CLUBBED

ImageFX 4

Photogenics 4.2

Interviewed:
Fleecy Moss
Tutorials:
CDROM Explained
DOSDrivers
Layers

Reviewed:
Photogenics 4.2
ImageFX 4.1
IBrowse 2.1
Cam Control
Olympus C1000L

EZTower Mk. IV
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Issue 4 - Winter 1999/2000

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Do The Write Thing

We'd like to make Clubbed more "interactive" so we need your input!

Got a question you'd like answered or an opinion you'd like to share? Write to us and we'll include it in a letters page.

Got a tip for other readers or even an article up your sleeve? Send it in and you could very well see your name in print.

Got a suggestion or comment on the magazine? Let us know and we'll try and make Clubbed better for you.

Editorial

As you've undoubtedly noticed we're very late with this issue, to be honest the main reason for this was the bout of doom and gloom which hit the Amiga after WoA and sapped our motivation. We recovered with the release of OS 3.5 but then we were being called on by SEAL members for help installing the new OS and ROMs. Finally a dose of 'flu scuppered a per-Christmas release. Anyway we're back now with a great issue (we hope) and plenty of plans for the future...

Incredibly it's over a year since the first issue of Clubbed rolled off the presses (well my printer to be more accurate!) so I'd like to take this opportunity to thank everyone who's helped to make Clubbed a success. That includes people who've contributed their time and work, SEAL members and also of course all our subscribers.

This fourth issue also means that if you're one of our initial subscribers who started with issue 1 you'll find a subscription renewal letter with your magazine. We hope everyone of you enjoys Clubbed and will want to re-subscribe. If for any reason you don't please let us know why... we can't make the magazine better for you without your input.

Since issue 3 some pretty big changes have happened at Amiga which you'll find reported in our news section and our Amiga: the future? feature. It seems like we won't be seeing a new computer bearing the Amiga name from Amiga. However despite the antics of the parent company the Amiga world keeps turning. Haage and Partner have released OS3.5 (by all accounts early sales have been good too) and Phase 5 should be releasing their accelerator cards based on Motorola's latest PowerPC 7400 (G4) processor with the QNX Neutrino OS soon. Met@box have also shown their Amijoe G3 card for the A1200 at the Cologne show. There are also several plans afoot to bring a successor to the Classic Amiga to market from groups of current Amiga users and developers... of course only time will tell if these come to fruition.

Even in these rather uncertain times for Amiga there's still a reasonable amount of activity in the software and hardware markets as you can see from the announcements in our news pages. It's also great to be able to review not one but two recently upgraded Image processors. ImageFX 4.0 builds on the success of version 3 (reviewed in Clubbed issue 1) with powerful animation features and new effects (review on page 22) while Photogenics 4 (page 18) starts with a clean canvas to produce a brand new package with only a few concepts related to earlier versions.

At WoA we spoke to several dealers and they all told the same story... Amiga hardware is still selling reasonably well but the same cannot be said for software. There are some great packages out there now at relatively low cost and a new wave of fantastic games appearing starting with Wipeout 2097. What's the point of a kick-ass powerful system if you don't have the software to run on it? So please people buy the software you will use and keep Amiga companies in business developing new versions.

To finish on a brighter note you'll hopefully notice we've done a slight re-design this issue which we think makes Clubbed look fresher and more professional. Any comments or suggestions on the design and content of the mag are very welcome.

Robert Williams
Editor

The Chairman Speaks

Well what a weird three months since our last magazine, there have certainly been some ups and downs. The World of Amiga was a major high point from SEAL's point of view, and on the down side of the Amiga world, it has to be the "plug" being pulled on the MCC promised by Amiga (or should that be "Amintelsoft")

Let me tell you about WoA, without doubt one of the greatest I have attended, mainly because for the first time we (SEAL) were involved in the organising, and had our own user group display table as did many other user groups this year. It was great to meet so many people in the flesh, such as Kermit Woodall, Andrew Korn, Urban Müller, Paul Nolan, Jim Collas (whoops), Ben Vost, and the QNX team (whoops again) to name a few. SEAL were certainly very busy at the show, from sorting out software/hardware problems, people making enquiries about SEAL or CLUBBED, or just general chit chat about anything Amiga related, it was great. We also sold many issues of CLUBBED, and Seal printed the posters and signs on site, which were dotted around the floors, (luckily Robert brought his HP A3 printer with him). The best part of all was meeting you Amiga loving loonies, couldn't get enough of ya. The show may have not been the biggest, but it was certainly interesting with the proposed MCC mock up on display (whoops), IBrowse 2 on release (yeah),

Photogenics 4 available and on demonstration (cool), ImageFX 4 available (nice), Wipeout on display (great) and of course many innovative hardware items.

Strange that a platform that is supposed to be dead and buried, has so many enthusiastic people that are talented doing everything in their power to keep it all hanging together, what other type of computer platform has that kind of loyalty? Maybe that's what an Amiga (the computer not the company) is all about, a combination of the hardware, OS and just as important the people with ideas and enthusiasm that keep the momentum going (without the aid of Amiga, the company).

But we cannot survive forever on enthusiasm alone, we need new hardware and software to take us into the noughty`s (geddit 80`s, 90`s, 00`s), because although we have tried to keep up with technology with the many add-ons we all have attached to our machines, at the end of the day it is a 80`s design machine and long overdue to be upgraded, so it`s a real shame that Amiga (Gateway) pulled the plug. But there may be some light at the end of the tunnel in the form of the Phoenix project that is being considered by the real Amigans, lets hope so.

People

In the last month or two several SEALs have been getting into Mac emulation (with help from Tony Johnson who's been using a pseudo Mac for ages) which is an excellent way to get industry standard applications from the likes of Microsoft and Adobe to run on your Amiga if you absolutely must have them.

Raffle

At the SEAL meetings on the 29th of October and the 12th of November we sold tickets for SEAL's first raffle. The major prizes of ImageFX 4 and an Amiga Format subscription were donated by Nova Design and Future Publishing respectively with several other smaller prizes being donated by members. Over 100 tickets were sold and the prize winners were drawn at the meeting on the 12th of November. Tony Johnson, one of SEAL's founder members, won ImageFX and Steve Hirst got the subscription to Amiga Format. Thanks to everyone who took part!

WoA

Several SEAL members were involved with the organisation of this year's World of Amiga show held at the Kensington Town Hall Conference Centre on the 24th and 25th of July. Mick, Gary and Robert headed down to the venue on the Friday to help setup. For the first time usergroups were able to have their own table at the show, of course we jumped at the opportunity to advertise SEAL as well as add to the show. We took various banners, posters and plenty of copies of Clubbed with us along with Rob's A3000 and printer, I think I can safely say that ours was the best looking user group table.

Our table in the usergroup area and got an excellent flow of people keeping us very busy especially on the Saturday. We sold about 100 copies of Clubbed and took 20 new sub- scriptions which was excellent. We were able to help out many Amigans who visited the SEAL table and Mick had a long chat with Urban Muller of Aminet fame about digital cameras. Several SEALs were able

Blurb

SEAL Update Continued...

generated a huge amount of discussion.

In the future we'll be trying some other ideas for keeping members (especially those not on the 'net) up to date with Amiga happenings. Ideas include the SEALWeb Offline disk mentioned in the Web Pages section and a news sheet at each meeting.

to meet Jim Collas, Alan Havermose and Petro face to face and question them about the future of the platform.

Highlights of the show included demonstrations of AmigaOS 3.5, ImageFX 4 and Wildfire not forgetting of course Paul Nolan giving his brilliant demo of Photogenics 4. While current events (see our Amiga: the future? item for full details) have put much of what happened at the show in serious doubt it was still a very enjoyable experience, enhanced by being a part of the organisation.

Meetings

At the meeting immediately after the WoA show SEAL members were treated to a video of the show and the Saturday evening conference taken by Gary Storm. This allowed members who weren't able to attend and those who didn't stay for the conference to get a feel for what went on and the announcements. The other two meetings in August were fairly quiet with many people away on their holidays or out enjoying the warm evenings but even so those that did attend were kept busy solving many problems and showing off their WoA purchases.

September saw the departure of Jim Collas from Amiga and the subsequent executive updates all of which we communicated to members at SEAL meetings. As you can imagine this

Time to Eat Humble Pie...

WebVision can be registered more cheaply than we stated in our product information box. Neil Bothwick handles registrations in the UK and it costs just £12 to get your keyfile which unlocks the full version. Full details are included in the WebVision archive.

I forgot to credit **Gary Storm** for writing the introductory paragraphs of my "Get Netted" feature... thanks Gary.

Web Pages

Gary's been doing a great job keeping the website up-to-date with all the most important news in the Amiga world in addition he has interviewed several luminaries connected to these events. The news and in particular the interviews have attracted lots of visitors to the website and have been mentioned on all the major Amiga news services. By the time you read this we expect to have received our 10000th hit!

With so much useful and interesting information on the website Martin Miller pointed out that many SEAL members who are not on the Internet are missing out. So the SEALWeb - Offline disk was born. This disk contains most of the SEAL website on one double density disk that can be viewed on any Amiga with a web browser installed. SEALWeb - Offline disks were given out to members not on the Internet at the SEAL meeting on Friday the 15th of October and will be refreshed with the latest information at each meeting.

The Clubbed website has had a major overhaul since the last issue. The layout has been much improved with most sections now split onto different pages for quicker loading and new graphics. We've also added some submission guidelines for anyone who would like to write something for the magazine (a printed copy is available on request).

Over the last three issues we haven't mentioned **Sharon Sutton** (Mick's wife) who's done sterling service proof reading articles and actually getting the magazines labelled, stamped and posted since the first issue. Everyone at Clubbed and I'm sure all our readers really appreciate her hard work especially as she has two young children to look after!

Amiga Activated

The first issue of AmigActive hit the news stands on the 30th of September, the new magazine covers all aspects of the Amiga with news, reviews and how-tos on hardware, applications and games. There is a strong leaning towards the creative side of Amiga use with plenty of tutorials, including mini-tutorials with some reviews. The AmigActive cover CD is tied closely to the magazine with extra resources for most of the features, demos and the usual collection of useful freely distributable software all accesed from a HTML based interface. AWeb is used as the default browser because it can run programs from HTML links, combined with either Directory Opus Magellan or Workbench 3.5 this allows directories and programs on the disc to be accessed directly from the HTML pages.

Amiga Active is available monthly at £4.99 complete with cover CD. Most WHSmiths have the magazine as do some smaller newsagents, if you can't find it your local newsagent should be able to get it for you. Subscriptions are available at £55 a year.

http://www.amigactive.com/

Subscription Hotline:
(01202) 296293

Fusion PPC

Microcode Soloutions have set a date for the release of FusionPPC, their PowerMac emulator for PPC Amiga systems. Delivery was promised 60 days after pre-payments were collected which sets a date of the 20th of November.

