled mouse-managed 3D polygonal framework based action. The rather excellent space combat saga, Grotesc 3D shall be getting some close scrutiny at Maggie Q-C as well.

Before closing off this section of the article, you may well want to dig out your old copy of Frontier to give that a spin on your newly turbocharged Falcon. An ST game, sure, but it looks and really enjoys the super-resolutions that 529MHz makes possible. To really appreciate the difference, why not run the intro to that game, showing unsuspecting maiden aunts used to 8MHz STs, with the total lack of frame-drop when it flies past the space station!

Most other games won't really benefit too much from the extra power in terms of what they put on the screen, but I'll mention Space, the Martin Green produced Defender clone, which seemed to transform from a playable but fairly tedious entry on a stock Falcon, to something a lot closer

to the frantic fury of the original arcade machine when given the CT2 treatment.

Turning to that other arena of computer-based entertainment, I decided to check out some demos to see if any improvements were possible there.

Demos are always a problem area for acceleration, the phrase "Written too close to the hardware" leaps to the lips of those busy fans of system legal software. Even here, there have been some early successes.



At the Error in Line coding convention last Easter, there were two releases that were able to run with the CT2 turbo made suddenly. These were the Dead Hackers ATG Demo, and the FUN Alive demo. The



later ones had extra goodies if it was lucky enough to have the extra power available. The fact that the authors of both devices had Centurio 2 in their machines is not insignificant!

A lot of devices won't have a hope of working with anything that isn't a stock Falcon. Genuine DSP-based effects are rarer than you might think (as opposed to devices that use GMP audio players), but these are very unlikely to work with CIB running as anything other than a standard Falcon. In its time to switch back regularly in 16/19ths, if you're wanting to take another look at Tat's 1990 DSP-based masterpiece [see www.computermuseum.com].

To see something that runs like a scalded cat with the extra power, why not try out the Great Hackers' Circus '97 running there. (Don't forget the master coprocessor, but watch those tunnels fly!)

In general, it looks like that a sizeable quantity of entertainment software will be able to make the most of the extra speed on offer from the Centurio 2. As you may appreciate, this isn't anything like a complete list, but I'll be trying out a lot more software in this category shortly, and you'll all be able to see for yourself in the forthcoming Maggie issue 28.

Chris Holland

Pie Bill Gates

ATARI INC.
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NUMBER ONE SERIES UNLEASHED

This unexpected and diverting title game was released in the recent Netherlands.

Pro-Billionaire Party (PMP) by the French team, Sector One.

Very simply, the Phoenix Pin-Finger is wearing the corridors of Microsoft's Redmond QHQ, with the sole duty of showing a cartoonist based confessionary into the unsuspecting face of Bill Gates, the all-time leader and great harbinger of reliable crash-proof operating systems. You are that Phoenix Pin-Finger (PMP mode off).

Thought you might like the sound of that?

Well, in translation, this game mutated into a computer version of one of those background attractions, where you hit the head of the nearest Spice Girl that pops up at random out of a hole in the floor. Here, the hedgehog river is replaced by a never-ending stream of outland pigs, the



head of Bill Gates pops out at random from one of three spots on the screen, or even from more than one hole at a time. You have to battle a time limit to accumulate the highest score possible, with only a dash flick of the mouse wheel to help you.

The pin fly, but you can't keep a Bill Gates down for long, as he willingly comes back more more slay gesture derived punishment after what looks like the quickest cleanup in history. You, are simply compelled to keep clicking it out to him. This can potentially go on for some weeks after the computer has been disconnected, several dribbling survivors of pig-mania had to be rescued from muttering "The Bill, Pie!" absently at black monitor screens.

Graphics and sound and general presentation for such a simple game, are at a very high standard. Sector One doing themselves credit here. This game is billed as compatible with just about everything from a standard 17 upwards, so why not give it a pin, arm, try.

Pin-Racing '97
Chris Holland

Download Maggie
and check out
the Maggie pages
at...