Assuming everything goes to plan FusionPPC will open a library of up to date Mac software to PPC Amiga users. Once released FusionPPC will cost £149.95 and requires a PCI PowerMac ROM and a copy of MacOS.

Fusion is distributed by Blittersoft:
http://www.blittersoft.com/
(01908) 610170

Amiga OS 3.5 & Boing Bag 1

Regardless of the high jinx at Amiga OS 3.5 was released as planned on the 18th of October. Several SEAL members have the new OS installed and in most cases the installation went smoothly and the OS works very well. Compatibility with existing applications and utilities is very good and the new features are welcome, in particular the new Workbench is much more usable even though the changes made to it are fairly minor. The upgrade is pretty good value for money especially for those with basic systems. Even people who have upgraded their Amigas with software like TurboPrint and already have Internet software will find many things to help them, some examples are:

• Support for disks greater than 4.3Gb including new scsi.device and fast file system. Complimented by new versions of HDToolbox and the Format command.
• Full 24bit printing support with drivers for popular modern printers. Contrary to what we first understood this seems to be a new system, not based on Turbo Print or Studio.
• Internet support including the Miami TCP/IP stack, Webbrowser (AWeb) and a new EMail client. The EMailer is based on a new EMail library allowing integration of EMail into applications.

Smaller, less obvious additions to the OS include:

• Improved icon system (backward compatible with original Amiga and NewIcons icons)
• Workbench with more short cuts and progress requesters (not threaded yet though)
• Fully AREXX scriptable Workbench
• Integrated PPC support (WarpOS)
• New Reaction GUI system for future applications
• Rewritten asl.library for faster file listings and more requester options
• Improved Installer
• Improved datatypes
• Increased reliability and bug-fixes

One nice touch is the large selection of backdrops which compliment the glow icons and make the system look great straight out of the box.

Understandably as the first Amiga OS upgrade for 5 years, compiled by a team who had not worked on the Amiga OS before there are a number of minor problems with the initial release. To help fix these problems the first free "Boing Bag" update to OS 3.5 was released on the 24th of December, this updates most of the major system libraries improving stability and the ROM update which failed on some systems.

So what are you waiting for? Get out there and buy OS 3.5 for your own benefit now and to prove there is a market for future more radically improved upgrades.

For more information and to download the Boing Bag Visit www.amiga.com.

G4 On The Horizon

Phase 5 announced their PowerPC G3 based accelerator cards for the A1200 and A3/4000 earlier in the year, over the last few months the cards have had several changes of specification, specifically dropping the built-in SCSI interface and adding USB and Firewire support. SCSI, DMA IDE and a CyberVision NG graphics card will be offered as options. Just when the specification seemed settled Phase 5 announced that they were dropping the G3 in favour of Motorola's brand new PowerPC G4 processor used in the latest Power Macs.

There are now 3 boards in their G4 range:

Blizzard G4 350 - 649E (£565)

• Motorola PowerPC 7400 processor (G4) at 350Mhz
• 1Mb Backside Cache 2 100Mhz SO-DIMM Slots for up to 1GB of RAM
• 2 MiniPCI slots for future expansion
• 1 Full size PCI slot for a standard PCI card or a PCI bus board

Blizzard G4 400 - 799E (£665)

As the G4 350 but with a 400Mhz Processor.

CyberStorm G4 400 - 799E (£665)

For the A3/4000 FastSlot. Spec. as the Blizzard G4 400 plus 2 12Mb USB ports.

Several mini PCI cards have been announced and are scheduled for release along with the accelerators.

• CyberVisionNG 3D gaphics card with 32MB of video RAM - 180E (£145)
• Ultra2 Wide SCSI - 150E (£120)
• Ultra SCSI - 80E (£65)
• Ultra-DMA 66 IDE/ATA - 80E (£65)
• IEEE-1394 (Firewire) Controller with 2 ports at 400Mbps - 100E (£85)

The CyberVisionNG and Wide SCSI controller are confirmed, the other three modules will only be produced if Phase 5 receive 250 orders for them.

As you will no doubt notice from the specifications these accelerators do not have a 680x0 series processor as the current PowerUP cards do, therefore they have to use a software emulator to run AmigaOS and most programs. Phase 5's soloution to this problem is to supply the boards with QNX's Nutrino operating system and run AmigaOS in emulation on top of this. It remains to be seen how well integrated and transparent this system will be as well as what performance it will deliver. The G4 cards will be shipped with a 512KB boot flash ROM and software to enable the user to select between up to three operating systems at boot time. This would mean that if Haage and Partner port their 680x0 emulator you could boot into this, a possible Linux implementation or Neutrino.

Phase 5 are at: http://www.phase5.de/

Phase 5 products are available in the UK from:

White Knight Technology
http://welcome.to/white-knight
(01920) 822321

Blittersoft:
http://www.blittersoft.com/
(01908) 610170

Browser Bonanza

As we anticipated in issue 3 there's been plenty of activity on the web browser front in the last couple of months, here's the current status of the "big three".

IBrowse 2.0 was released at the WoA show but purchasers were disappointed to find that the version on sale was in fact a pre-release with its fair share of bugs. However about a month later HiSoft were able to release an improved 2.1 version. 2.1 is now usable but far from perfect, a further 2.2 update has been promised although currently there is no release date. We have a review of the upgrade on page 26.

Voyager 3 is now available after 5 public beta test versions. The current release version is 3.0a which fixed a bug in the Javascript implementation. V3 adds many features that were lacking in previous version and seems to have the most active development at the moment. Visit v3.vapor.com for further details.

Amitrix have released a minor upgrade to **AWeb** bringing it up to version 3.3, a cut down version is also included with OS3.5 so this browser will be getting more exposure in the coming months.

Hopefully we'll have reviews of the latest Voyager and AWeb in the next issue.
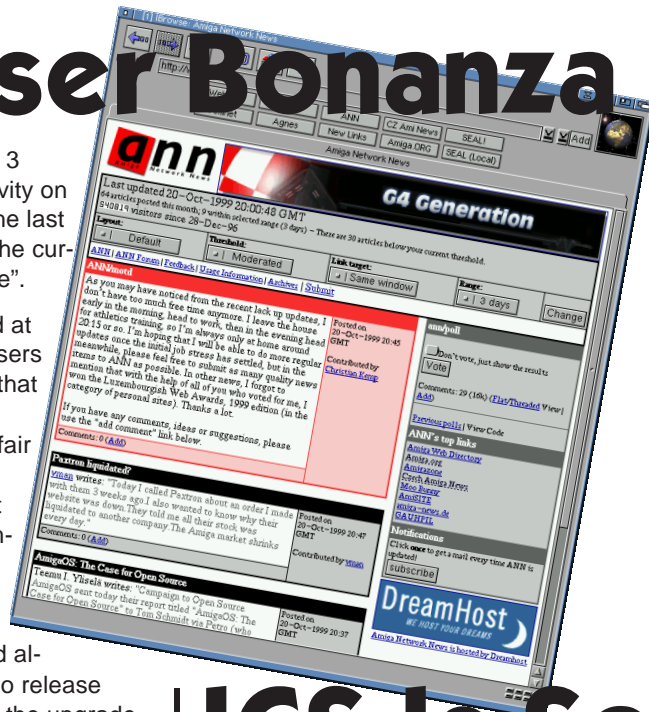
Photogenics 4.3

Since the last issue Paul Nolan has released two updates to Photogenics 4. Versions 4.1 and 4.2 have made the package much more reliable and added some extra effects and features. A beta of version 4.3 has been released for public testing and should be available soon. A full review of version 4.2 can be found on page of this issue.

Download the upgrade and public beta versions from:

http://www.paulnolan.com

ICS Is Scantastic!

Wolf Faust, the author of the Studio print enhancement system, has recently released a new product on Aminet. ICS is a scanner calibration system which automatically colour corrects your scans without manual adjustments. ICS works by analysing a scan of an accurately produced target image, and uses this information to correct future scans.

Until recently calibration targets were only available from professional photographic and DTP suppliers at a high cost (£30 - £50). Now Wolf has produced his own calibration targets which he sells for DM25 (about £10 including currency

conversion and postage to the UK). I've recently received a target from Wolf and the improvement in my scans is really fantastic and I don't have to spend time tweaking each scan. ICS is easy to use (although "under the bonnet" it is very advanced, Wolf has spent 2 years in development) and works with any scanner software and scanner, it is directly supported by ScanQuix 4 and ScanTrax 2.2. If you've got a scanner, get ICS now!

ICS is available for free on Aminet in the hard/misc directory. The archive includes details of how to purchase a

BoXeR Update

Blittersoft have released updated specifications for their Amiga compatible BoXeR motherboard including prices for systems based on the board:

• 100% Amiga compatible.
• Motorola 68040 or 68060 at 25-75MHz in a single processor socket.
• Integrated chip-set, AGA compatible but with performance enhancements.
• Most peripherals support high speed DMA transfers.
• No CHIP RAM limits.
• 2 x 64-bit DIMM sockets (low cost) for combined use as FAST/CHIP.
• Dual IDE Hard disk interface, supports fast IDE modes, including UDMA.
• Flash ROM 2Mb. Provides Kickstart, resident modules and future enhancements.
• High Density floppy drive interface.
• Real Time Clock.
• 4 x Active PCI slots
• Amiga Video slot
• Expansion connector to support 2 x Zorro 3 slots
• Connector for full 64-bit PowerPC expansion card
• PS/2 Keyboard and Mouse ports.
• Amiga Joystick and Mouse ports.

The addition of PCI slots to the BoXeR could be a master stroke as a myriad of cards are available at a fraction of the cost of similar Amiga cards. How useful the slots will be depends on drivers for

currently available cards being written. However even if only a couple of reasonably priced graphics cards were supported the BoXeR will look pretty attractive compared to expanding an A1200, particularly when you consider it already has fast serial and parallel ports and uses cheaper RAM than an accelerated A1200.

In an IRC conference at the Cologne show Mick Tinker (the BoXeR's designer) stated that the final prototype motherboards will be finished before the end of November. With time for testing this could mean production BoXeRs will be ready early in the new year.

Prices

Blittersoft are offering two complete BoXeR systems the BoXeR 4 with a 68040 40Mhz or the BoXeR 6 which has a 68060 50Mhz processor, both share the following common features:

• Choice of colour Tower
• 64Mb RAM
• 6.4Gb UDMA Hard drive
• 40 Speed CD-ROM
• Keyboard and Mouse (PS/2)
• Upgradable to PPC
• KickStart 3.1
• OS 3.5
• Multimedia Speakers

BoXeR 4:   £799.95 incl. VAT

BoXeR 6:   £899.95 incl. VAT

For more information you can contact Blittersoft at:

http://www.blittersoft.com/

or phone them on: (01908) 610170

Candy Pro Update

The popular instant graphics program Candy Factory Pro has been updated to version 1.03, the new version concentrates on improving stability and the user interface. One SEAL member got an error after installing the update that the tabs.gadget was missing. Copying the file from the MetaView distribution on the original program CD into your classes/gadgets/ directory solves this.

Download the 1.03 update from http://www.titancomputer.de/

Z4 Bus
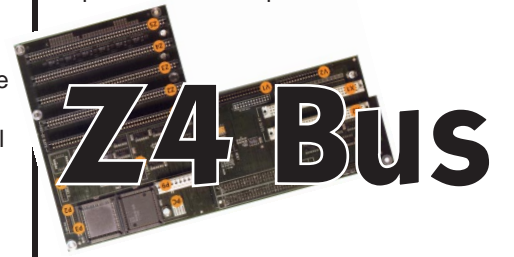
Apollo have released a new bus board which gives numerous expansion options to A1200 owners. The new Z4 board includes 5 Zorro II slots, 2 custom slots named Zorro 4, and no less than 4 clock ports. A graphics card and fast IDE interface are promised for the Zorro 4 slots which should give performance similar to existing Zorro III cards, although they have little in common except the name. Two of the Zorro II slots can run at twice the normal speed (about 2.5Mb/s) with specially adapted cards but still share the normal ZII limitations (8Mb address space and 16bit wide data path).

The Zorro 4 bus board costs about £130 and is available from Eyetech, Blittersoft and Power Computing.

Active Abandon Retail

Active Technologies are no longer selling direct to the public and are now concentrating their energies on developing their Amiga products such as NetConnect and STFax. Eyetech will now distribute Active's products.

On a brighter note the NetConnect 3 package is now available, highlights of the new version include Voyager 3 with Javascript and Shockwave Flash support, a brand new FTP client, mFTP and the WebVision web cam viewer. We'll have a review next issue.

Active Technologies:
http://www.active-net.co.uk/

Eyetech:
http://www.eyetech.co.uk/

fxPAINT Debuts at Cologne

A brand new paint and image processing package was released on the 1st of November just in time for the Cologne show. fxPaint comes from a ... company Innovative and ...mmed by Felix Schwarz ... talent behind programs ...kIRC and UltraConv.

... loaded with features and ... draw quite heavily from ...iga packages:

... pping for 3D effects.
... and Shadows.
... etouching functions.
... ptimising functions.
... d painting tools plus pan-
... h (cloner), gradients, smear,
... d pyrotechnic effects.

• Comprehensive set of image processing operators.
• Wide range of loaders and savers.
• Includes an image catalouger and batch conversion utility.

The interface looks attractive and uses standard windows and gadgets, full support for graphics cards and PPC accelerators (PowerUP and WarpUP) is included.The feature list is certainly very impressive and at a price of only 70Euro (about £45) we can imagine it catching on fast.

For a complete list of features (there are loads more) and some example pictures and screenshots visit Innovative's website at http://www.innovative-web.de/

Amiga Web Directory Closed

I'm sad to have to report that the Champaign-Urbana Computer Users Group decided to close its Amiga Web Directory on the 1st of January 2000. AWD has been the premier Amiga links website for many years and has always provided a sterling service with over 2000 indexed links with full descriptions for all types of Amiga organisations and the useful Agnes search engine to help find them. CUCUG point to the decline in the Amiga marketplace and Gateway's inaction as reason for the

closure, ironically the last news item they reported was the sale of the Amiga name to Amino.

What makes this news doubly sad is that CUCUG will not be passing their database of links and descriptions or the code for Agnes to another maintainer so it will be down to other sites like the recently re-vamped www.amiga.org to pick up where AWD left off.

Read the full announcement at http://www.cucug.org/aminew.html

Games Update

Although things aren't going the way we'd like at Amiga, there are a plethora of great games to use on your favourite machine...

Wipeout 2097 hit the Amiga in December and is the first game to make full use of the PPC and 3D acceleration offered by Phase 5's PPC and graphics cards. Developed by Digital Images (www.di-games.com) the Amiga version of Psygnosis' classic looks fantastic and plays just as well (if you can wait we'll have a review in issue 5).

To run Wipeout you must have a PPC card and 3D graphics card and at least 32Mb of FastRAM. Wipeout is available from most Amiga retailers or directly from the publisher, Blittersoft (www.blittersoft.co.uk).

Heretic II is another PC port. The original is based on the Quake II engine, and is the sequel to (funnily enough) - Heretic. It's a third-person shooter (a-la Tomb Raider). Hyperion software (www.hyperion-software.de) are the people responsible for bringing us this magical blood-fest. Not only do you get that, but they've wangled it so that the add-on "Heretic Fortress" (by Wankeroo, I kid you not) will be ported with the package too. Heretic II is also blessed with an active on-line battle. Hyperion recommend a minimum of an '060 and 3D accelerated graphics card. PPC is preferred, and you'd also be advised to have 64mb of RAM. But just look at these Amiga screenshots :)

Apart from Heretic II, Hyperion are also going to be porting the lovely 'Shogo' for us as well... more details on that when we can.

A new real-time strategy game from Polish developers is available in demo form. It's called Exodus - The Last War and, according to Robert Elson on the Amiga-Flame website (www.amigaflame.co.uk - where you can get all the latest Amiga games news), it already looks better and faster than Napalm. WoW! Download the 6MB demo from Aminet (game/demo/ExodusTLW_Demo.lha).

Payback is a gangster warfare game from the virginal "Apex Designs" (www.apex-designs.net). From what I've seen and heard about it seems like a Grand Theft Auto ...but with attitude. Running on even vanilla flavoured Amiga 1200's (an '040 is recommended though), it features:

• Perspective correct texture mapping.
• Environment mapped cars.
• Realistic physics model.
• 100 square kilometres of land and 4 different cities to explore.
• Dozens of vehicles to drive, each with their own unique handling characteristics.
• Realistic real-time shadows.
• Non-linear mission structure.

Payback will even have graphic card support (via CyberGraphX), an advanced 3D audio system, and there's also a possibility of PPC support. Expected to be released at X'mas, this gorgeous baby will set you back £30. Well worth it if it lives up to what is seen in these screenshots.

Finally, you'll also read about the brilliant 'Wasted Dreams' elsewhere in Clubbed. The even better news is that Digital Dreams will also be producing a game called Hell Squad. This arcade-adventure will even work on OS1.3 Amiga's (with a CD-ROM). WoW! Why? Whichever, it's expected to be with us in November, but if you can't wait for a taste, download the 2.15mb demo from their website (www.dd-ent.com)

Quick BLASTS

T-Zer0

Clickboom have just released a demo for this fine shoot-em-up (reviewed elsewhere in this issue) for download, at (http://clickboom.com/t0/demo.shtml), but it weighs in at a hefty 26MB, luckily it's also on the cover disc of Amiga Format and AmigActive.

Napalm Add-on

Following on from the excellent (if slightly hard) Napalm, Clickboom are about to unleash something "more than a missions disk" in 'Napalm - Euro Burn'. Hmmm. We didn't piss them off or anything, did we?

Virtual GP

If grandprix racing is your thang, then you'll be pleased to know that Virtual Grand Prix has been released (much to Mick's delight). We'll have a review / update from Mick, on the website shortly.

Foundation DC

Paul Burkey's 'Foundation' has had a new lease of life in 'Foundation, the Director's Cut'. It features all the good stuff of the original, plus all the patches and updates that make it (somehow) an even better game than it was. So, if you have any interest in Populous/strategy type games at all, then Foundation DC should be top of your list... go get it.

Super Frog

Also on the re-release trail is 'Superfrog'. Surely you've heard of it? If not then where the hell have you been? Superfrog is probably the finest platformer the Amiga has ever known. It was released by Team 17 way, way back, but it's so good it has stood the test of time. Get your vanilla miggy a X'mas present and have some great fun.

For all the games currently available, and to find out more (and maybe even pre-order) about the ones that aren't quite with us yet, give John at ForeMatt Home Computing or your preferred supplier a ring.

Happy gaming, and I'll see your ass on-line where I can frag it in Quake :)

Gary Storm

Amino Buys Amiga!

In a shock announcement on the eve of the new millennium Amino acquired the rights to the Amiga from Gateway. Details are still sketchy but here's what we know so far.

What a way to start 2000! Amino (formed by Fleecy Moss and Bill McEwan) have finalised a deal which brings the Amiga name back home to people who care about it, and can see the potential of having a modern computer with an Amiga badge. We've reprinted the first official statement from Amino here, this comes directly from the http://www.amiga.com/ website.

Official Announcement

January 3, 2000

YeeHaw and welcome to the year 2000;

I want to make something very clear from the beginning we have been told, that Amiga was purchased by Gateway because of the Patents, and that there were not even aware of the Amiga installed base, or the people.

Gateway purchased Amiga because of Patents, we purchased Amiga because of the People.

Without the people standing behind, developing, creating, purchasing and continuing to believe in the Amiga there never would have been anything for Gateway to purchase. We recognize this, and it is because of you, and what you have continued to accomplish with Amiga that we have purchased the company.

I want to make sure that everyone knows and understands what this all means to you the true Amigans.

Here is what was acquired from Gateway:

1. All trademarks logo's etc.
2. All existing inventory of Amiga International
3. All existing licenses.
4. License to All Amiga patents (Gateway still owns the patents, but we are able to use them).
5. All web sites, and registered domain names.
6. The Amiga OS and all that is associated with the OS.

7. The Amiga operation as it exists today.

Specific details of the developer system, the OS partners and how one can begin developing will be released in the next couple of weeks.

We will be making an announcement on January 8th, 2000 with one of our partners at CES in Las Vegas, and more details will follow that release.

Fleecy, Myself, Petro, and the rest of the team are not going to make promises and create presentations and demos. We are going to deliver products, services, and the rest of the world will know what you have already known.

We will be officially changing the name of Amino Development Corporation to the Amiga Corporation this week, and we will let everyone know of this change shortly once it is officially completed.

I want to thank all of you for your continued support we will make Amiga what it should have been, and more importantly what it will be.

Keeping the faith,

Bill McEwen
President/CEO Amino Dev. Corp.

Initial Reactions

Gary Storm and Robert Williams air their initial thoughts on the Amino buy-out and raise some questions not answered by the short press release.