<http://rg.atari.org>



Q&A

"We always have more answers than questions"

Q I want to get up-to-date with the latest hardware/software! I am very happy with my STFM equipped with 1Mb memory and intend to stay with it for the foreseeable future. However I would like to get up to date with the latest hardware/software and I would like some advice on the following:

- I am confused about the differences SCSI and IDE - they both seem equally fast nowadays and even cost similar amounts. I believe they can both be daisy-chained and I cannot decide how to choose one option over the other!
- I intend to replace my original floppy drive with an LS1 120. Is this a good choice - or even possible and is the drive SCSI or IDE?
- Is there driver software which supports parallel scanners? I believe the HOPMA Systems scanner drivers are for SCSI scanners only! It seems possible to connect both scanners and printers to the parallel port...
- I am interested in the Yamaha 4410, CD-ROM and would like to know if this is SCSI or IDE.
- I'm also interested in the Magnus memory-expansion board reviewed in AC#7 but didn't get a reply from I&TQ and my letter to the manufacturers, Aist, was returned unopened, can you help?

(John Bagnall, North London)

A We can help, yes we really can!
Let's go

- SCSI is the more popular interface used on STFM machines. To use an SCSI device with the STFM all you need is a host adapter which converts the SCSI interface to Atari's MMC interface (Atari's own drive SCSI implementation) on the back of the machine. Suitable host adapters include GDF's Link 2 and Muller's Link/XT. Creative Design, TUS or System Solutions can all supply these or you may be able to pick one up from our classified ads or from AC#77P. SCSI can be daisy-chained up to 7 devices whereas IDE can only cope with two. (Many machines (and most modern PCs) support one

primary and one secondary IDE interface which makes it possible to connect up to four IDE devices - but I've never heard of anyone doing it on an STFM).

If you decide to go the IDE route you can add Planis Interact's IDE interface (sold by AGP in the UK). We have one of these fitted in an STFM and it works really well with the added benefit of on-board TOS 1.08 - in fact you need TOS 1.08 if you require autobooting. This interface also supports a second IDE device which could be an IDE CD-ROM. Although it's possible to get the board inside a standard ST case you have to cut the shielding away but it's an ideal upgrade for anyone building a newer system using one of AGP's existing solutions. It is essential to keep the cable runs as short as possible.

- The LS 120 is a logical IDE device which takes both 120Mb disks and standard HD disks. Although you may be able to replace the internal drive there is one potential snag you should be aware of. Normally, if you have HD driver problems, you can boot from floppy to resolve the problem, but because the LS 120 is seen by the system as a hard drive this would not be possible - in which case you would need to connect an external floppy drive.



Your original floppy drive has a Shugart interface and can be replaced or upgraded to use QDHD disks using a SCMT PPS S20-1 or Tasc FD-215MF mechanism. There's an excellent help file which details this upgrade for the SCMT mechanism available from Holland Tangent's web page at http://www.geocities.com/SiliconValley/Bay/5745/stfm_hardware.html

http://fp.sei.se/users/t/holland/stfm/info/scmt_114.asp
The HD upgrade requires either a WD-1772-02.01 or AJAX disk controller chip. Sadly your WD-1772 chip may not be up to the job and AJAX chips are rare.

- There's QD-Link, now released as PD, and there's even an English version available for download from <http://www.cla.co.uk/~darryk/>

Alan C now, an SP50M S080 scanner on an Atari Falcon/030 using the GT-Link software and this works alongside his internal hard drive. System Solutions supplied a special lead which includes a DIN plug wired into the G-Sub 28 parallel plug and this is connected to the PDS1 out port to enable the scanner to work with ST models. We're also aware of an adapter which enables some parallel port devices to be connected to the cartridge port - but this is only available from Muller in Germany and isn't cheap.

Again you're probably better off opting for SCSI, using the HOPMA Systems scanner drivers which work well and support the GDF's standard - which means you can scan directly into programs which support GDF's including Alexander Class' GCR program.