Very good news and a late Christmas present. At least something's happening, and the Amiga name isn't stagnating in the putrid pools of Gateway's infighting, political remonstrations and lies. It's back home at long last with people who actually care and understand what it's all about. Fleecy, Bill and friends know we're not crazy... well, maybe just a little crazy.

As Amino now own the OS, will they be releasing it as open source to proliferate (possibly even migrate to other platforms) while they continue to develop and release a 'new beginning' OS? Since Fleecy Moss has previously declared his support for COSA we believe Amino are likely to open-source the Amiga OS.

There are good reasons to release the 'Classic' Amiga OS source, as it would allow anyone to develop and improve the OS, and therefore the development cycle would be much quicker. To prevent it becoming a behemoth though (exactly what Amiga stands against), Amino/Amiga must take a central role in directing 'official' development and releases. Failure to do this would result in the OS losing cohesion and splintering into many unwieldy versions. For a deeper perspective, visit The Campaign For Open Source Amiga (http://www.savetheamiga.org.uk/) website.

We know that Amino have been working with an OS partner (as yet unnamed, not QNX), Rebol (Carl Sassenrath - big respeck), and others to provide the foundation, direction and development of a successor to the Amiga experience, while still keeping true to its values and karma... yet expanding on it to compete in the modern and future computing environments. This new 'Son of Amiga OS' would most likely be small and efficient in the Amiga tradition (especially important in the future to be a leader in digital convergence which needs the smallest/fastest system for communication between the various elements of a wireless and Internet network), and comprise of a modern OS with features such as multi-threaded multi-tasking, memory protection, virtual memory, POSIX compliancy etc. etc. It may even be a Dr. Doolittle of the computer age, with a near-effortless ability to interact and control alien computer systems (i.e. communicate with the Microsoft animals)... possibly via TPFKNAO (The Project Formerly Known As Amiga Objects) from Gateway.

Whatever their final product, we're hoping (as we have many times before) that this piddly little world may finally have a decent computer system coming, which has learnt from the mistakes and triumphs of all those that came before it: Apple/ IBM/ Acorn/ Commodore/ Microsoft/ 3DO/ Sony/ WebTV/ Xerox/ HAL (:)) etc. etc., in the design, implementation, marketing and support of the Multi-media Millennium Amiga.

Amiga Update

Robert Williams summarises the changes at Amiga since issue 3.

Immediately after the World of Amiga show in July it looked as if things were finally looking up for Amiga. Although the announcement that the MCC's OS would be Linux had shaken the community many users had begun to understand and accept the decision (even if they didn't really agree with it). Jim Collas' personal commitment to the project was show by his evangelical speech at the show and the models and specs for the MCC were proof that Amiga weren't solely interested in the set top box market.

In late August an announcement appeared on the Amiga website stating that they would be concentrating on their projects and not to expect any further announcements. As regular public statements had been started by Jim Collas with his monthly executive brief-

ing and less formally with Amiga staff answering EMails and taking part in discussions on Usenet this came as a surprise. Many people speculated that Amiga's plans and partners were being put in jeopardy by the press coverage generated by their announcements, others suspected darker motives.

At the begining of September rumours circulated the Amiga's PR man, Bill McEwen had not had his contract renewed and hence was leaving the company. Bill had been heavily involved in community relations particularly in the US and had talked at several shows, his departure was seen as a bad sign. This proved to be true as two days later it was announced that Jim Collas had also left the company to "pursue other interests and opportunities". Tom Schmidt replaced Jim as CEO moving from his

job as Vice President of operations.

This news was reported on Internet news sites and it was several days until it was confirmed on the Amiga website (http://www.amiga.com), after the confirmation rumour was rife on the Internet as to what the change would mean to current Amiga projects but in particular the MCC and OS3.5. Later in September Tom Schmidt published two executive announcements on the Amiga website, the first tried to calm the community by stating that Amiga was not closing but said little else. The second confirmed what many had feared, the MCC and its modified Linux OS were being dropped although development of Amiga Objects is to continue. Tom Shmidt stated that Amiga Objects will be developed for "Linux (and other operating systems that support Java)".

Amiga: the future?

With the Gateway situation so unsure a number of companies and groups have emerged with plans to revive the Amiga market in some way. As you'll have read on the previous page Amino have pulled off something of a coup by purchasing the Amiga rights from Gateway but even so the companies discussed here are sure to have some influence on the future direction of the platform.

QNX

QNX are still working on their own particular partnerships (with Phase 5) to bring their Neutrino OS to us in a PPC computer. QNX have also recently signed partnerships with Motorola and IBM in some non-related ventures. We should see something from QNX in the next few months.

Phoenix

In September the previously unheard of Phoenix Platform Consortium published a very impressive list of developers who

had signed up to their charter. The list included famous names in the Amiga community such as Holger Kruse (Miami) and Olaf Barthel (Term and OS 3.5). Also included are representatives from major current Amiga developers like Phase 5 and GPSoftware and members of the original Amiga team like RJ Mical, Dave Haynie and Carl Sassenrath.

Phoenix say they aim to define open standards for a new computing platform with each of its members contributing in their area of expertise. When the standards are defined new machines could be built by any of the Phoenix manufacturers.

Phoenix has a pretty broad definition of what qualifies a developer and asks for anyone who is involved in bringing software or hardware to market to get involved. This includes not only programmers and hardware engineers but also beta testers, translators, marketing people and many others. Users can

Gary Storm and Robert Williams look at some of the organisations hoping to revive the Amiga spirit.

pass their ideas to Phoenix through developers who belong to the group and through a "Team Amiga Central" website which is currently being developed.

In the PhAQ section of their website Phoenix say they are trying to achieve "A computer that people will enjoy using and a marketplace that has a future". More information on Phoenix is available at http://www.owlnet.net/phoenix/.

COSA

The Campaign to Open Source AmigaOS is a group of individuals and organisations which lobby to have the source code of the AmigaOS released. Open Source means that the source code of the operating system is made freely available and can be modified at will. If a programmer wishes to distribute modifications they must make them freely available in source code form. This model has been successfully applied to many projects, the most popular of which is probably the well known Linux Unix like operating system.

Amiga: the future, continued...

COSA have compiled a report called "AmigaOS: the Case for Open Source" which sets out why they feel the AmigaOS source code should be released in this way and what benefits this would bring Amiga Inc. and the Amiga community. The report was compiled in consultation with Eric Raymond an open source advocate who acted as a consultant to Netscape when they recently released their Mozilla browser as open source. The report highlights that popular open source projects benefit from large number of enthusiast programmers and often progress very quickly. Just releasing the source code would probably give the AmigaOS a new lease of life especially as the Amiga has always attracted large numbers of hobbyist programmers. The report was submitted to Tom Schmidt of Amiga Inc. and Ted Waitt of Gateway on October the 18th.

COSA has many influential Amigans among its supporters including Fleecy Moss and even Petro Tyschtschenko seems to be interested in the idea and passed COSA's report along to Tom Schmidt.

Not everyone is convinced that an open source AmigaOS would be a good idea however, it has been pointed out that many key parts of the OS including AREXX and the compugraphic font engine are licenced products whose owners may not agree to them becoming open source with the OS. Another worry is that the OS might loose it's cohesive efficient design if it were worked on by a large number of independent programmers with little central co-ordination.

Haage and Partner who organised the development of OS3.5 and Olaf Barthel who was one of the main programmers on the project have stated that they are not in favour of a completely open source AmigaOS although in an IRC conference at the recent Cologne show Markus from Haage and Partner did state that "It might make sense to make some parts open source... so this can be discussed" he also pointed out that no code could be released without Gateway's permission.

The latest updates on COSA's progress and an on-line survey where you cab express your support are on their website at:
http://www.savetheamiga.org.uk

Fleecy Moss

With Bill McEwan Fleecy has set out to create a new platform with the user experince that makes Amiga special but based on a modern OS and hardware.

Hi Fleecy, thanks again :)

No problem - we are all partners in this - we aren't the silent types either - when we hold a party, we party!!!

Name: Fleecy Moss

Age: 32

Family:

1 red headed Scottish warrior woman, Elspeth, 2 boys, Seth (9) and Yerran (7) and little Evie (Evangeline) - 1

So, whatcha been up to since we spoke last (just after you 'left' Amiga)?

Getting to know Evie, buying a house, getting into a horrendous ERP implementation at work. Trying to work on KOSH when I can. I spent a lot of time chatting with Bill about Amiga possibilities, especially how we would do it if there was an opportunity.

From what we've read and heard about, the many plausible explanations for Jim Collas 'leaving' Amiga, We definitely know that he didn't leave because of any immature dickhead's threats (he's a bigger, stronger man than that), and didn't leave of his own volition. Comments?

Jim left because Gateway got threatened by MS when they caught wind of the last round of publicity, and the comments that GW was going to take on Amiga. There were also a lot of internal disagreement over direction, and the role of the community, and he was set up, to an extent (at least in my opinion) by those who have now benefitted. With his revenue stream and plan in tatters, what self respecting guy would stay?

There was a suggestion of you trying to get Jim Collas involved in AQUA. Any luck, or do you at least know what he's doing now?

It is always a possibility. I think Jim will surface pretty soon but he is resting now. The GW2K rape left him drained.

Bill McEwan was let go as well, which seems to indicate that they aren't interested in producing anything, as it's a numb decision to lose your market-

ing dude when you're about to launch new product(s).

Bill got a bad dissing by a "senior employee" out to save his own skin when Collas took over. As a result, they never really understood just how much talent, leadership, and plain downright goodness there is in Bill. As a result they failed to utilise him. He never told me what transpired, because we both agreed when I was dropped that we wouldn't talk about AInc stuff, but his mood started pretty black and just got darker. Release was actually a relief for him, and now we can get on and do what should have been done 2 years ago.

I know you're a Bill McEwan fan, even though he hadn't had any Amiga contact or experience before joining Amiga (after you left?). Why is that?

Just spend ten minutes with him. For an American, he has a rare sense of humour, cuts through the bullshit, and enjoys wacky stunts. Schindler got really bent out of shape because I went out to South Dakota one time, and we were all meeting up. I bumped into Bill at Minneapolis airport, and by the time we got off the plane in Sioux City, we were best friends - and Schindler had been his friend for years. He just "gets it". The best compliment I can pay him is I would spend time with him outside of work. In fact, that's the whole point - even work isn't work with him. We do it because it makes us feel alive.