- We'd recommend you check the available software supports your chosen drive before purchasing anything. Amoytek (UK distributor in System Solutions) and Soundpool (<http://www.soundpool.de>) in Germany offer suitable software, the latter with a dismountable drive.
- Send Software Services, Heilbronn/Weg 43, 74169 Gail-Dröbenheim, Germany, are currently advertising the empty Magnus card for CH119 (around £70) or CH 120 (around £80) inclusive of 8Mb memory. Payment by Eurocheque is possible - add DM 10 (around £1) for post and packing. You will also need to buy UK TOS 1.08 ROMs which can be readily sourced from our advertisers or picked up second-hand. Peter West has translated the Atari filing instructions and these can also be downloaded from Darryk Craker's webpage at <http://www.cla.co.uk/~darryk/magnus.htm>
- Gary Bakerbridge, Darryk Craker, Barry, Joe Connor, Alan C and Peter West via the GDM start-up/competing conference

Q&A in AC#14 will be the last chance to have your questions answered by our experts through the pages of the magazine, so send in your requests for help and advice now!

AC#14 Bug Report!



Rodolphe Coube, Director CENTER/CLASS emailed us concerning our "Turbocharging the Falcon" article in AC#14:

We have the right to ask for a correction of this article in your next issue?

First, I want to tell that this test is not good because it's obvious that John has never seen a C73 running, because he wouldn't have said things like that. We've already received Falcon with FX card (fixed). The users want to upgrade to C73 because the FX is too slow. But all that is what some would call "feelings", and John can't say because he didn't test the C73. Apart from this, which is our personal opinion, here are the biggest mistakes made in the article as WAAAT! you to inform the readers of AC.

1. The FX does not "bypass" the Falcon logic. The 3 GBAs of the Falcon (located at the left of the ADDRESS block - U41, U42, U43, U44 and near the DSP - U44) are used there, and ONLY the C73 replaces the logic, it has a new 32MHz logic in its internal logic (without the wait logic).
2. The FX supplementary RAM can't be called TT-RAM, and certainly not "burst mode 32 bits". If yes, the Falcon expansion bus is 16 bits wide and moreover the BURSTing of the 68030 is not used. Only 32-Bits synchronous accesses can be handled by the 68030; in fact, you should call it ALTERNATIVE-BANK, what was designed by Atari to be a new chip is added to the motherboard RAM without a hole in the address space... TT-RAM is a 32-Bits burst-mode access RAM.
3. The table on page 29 is completely wrong. The speed of the boards are not good or all. The C73 speed is 19.57 MHz, the C73 speed is 19.57 MHz, the C73 speed is 19.57 MHz, the C73 speed is 19.57 MHz. However it is ACWOTI at 50 MHz. Other

products are only 30V2, which means that the processor is at double speed (at 30 or 40 MHz for the FX, and 40 or 50 when it's the Hercules) only when it doesn't access to the Falcon logic.

4. The C73 is NOT "similar to the Slowup FX in concept, except Cards, has incorporated a separate 30MHz 68030" - RECALL is a different design. The TT-RAM is accessed at 32MHz using BURST EDO 32-bits (not like the FX-board which is good) 16-Bits ADDRESS at 32MHz. This is why C73 is so fast compared to a FX. Please, in future, don't do test like that without a real knowledge of product hardware. With that kind of article, customers get really confused, and they could even DON'T BUYING US when we say the truth. We want you say these things in the next 14 of AC. Please, inform your readers!

John Kolak, the author of the article replies:

To answer your points in turn:

1. That's the same as what I said.
2. Microsoft's expansion is on TT RAM, and in legacy's terms, TT RAM is a class enough description - although your technical points are valid.
3. Of course, as stated in the article, the Falcon bus is faster than the Falcon CPU and of course the Centurion runs at 50/50, not 25/50. The text correctly states that the Centurion runs a 30MHz CPU, but as you point out, the chart has a typographical error (more, not the editorial team) listing it as 25/50 instead of 30/30. I would agree to an error on this point with an apology for any misunderstanding it may have caused. Well, as in my first letter, the chart clearly shows the Centurion as the top

performer. Higher numbers in ALL categories and the only product on the chart running over 100%, so I would hope you would appreciate the positive publicity and interest it generates in your product.

4. The Centurion results were provided by System Solutions on their Web site etc. The results clearly show the advantage and superior performance of Centurion, and the review stated that Centurion was the superior product, so I do not understand your offense.

It does seem to be a storm in a teacup over an article which was primarily a comparison between Hercules and Slow Up FX, and since Atari Computing has no future equity we propose we close this discussion and refer anyone interested in the Centurion II to our review in AC#15.



Last issue's Phoenix report stated that Class 4 used, "multi-kilowatt" lasers, which was a slightly ambiguous description. Thanks to Dominique Capitant for the following clarification:

"We work with power between 1.5 and 15 watts. This is the output power, but the current that we need to heat each output is between 32 and 80 Amperphases. So we need few kilowatts current to have a power output in watts. Don't forget that it is a coherent light. Nothing to do with normal lighting."

Spotted an error, or you've got some extra information that could help other users!



If so, then please share your knowledge with other AC readers!

Contact us at any of the contact points listed in our masthead on page 4 of this issue.

Many thanks!

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Atari Magazines without cover disks:

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WINTER

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Wanted: Atari software/magazines.
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can only pay nominal sums. £1000
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THE CONTACT FILES

If you intend to help out, please, or just want to hang, leave this site with the thousands of people who are members of our community. Here's a few reasons to do so:

WORLD WIDE WEB (WWW) The following sites provide a very good source of information [note: Whaley's site is a great place to check out Y2K compatibility issues for Acetate and is also useful for HgCl₂ documentation]. The following is an MSN search engine site used to obtain it:

Diaryle Cooker's site is full of useful English translations of help notes and resource files for a variety of languages, take a look at: <http://www.diaryle.com/eng/eng.htm>

F&Q (Frequently Asked Questions). Nick Baker's site is a must for Adult Learners, or experienced adult learners (to become more skilled at their systems) or those who are new to the system. *Click on the link below to see additional information.*

HAIRY WINGS: If you have an aerial facility, these hairy wings can be a great way of keeping a much smaller hairy insect away. You basically sign up to a list, usually by revealing the chromosome, or using some online sign-up method. Once you are registered you will receive alerts, from other users of the list, and you can reply to those just like other alerts, because your response goes to all recipients of the list automatically. However, this provides a digital version of the list which can be better than loads of individual alerts. Regularly in ACFTB we also give an up-to-date list of relevant alert contacts.

LOCAL, STAR CLING: If you are or are a member of a club dependent entirely or in part to local companies, and it really likes to know your details on how to do a successful business collaboration, then you

Here's a round-up of UK clubs that we've been details of:

EMAC in Scotland, held monthly meetings, at Heronwood on the shores of Glasgow, Central Argyll, Ross Shire, Dumfriesshire, Johnstone, PA1 9BL, Scotland, for more information, Email: apm@emac.co.uk

Cheshire Computer Club (CCC), Cheshire, Here is, Meetings at the CCC on held monthly at a convenient location in Cheshire, Contact Derrick Carter on 01931 475019 for further info on membership. Or email: dcc@ccc.co.uk

NEW GROUP: If anyone in the North Holland or South Yorkshire is interested in forming a RFL user group then please contact Mike Kardala on 01246 847766 or 07966 44473 at mike.kardala@bt.com. Email: mikekardala@bt.com

Steinberg
PRO 24 III

1990 to 2014 the primary subject of 2001 research is within agricultural practices, and the secondary is the use of land for other purposes such as housing and industry. The use of land for other purposes is a very high priority for the United States, and the use of land for other purposes is a very high priority for the United States.

[illegible]

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1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.



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