At the moment, until some proof comes from Amiga, it seems the only good thing that's come out of the last couple of years, is QNX, who seem intent on keeping their word and co-operating with hardware vendors to produce a new computer platform. It's funny how things turn out, as you suggested QNX while at Amiga, and now there may be a chance that you (and others) will be working with QNX to do the deed, and produce the AQUA (was 'Amiga QNX Uniform Architecture'). How are things moving on that front, and what is the vision? Do you have enough financial backing yet?

QNX is a great product, and we have been trying to get Dan and the crew in-

volved for well over a year. With Amiga Inc finally revealing their true colours, the time is now right to break the community from its dependency habit. We have coalesced a business, technical and strategy document that we have been working on really for over 18 months, even if informally. One of Bill's "gifts" is that he seems to know absolutely anybody who is anybody, and the job offers, and investment offers we have had in this little venture of ours sometimes blow me away. Money will not be a problem.

For us, the Amiga is a philosophy. Elegance through simplicity is it's motto. I spent the last year telling ppl that this was the case, that it wasn't the company but the ideals. However, dependency is a hard thing to kick, and Collas, to his credit, did offer something appealing. The collapse of that though is really the best thing that could have happened for the Amiga - the ultimate slap in the face wake up call. We want the philosophy to continue. We made and are still making strenuous efforts to get the name, but AInc has now made it clear they will try to wring as much as they can from it, and we need our money for the future. So we will proceed anyway. However, for the community to survive and prosper, we must break out of the cycle of the past. No more single owners, power focuses, or single points for failure. We see all as working together for the benefit of all, working at their core competencies to produce a variety of wonderful products and ideas based around a common core.

We see QNX as producing the core OS and services. We see Rebol as providing the scripting and messaging paradigm. Bill and I see our new company as providing the Amiga experience, from the moment you approach an new machine to the moment you leave it. It is much more than an interface though, although that will be one of the items we work on. It will be an attitude, an empowerment, a model, a habitat. Included in this is not just how you relate to the machine but how it relates to you, your finances, your home or office, your philosophy. Marketing a reality that is far and away above what exists today.

Of course this is all talk and plans at the moment, but that's how it starts. I haven't stopped though. QNX, Rebol, and our company, which has a working name of Amino at the moment (for many reasons ;-)) are just a small part of it - the core SW part. We also have invited hardware companies to come together to form a hardware reference platform group - core product specs that will enable our SW to run on it, and to allow them to gain from economies of scale. This SW architecture will be called AQUA (Amino Qnx United Architecture).

Our hope is for a co-operating ocean of companies, all doing their bit. With no single authority, we gain the flexibility and protection that has been missing in the past. Of course, we want to further safeguard our own part of this, Amino. We want to take the company public, but in such a way that the controlling shareholding is distributed widely amongst the community, users, developers, and the like, further protecting our dream in case anyone ever comes looking to buy it out. We have already sent the preliminary proposal out to our partners in the community, and are talking to many outside of it.

We have received nothing but good news up until now. We hope to have Amino up and running in 4 weeks, and our partnership plan is to get a set of products, the second wave (we want to reserve the first wave for the classic Amiga) out within 6 months - no dilithium powered warp capable products, but a good, solid basis that can come to market quickly, and get the community moving again. In addition, there are other efforts afoot to energise the community, developers and users. As we have already said, we are wanting to see a new model, not just us selling to them, but a dynamic habitat where we all meet, work, play, and have a good time. This cannot be done alone. We will do it together, but this time it will be done by Amigans first.

Hopefully AQUA will be multi-media centric, with DVD, audio and video in/out ports, timecode generating software etc etc for producing animations, music, and video's. What are your visions for the AQUA range (if there is to be more than one)? I assume the internet will also play a big part in the user interface design, to make it easier/friendlier.

No, we intend to concentrate only the soybean manufacturing computer device market. We see it as having a huge potential to keep our company in tofu for years to come ;-) AQUA is just the architecture. We personally are going for 2 markets, the pathfinder market (power user, geek, academic, and technophile), and then the digippl market - technology haters who just want technology solutions in their life but we will run at the first sound of the word computer. The future is moving on, away from workstations, clients, servers etc - it is all about digital content, whether you are building applications, sculpting 3D images, listening to music, searching the web or whatever. Many ppl are still caught up with something that looks like a computer - the initial revulsion by the community towards Digital Convergence was a sign of this, but it is also a misunderstanding - it is about the solution and not the tool. We will fully support, develop and work in partnership with others to push this pathfinder community forwards - our techo-adventurers, and then follow up 12 months later with products for the mainstream. We see it as a wonderful opportunity for co-operation and just plain fun.ainstream. We see it as a wonderful opportunity for co-operation and just plain fun.

You mentioned patching up the current Amiga market. The only way you can stop the rot, is to sell a reasonably priced computer, that marries the Amiga ethos to pc hardware. Can you go into more detail on this? And if that's the first stage, what is the 2nd stage?

Going along with AQUA, we see waves of development. In honour of Jay and crew, the first wave will be reserved for the classic Amiga. The second wave is what we are working on with our partners now. It will be a very powerful system, even at the low end, but don't look for miracles or warp drive. We are calling the HW reference group together, hopefully within the Phoenix organisation to spec out a single sourced common design - single CPU, single high end graphics card, sound card etc - this minimises development time and effort, support and incompatibilities, and means we can hopefully get something out within 6 months from startup. It will give us the powerful foundation we need, to prove the market, to secure revenue streams, and to be able to start designing the third wave, where hopefully we can really go to town.ly we can really go to town.

How much moolah will the AQUA(s) set us back?

Again, Aqua is just the SW component, so I don't know what the actual products will be called. We are looking at 3 products for the second wave, at least on paper, 1 single CPU workstation (<$1299), a multi-CPU workstation (<$1799), and an integrated motherboard, that takes a DreamCast type approach - squash the single CPU workstation down onto a small board, with PCI/AGP headers and allow companies to produce an A1200 like device with a lot of expansion potential - I would hope to see this sell for <$499.<$499.

Where does Arexx sit in the AQUA equation? Would it be possible to adapt Rebol to be an Arexx replacement?

We see Rebol as fulfilling the potential of Arexx, and so much more. Most ppl only know a part of the Rebol story and we will be delighted to be a part of telling the whole. Rebol will be one of the key pillars of AQUA. We only left the R out because it messed our nice water imagery up ;-)

We all know that any new computer platform would have to have some level of PC software compatibility. You believe that Java is the answer. If Gateway have dumped Sun in favour of Microsoft, then perhaps Sun would be willing to join the AQUA project?

QNX already runs Java. WINE already runs PC apps to an acceptable level. We are always willing to talk though.

What about Transmeta? If Gateway have become bosom buddies with M$ again, then they may be out of the Amiga equation too.

Transmeta are a chip supplier, so are Motorola, AMD, Sun and others. I leave that to the HW reference group.

Any new computer also needs killer apps and games at launch. Where in the world are you going to get these from? An original game to show off the AQUA would take at least six months to program (and a port just wouldn't be any incentive to change computers for).

Games companies want to show off, and they also want to sell a lot. Play fair with them, give them the tools and support, and show them a hungry market, and you would be surprised what turns up. Multi-modal markets also helps a lot, and although the community is our love, and it will be our pathfinder for technology and product, we are also going to take our speedboat around the bigger ponds a la Caddyshack style. I also still need to get someone to develop Cannon Fodder 3D.

Whatever the final solution, it seems likely that (due to the nature of the current industry) AQUA will have a much larger OS than the current Amiga OS. Does this mean sacrificing some of the small size, cleanness, and efficiency of the code in an effort for semi cross-platform compatibility?

With Carl and Dan on board??? Do you think I have iron underpants on? They'd spank the hell out of me.

We intend to develop the best platform out there, and if we have to be off the mainstream, then so be it. We can't expect ppl to come to us unless we present a compelling reason for them to do so. We may not be able to get the name Amiga, but elegance through simplicity will always be our motto.

Excellent name btw :) Perhaps it would be safer to acronymise it as 'Ami Qnx United Architecture', unless Gateway were willing to sell the Amiga name (very doubtful).

Maybe you now see why we chose the name Amino - and its the building block of life as well. Who could want more? AmIRC doesn't even have to change its name ;-)

Are there any Amiga patents/traits that are essential in the building of this new platform?

just the desire to do the best, and have fun, irrespective of the sneers of others.

I think we've all had years of practice at that.

How much do you estimate the cost to design, produce and market AQUA?

We have a very specific set of plans both for the common market, and for dynamic extra-market activity. The innovative nature of both our plans, and the unique nature of the community itself makes it difficult to honestly answer that question. The standard answer is that it costs $20 million to establish a brand-name. We intend to let our products establish that brand-name, and the $20 million would be better spent researching and developing those products. Still, expect some fun - Bill already wants to bungie jump off the Space Needle dressed as a mermaid (although strangely enough, that was before we coined the term AQUA?)

Bill. Seek help immediatly... it has to be a naked bungee jump a-la 'Man From Atlantis' :)

The big question: Timeline to market? When could we buy it, and what competition do you envision?

The existing community and market needs to be stabilised and quickly. The second wave product line will be a good solid foundation for our future. By simplifing, concentrating on maybe a single graphics and sound solution, and going for the base functionality, we believe we can get product out within 6 months. It will easily be performance competitive with the competition (we do have QNX after all), and point the way to where we want to go once we have stopped the rot and began the climb back to the top. Most important is to stop the great developers and users from slipping away. There are as much our partners as are the investors and the companies. Competition wise, I don't see any. Sounds cheesy, but you have to ask yourself, what are we building. We are building a community and a platform that follows a philosophy. We won't take the cheap, easy or profitable way out if it can be done better. There aren't any competitors that I know of who take that approach or who target ppl who think like that. We win the loyalty of the community because we provide a better product, a better experience.

Finally, common sense meets technological prowess, and the will to make it real.

Are you going to produce a website now, or only when the plans are finalised and backing has been procured?

Once the money is in the account ;-) We don't want to do another iWin, or AInc, mouthing off only to disappoint a few months later. We will be in constant contact with many ppl, and we hope they will spread the word, or at least the news.

Will it be possible for people (like me) to buy shares in AQUA, and put a little money into something we believe in?

That is one of the key points of our company, Amino - I can't speak for the others, but it is a great way to raise capital, show your commitment to the community and protect the future. AQUA is the architecture, remember and it belongs to no single entity.

As you said on the Team AMIGA mailing list, AQUA is a great marketing name. I can envisage a whole range of different AQUA's ....AQUA Barracuda; AQUA Shark; AQUA Dolphin (also friendly and intelligent) etc etc, possibly even AQUA Storm? :) The designs could afford to be a bit wild and colourful too :)

We are going to insist on it - we dare to be different because we can be, and because it is demanded.

...need an Australian in your team? I promise I won't shag your sheep (much) :)

We want to be part of a much bigger team, the community itself... but we have to be honest and you have already failed that... an Australian who won't shag sheep much... pah, next you'll be telling me the Welsh wear wellies because it rains a lot ;-) stay in touch.

Well, gotta leave some sheep for you to shag on the edge of cliffs (they push back harder) :) I'm more 'into' rubber chickens, myself. Easy to turn inside out for cleaning, too :)

Thanks Fleecy. Good luck BTW.

Interview by Gary Storm.

CDROM Explained

Access to a huge range of software and resources has never been eaiser or cheaper! Robert Williams shows you how to add a CDROM to your Amiga.

A wealth of useful programs and files are available on CDROMs like these!

Why Add A CD-ROM Drive?

It's hard to get away from the CDROM these days, they're stuck on the front of virtually every computer magazine and being stuffed through our doors with junk mail. Why are CD-ROMs so popular, well simply they provide an inexpensive way of distributing a large amount of data. Even though we were a bit slow off the mark taking up CD-ROM in the Amiga world now most modern software is distributed on the silver disc and huge collections of software are available in the form of magazine cover discs and collections like Aminet.

So if you haven't got a CD-ROM drive it's a pretty essential purchase and this feature will guide you in buying and installing one. If you already have a CD-ROM we hope you'll find out a bit more about how it works with the Amiga's OS and there are also some suggestions of free and shareware software that will help you get more from your drive.

What You Need

A CD-ROM drive
A suitable interface
A CD File system

IDE

IDE CD-ROM drives are very widely available at low cost because they are the most popular standard in the PC world. IDE CD-ROMs use an extension to the IDE standard called ATAPI, this extension is also used by other IDE devices such as ZIP drives. Amiga

A1200s and A4000s come with an IDE interface built in however the drivers for this interface which reside in the Kickstart ROM were designed so long ago they do not support ATAPI devices. This means you cannot use a CD-ROM with the built-in interface with simply a CD file system (as you can with SCSI). Several patch programs are available which add ATAPI support to the Amiga's IDE drivers these include IDE Fix and EIDE99.

Another solution to the ATAPI support problem is to buy OS 3.5 which comes with a new version of the IDE driver software which does support ATAPI, it also includes a good CD filesystem.

You can buy pretty much any ATAPI compatible IDE CD-ROM and it will work on your Amiga, even the latest 40 speed drives are commonly available for less than 40 pounds as an internal unit. When shopping for drives beware that many older CD-ROM drives for PCs did not follow the ATAPI standard and required a custom interface card which are not available for the Amiga (one exception to this is the tandem card which worked with Mitsumi custom CD-ROMs). Unfortunately most of these drives use the same 40 pin connector as genuine ATAPI drives and can damage your IDE interface if you plug them in so shop with care. As a rule if you stick to drives of 8 speed or faster you'll find they are ATAPI compliant, if you're unsure confirm the spec of the drive with the manufacturer (most have excellent technical references on their web site) before you try and use it.

You can connect two IDE devices to the A1200 or A4000's built in IDE port using an IDE cable with suitable connectors. because the A1200 was designed with a 2.5" IDE hard drive in mind you will need a special cable which converts from the 44way connector to the 40way connector on the CD-ROM and has the correct connector for your hard disk. These cables have to be hand made so they tend to be quite expensive (£10 - £15). For a little more you can buy a four way IDE interface which makes connecting the devices easier, allows you to use up to four IDE devices and often includes IDEFix or EIDE'99 which you'd have to buy separately otherwise.

Whichever way you choose to go you need to set up the CD-ROM and hard disk correctly. If you have them both plugged on to the same IDE cable you need to set one as master and the other as slave this is achieved by setting jumpers on the device. If you had the hard disk attached before it is probably set to master so simply set the CD-ROM to slave and plug it in. If you have a four way IDE interface you will have two IDE connectors (often called channels) and you can connect two drives to each one, one master and one slave. If you have one device on each channel set them both to master.

SCSI

If you have a SCSI (often pronounced scuzzy) interface for your Amiga then fitting a CD-ROM drive is quite simple. Almost all Amiga SCSI interfaces will work with CD-ROMs, you're only likely to run into problems with really old (pre 1990) ones. If your Amiga is in a case with 5.25" drive bays you can fit a SCSI

CD drive internally where they usually connect via a 50 way IDC connector on a ribbon cable. External models are also available although these are usually simply an internal drive in a powered case. External drives can be connected with a variety of different cabling depending on the external connectors supplied on both the device and your SCSI interface. However as long as you buy a cable intended for SCSI with the correct connectors on each end everything should work with no problems. Any type of SCSI CD-ROM should work.

Setting up the SCSI Bus

Up to seven devices can be connected to a SCSI controller with each device daisy chained to the next. Each device has a unique device number from 0 to 7 (the controller is usually unit 7) the unit number is usually set by jumpers or a selector on the back of the device. The chain must go directly from one device to the next, therefore it will only have two ends. Both physical ends of the chain must be terminated, this uses a resistor pack to stop signals being reflected back along the chain. Termination can be accomplished in two ways, the last device in the chain can have it's built-in termination switched on (if it has it) or a separate terminator can be plugged into the last connector.

Most SCSI controllers have termination built in so as long as you make the controller one end of the chain you only

need to terminate the last device. Most Zorro SCSI cards designed for big box Amigas have an internal and external SCSI connector. If you connect devices internally and externally this means the controller is in the middle of the chain and thus should not be terminated. Some cards have a jumper to disable termination but with others the only alternative is to physically remove the terminating resistors.

So to put it simply when adding your CD-ROM (or any device) to the SCSI bus:

Ensure it has a unique unit number (remember that the unit number DOES NOT have anything to do with physical position in the chain or termination).

Ensure that both PHYSICAL ends of your chain are terminated and nothing else.

Audio

If you want to use your CD-ROM to play standard audio CDs or use games which play their music from CD-ROM (most CD releases do this) then you will need to connect the audio output of your CD-ROM to some speakers. Most people will also want to be able to hear their Amiga audio at the same time, which causes a problem. To further add to the problem the output from the CD-ROM and that from the Amiga are at different levels so you need a proper mixer, simply combining the signals is bound to

drown something out. Most CD-ROMs have a headphone output on the front that you can use to listen to CDs but of course that won't be mixed with the Amiga audio and is a bit untidy. Usually there is also a connection on the back of the CD-ROM which is designed to connect to a mixer inside the computer, unfortunately the A3000T and the A4000(T) are the only Amigas ever to have a mixer on the motherboard. If you have another machine several options are open to you. A small external mixer can be used with the Amiga and CD-ROM output, this works well and means the level of each output is adjustable but can be a bit untidy. Another option is to build your own mixer and mount it internally, there was an excellent feature by Simon Goodwin in issue 126 of Amiga Format on various types of DIY mixer. CD-ROM audio leads often come with CD-ROM drives and if not are available from most PC retailers.

CD File Systems

Once you have your CD-ROM attached to your Amiga you then need the software that lets the Amiga understand the data stored on the CD-ROM. This software is called a file system. There are several CD file systems available for the Amiga. One of the most popular is AmiCDFS, which is available on Aminet, this works with almost all CD-ROMs and is unrestricted shareware. AsimCDFS is a commercial package that comes with loads of extras and a preferences pro-

More Haste Less Speed?

The first CD-ROM drives transferred data at the same speed as audio CDs, 150kb per second. As technology improved faster drives were developed with their speed commonly expressed as how many times faster than an audio CD they are. For example a 12X drive can transfer data at 1800kb per second. As speeds increased beyond about 12X several problems caused by spinning the compact disc far faster than was originally intended were encountered.

Audio CD players and slower CD-ROM drives spin the CD at different speeds depending on what part is being read to keep the data transfer rate constant at all times. This means the disc has to be spun faster when the laser is reading the centre of the disc than when it is reading the outside, this type of drive is

called Constant Linear Velocity or CLV for short. Some CDs are not stable when spun at over about 12X when reading the inside of the disc so to enable drives to go faster a new type of drive was invented. Constant Angular Velocity drives spin the CD at a constant speed accepting that data will be read at different speeds on different parts of the disc. Most modern drives are CAV and this fact is often indicated by the word "max" after the speed. 32Xmax for example indicates that 32X is the maximum that will be achieved on the very outside of the disc. Other manufacturers are clearer and label their CAV drives with the minimum and maximum speeds possible for example 14/32.

High speed drives also have a problem in that they have to spin the disc up to

speed before it can be accessed which slows response time in interactive operations like looking through directories on Workbench. Fast drives also often suffer from excess noise and vibration. To avoid wear and minimise noise many drives exacerbate the spin-up problem by stopping the CD after a few moments of inactivity so it has to be spun up again on the next access. If your main use for a CD-ROM is to install programs, watch animations and listen to music, all activities where the CD is in constant use, you'll find a faster drive will be a real boon as data will be transferred faster. If you're more likely to be exploring magazine cover CDs and Aminet discs you may well find a slower drive is actually much easier to live with.

gram. Other options are CacheCDFS which comes with IDEFix and AllegroCDFS that comes with EIDE'99. All the above are very good and work well. As a long term user I'd happily recommend AmiCDFS unless you get one of the others with your IDE interface or particularly need to read Windows 95 CDs which are in the Joliett format that AmiCDFS does not support but the other three do.

CDs are not formatted with the same filesystem as hard drives and floppy disks, in fact there are several CD formats commonly used. Most computers including the Amiga, PCs and Unix machines use the standard ISO9660 format which means a CD-ROM from any of these machines should be readable on any of the others. Macs use a format called HFS which is the same as their hard disks and floppies but can also read 9660 discs if set up to do so. The ISO9660 format is fairly restrictive, for example it only allows PC style eight character filenames. For machines which allow longer filenames (Amigas, Unix etc.) a set of extensions to the ISO9660 standard were defined called the Rockridge extensions. There is an Amiga specific portion of these extensions which allow Amiga protection bits and file comments to be preserved on a CD, all the above Amiga CDFSs support these extensions.

.device ?

Got a SCSI or IDE controller but you're not sure what its device name is? Here's a list of the more common ones:

A1200 and 4000 IDE   scsi.device
A3000 SCSI   scsi.device
A4000T SCSI   2nd.scsi.device
Most GVP   gvpscsi.device
GuruROM   omniscsi.device
Blizzard 12x0 SCSI 1230scsi.device
CyberStorm MkI and 2 SCSI Module
                                       cybscsi.device
CyberStorm MkIII and PPC
                                       cybppc.device
Blizzard PPC   blizzppc.device
bsc Oktagon 2008   oktagon.device
HiSoft Squirrel   squirrelscsi.device

If your controller isn't on this list and you don't have any documentation a system information program like Scout or XOpa will list all the devices on your system, with a bit of luck you'll be able to see the one which relates to you controller.

Setting up the File System

Most CD File systems, with the notable exception of AmiCDFS, come with an installer to help set up your CD-ROM, this is included during the installation of IDEFix and EIDE'99 too. However this section explains what's going on during the installation and should help you answer any awkward questions the installer asks you.

CD file systems usually consist of two parts, the file system itself which resides in the L directory and a DOSDriver which is normally called CD0 (if you want you can name it anything you like and if you had more than one CD-ROM you could have CD1, CD2 etc.). There may also be other support files that need to be copied to the system directories. After the support files have been copied it's safest to place the DOSDriver in the Storage/DOSDrivers directory so it will not be mounted at boot up until you're happy everything is working correctly. Then you need to configure the CDFS to use the correct device and unit number for your CD-ROM. This is done by editing the DOSDriver. Some DOSDrivers have the device and unit defined as tooltypes. To check this, click once on the DOSDriver icon then choose Information from the Workbench Icons menu. In the information window look for the following lines in the tooltypes section:

```
DEVICE=
UNIT=
```

If they are present simply click on each one and edit the tooltype to reflect your set up then click save. For example if you had a CD-ROM set as unit 4 on a GVP SCSI controller you might set the tool types to:

```
DEVICE=gvpscsi.device
UNIT=4
```

If you're using an ATAPI CD-ROM check the documents that came with your ATAPI driver (IDEFix, EIDE'99 etc.) to find the correct device name and unit number to use.

If you're not sure of the device name for your controller take a look at its documentation, we also have a few of the common controllers listed in the ".device?" box.
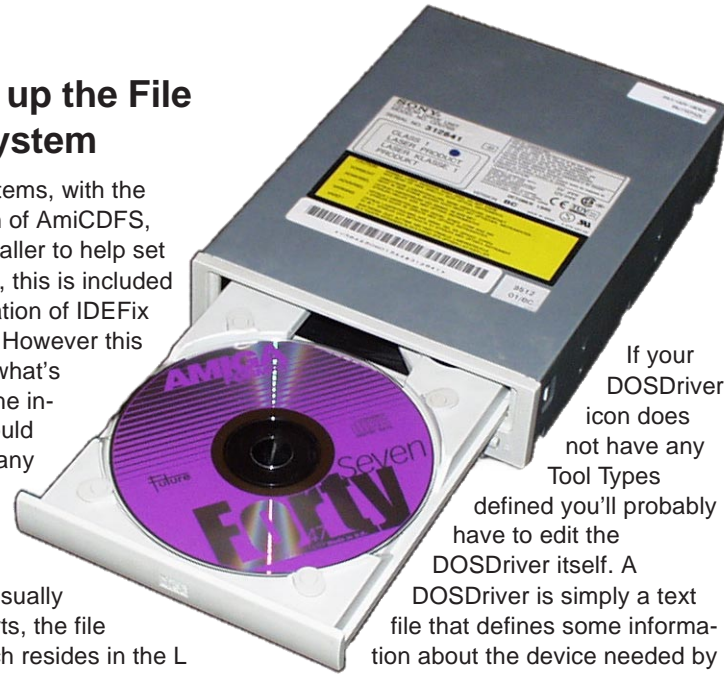
If your DOSDriver icon does not have any Tool Types defined you'll probably have to edit the DOSDriver itself. A DOSDriver is simply a text file that defines some information about the device needed by the file system so it can be easily edited. Assuming your DOSDriver is called CD0 choose Execute Command from the Workbench menu and enter the following command:

```
ed sys:Storage/DOSDrivers/CD0
```

Press enter and you should be presented with the DOSDriver loaded into an editor. Near the top of the file you should see two lines looking something like this:

```
DEVICE = scsi.device
UNIT = 3
```

Again simply change them to suit your set up and save the file using the Project/Save menu item.

Once you've done this you should be able to double click on the DOSDriver for your CD-ROM to mount the drive. Now insert a disc and in a few moments an icon should appear on your Workbench. You can then use the CD-ROM just as you would any other disc, except of course standard CD-ROMs are read-only... you can't save anything on to them. When you're happy the CD-ROM is working use Workbench to move the DOSDriver icon from the Storage/DOSDrivers drawer into the Devs/DOSDrivers drawer, your CDROM will now be available every time you boot. If you want to use the CD-ROM from the shell you can refer to it by the name of the disc you've inserted or by the name of the DOSDriver, for example CD0:.

CDROM Utilities

O nce you've got your CDROM up and running there are a whole host of utilities available which you can use to deal with the huge amount of data found on the discs and to help you control the drive. Most of the ones mentioned here are available ofrom Aminet either on the Internet or from the CDROMs (of course)!

Picture Cataloguing

Many CD-ROMs are available with a wealth of images of all kinds from mono clipart to 24bit photos. For this type of disc a picture cataloguing program allows you to search through a thumbnail index of the images on a particular CD-ROM without even having the disc in the drive. Once you've found the image you want it can tell you exactly where it is.

PhotoAlbum - gfx/misc

Extremely fast shareware picture cataloguer, effortlessly handles CD-ROMs with thousands of images and saves catalogues of a reasonable size. Includes functions to load images into image processors. Optimised for Amigas with graphics cards. Reviewed in Clubbed Issue 2.

Collector - gfx/misc

This cataloguer displays better than PhotoAlbum on AGA Amigas although it generates thumbnails more slowly. Reviewed in Clubbed Issue 1.

Drive Cataloguing

These programs will generate an index of every file on a CD (or indeed any disk) and allow you to quickly search for files without putting each disc in the drive.

CDCat - disk/cdrom

This MUI program is very attractive and straight forward to use. It creates catalogues of even large CDs very quickly and searching through several disks was virtually instant on my '060. Once you've found the files you're looking for CDCat even has a simple file manager built-in where you can de-
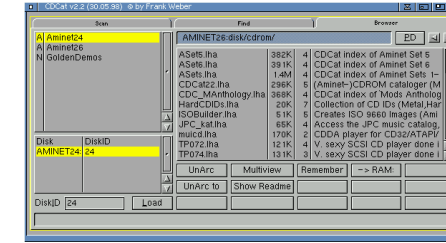
CDCat uses a simple MUI interface.

Audio Players

All CD-ROM drives that I'm aware of allow you to play audio CDs on your computer however you need a utility to control the play back. These range from the very simple to complex programs with more features than your stereo! There are absolutely loads on Aminet but here are a few of our favourites:

Groovy Player - disk/cdrom

This neat player is now freeware, it has an attractive front end that looks like a Hifi component. Supports all the normal options like random play, program play and intro scan. You can also name each of your CDs and all the tracks then Groovy will recognise the CD when you insert it.

Plugged - disk/cdrom

My personal favourite CD player, this shareware program is now sadly unsupported. Plugged lets you define play lists for each of your CDs then happily play just the tracks you want in the order you choose when you insert the CD.

ACDP - disk/cdrom

This player has similar functionality to Groovy player but uses a standard GadTools interface if you prefer that over Groovy's custom look.

Drive Control Utilities

Ejectors

There are a number of utilities on Aminet which allow you to eject the CD-ROM from your Amiga. Two good ones are **EjectCD (disk/cdrom)** which opens a small window with a button to eject the CD and **dbEject** (disk/misc) which is a shell command that can be called from scripts, Directory Opus etc.

Groovy Player is well... groovy!

PlextorControl - disk/cdrom

This useful command line utility allows you to set some of the advanced options available with the excellent SCSI CD-ROMs made by Plextor. Options include changing the spin down delay for faster browsing of CD-ROMs and options to slow down the drive on damaged discs.

SSD2 - disk/cdrom

This utility stops Toshiba SCSI CD-ROMs spinning down so quickly when they're not in use which is very annoying when you're browsing directories.

Audio Extraction

It can often be useful to extract audio from a CD onto your hard drive, once there you can use it as a sample in music programs, encode it into an MPEG audio file or even burn it onto a compilation CD if you have a CD writer. Most SCSI CD-ROM drives and some IDE ones are able to transfer audio data across the bus rather than just play audio CDs. Depending on the drive you may be able to extract the audio at greater than the speed of a standard CD but it usually does not reach the full speed of the drive.

MakeCD - http://makecd.core.de

Can legally be used for to extract audio without registering and supports a wide range of drives, the interface is complex if you just want it for extraction though.

CDDA - disk/cdrom

A small command line program which has worked well for me but is difficult to use. A number of extra GUIs are available on Aminet.

OptyCDPlayer - disk/cdrom

A MUI based Audio CD player with an extraction option. I couldn't get it to work on my drive but if it works with yours it has a much easier interface than CDDA.

Grabator - disk/cdrom

A shell based utility specially designed to extract perfect audio from scratched or damaged CDs, it may also improve grabs from CD-ROMs with poor audio extraction quality. Optimised for quality rather than speed.

Something Fishy

Reviews are very subjective, what one reviewer may love, another hates. Such is life. So we decided to have a general score, which the reader can take into account along with the text.

So we invented the fish... it's easy to work out which we feel is a better product... the more bones that show, the smellier the fish :). We only award our top Caviar rating to products that are practically perfect.

Caviar

The best so far! We can hardly pick anything out of it, not even boogers. Rarer than Nessie.

tasty

This product is definitely worth buying but, like most things, still has room for improvement.

FISH fingers

Average, neither too good nor too bad — it works but there are areas which need major improvement or are way behind competing products.

SMELLY

Crap, but hopefully getting better in future versions (if there are any).

ROTTEN

Disgusting, multicolour yawn inducing abomination that insults the Amiga.

Photogenics 4

After a rocky start with the buggy 4.0 version Photogenics 4 is ready to take on the world. Robert Williams and Mick Sutton find out

Photogenics has always been unlike any other graphics package on the Amiga (or in fact any platform that I'm aware of), with its unique paint layer enabling you to spray on and off a multitude of effects. Then you experiment with the effect applied and its settings all without touching the original image until you were completely happy. Photogenics was originally designed and written by Paul Nolan when he was just 16, an amazing achievement. The package was then published by Almathera and reached version 2 when they went out of business. Paul then took the package on again and started writing a new version from scratch, after more than two years of development Photogenics 4 was born.

The two version number jump is a sign that this is no ordinary upgrade, in fact Photogenics 4 is a completely new program sharing only some concepts from version 2. Not only is the user interface quite different but major new features have been added. In this review we are going to look at Pgs 4 as a completely new program as much as possible.

What You Get

The Photogenics 4 packaging is minimalist however as it is supplied on CD with on-line documentation there really is no need for more than the slim plastic case in which the CD is supplied. Photogenics is installed by dragging its drawer from the CD onto your hard drive, no installer is required. When Photogenics 4 is first run it opens its interface on the Workbench screen with the preferences window open on the Screenmode page for you to choose a screenmode. The following types of display are supported:

16 Grey scales on ECS machines. 256 Greyscales, 256 colours (dithered), or HAM 8 on AGA machines. 16 or 24bit CyberGraphX screens for those lucky enough to own a CgX or Picasso 96 supported graphics card.

Initially the interface consists of a toolbar along the top of the screen and an Options window down the left-hand side. The toolbar has buttons for common options such as loading and saving along with drawing tools and a drop down list of the various paint modes (image processing effects) you can apply. The Options window consists of five pages each containing some tools or settings. This area of the program is completely configurable, you can choose which options appear on which page of the window and open new options windows to which you can add the options of your choice. For example if you prefer having the colour palette available all the time you can simply drag it off the initial options window and it will automatically make a new window so you can place it where you like on screen. The only limitation I could find with options windows is that they are designed for vertical orientation, although you can stretch the window horizontally the contents remain in a narrow column.
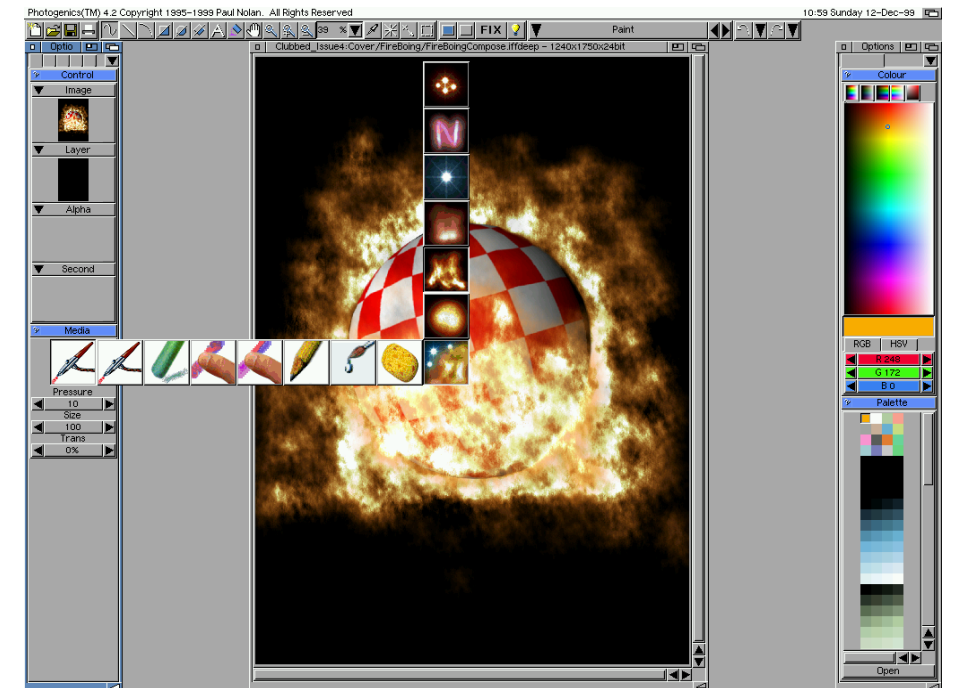
Painting

In Photogenics when you paint the effect is applied to a paint layer (more about layers later). You can paint on the layer with a variety of tools including free hand, circle, rectangle, polygon etc. Each of these tools can be used with a choice of brush styles such as air brush, water colour or sponge. The brush style affects what is laid down on your paint layer. You can alter the size and pressure of the brush to get just the effect you're looking for and there is also a transparency setting which allows the image to show through what you've painted. Because you are not painting on the image itself but the paint layer you can alter what you've painted to your hearts content without actually changing the image. At any time you can "spray off" what you've painted by painting over it with the right mouse button rather than the left, correcting mistakes is very easy. When you're happy with the effect you've achieved you simply fix the changes which actually alters the image and clears the paint layer ready for a different paint mode or colour to be applied.

If you've got the gist of how Photogenics works from the above (and it's hard to describe in words believe me) you're probably thinking it sounds pretty impressive and flexible, however there is another trick up its sleeve. You can not only paint on colours but also special effects too. Because they can be painted on these effects are referred to a "Paint Modes". There is a wide range to choose from and all of them can be simply painted on to the areas you want to change using any of the tools and brush styles. As you can change the colour of what you've painted you can simply choose a different paint mode and it will be applied to the areas you've painted over. Altering any options the paint mode has will instantly show you the results too. The options for the current paint mode are displayed in the options window so you don't have to continually open and close requesters to experiment with the options. As all effects are paint modes you can use the brush settings and transparency options to get subtle results.

Users of Photogenics 1 and 2 will recognise this description from the older versions. In Photogenics 4 this method of working is called experiment mode and as the name implies makes experimenting with effects extremely easy. However if you know what you want to achieve having to click Fix every time you're happy with a change can be a bit annoying. In this case you can now turn experiment mode off, Photogenics will then fix the changes you made as soon as you change the colour or paint mode, this makes the painting process much more natural. Even when in experiment mode your progress is hardly interrupted as fixing even large images is now almost instant (it could take nearly a minute in Photogenics 2).

Along with the various brush types there are also smear and smudge functions which blend the existing image together. Unlike the previous versions of Photogenics these modes can now be rubbed off with the right mouse button making them far more friendly to use. These two functions are very useful for blending changes into an existing picture and for changing even simple effects into beautiful flowing works of art, anyone who has seen Paul Nolan demonstrate Photogenics will know what I mean. The smear tool can even be used to achieve Goo type effects by stretching features of an image. To use the smear tool smoothly, especially with larger brush sizes, you'll need a high spec Amiga however as it is very CPU intensive.

Layers

Photogenics 4 allows you to add multiple layers to your image, this makes the existing paint layer much more powerful as you can now have several active paint layers allowing you to experiment easily with combinations of effects. Each paint layer can have its own paint mode, tool, brush, and transparency, not to mention an individual alpha channel and secondary image. Layers are stacked one above the other and there are commands to alter the order of the layers.
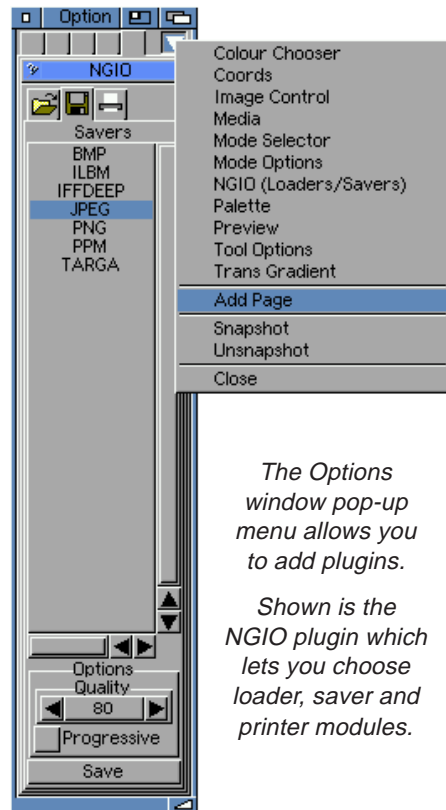
Using the rub-through paint mode you can use layers to compose several images together. You simply make a layer for each image and set the secondary image for each layer to the one you want to compose. Then the rub through paint mode will bring the secondary image onto the layer. Because layers can be moved and their position in the stack changed you can simply organise your composition without committing to any changes until you are completely happy.

One really annoying aspect of Photogenics' layers implementation that is that a layered image cannot be saved with the layers intact. This means you have to finish your masterpiece in one session as it will be saved as a standard flat image.

For a hands on explanation of layers take a look at our tutorial on page 33.

Undo

On top of the excellent paint layer technology Photogenics also has probably the most powerful Undo system in any Amiga graphics program. You can undo operations even if the results have been fixed to a limit set in the preferences. The limit is set in the number of complete image undos to store. If you have the undo limit set to three you could undo three complete image effects or a huge number of individual brush strokes. On the tool bar there are Undo and Redo buttons which allow you to go back and forward through what is in

The paint-on pyrotechnic effects are stunning. In this grab you can also see the flexible palette-based interface.

The Options window pop-up menu allows you to add plugins.

Shown is the NGIO plugin which lets you choose loader, saver and printer modules.

effect a history of operations performed on your image. Even more powerfully each button has a drop-down menu which shows a list of operations performed and allows you to Undo back to a specific operation with one click. Undoing multiple operations can be a bit slow, you can actually see Photogenics undo your work in reverse order! The speed is a small price to pay for such a powerful feature.

Image Manipulation

Menu options are provided to rotate or scale your image, both these tools offer the option to also affect any layers and or alpha channels so you can continue

Stability

As tends to be the case with brand new software the first couple of releases of Photogenics 4 were somewhat buggy and caused problems on many people's machines. My experience with 4.2 has been pretty positive, it's not perfect and I have had the odd crash but it's perfectly acceptable. However Mick Sutton and Gary Storm who run the program on BlizzardPPC BVisionPPC combos have found it less reliable than I do, currently we haven't diagnosed what is causing the problem.

painting where you left off after using them. Cropping is implemented as a tool bar button, when selected you simply draw a box around the area you want to keep, an options panel appears which allows you to enter the exact position of the box manually.

Pyrotechnics

Some of the most immediately impressive features of Photogenics 4 are the paint on pyrotechnics. These brush styles emulate different types of fire, neon lights and stars. You simply use these brush types as you would any other (although they work best on a dark background). Creating anything from fire balls to starry skies is easy. Most work best if you apply them in several passes each with a slightly different colour. The fire effects in particular look brilliant if you smear them a little afterwards to give a heat haze effect.

Paint Modes

In Photogenics version 4.2 there are about 50 different paint modes which apply a wide variety of effects to your image. All of them can be applied to the areas of the paint layer you want using the painting toolsand most have a set of options to alter their effect. Some of the more interesting ones are:

Adjust

The Adjust paint mode groups a number of common colour adjustments making it ideal for photo and scan retouching. You can alter the brightness, contrast and gamma as well as changing the intensity of the RGB colour channels individually. As with all Photogenics paint modes you can apply it to only certain areas of the image with the airbrush to correct small imperfections or to the entire image to deal with larger problems.

Bizarre Pixelise

This paint mode breaks the image up into user definable squares then distorts the image in each one, the final effect looks a bit like frosted glass and is really stunning.

Blurs

Although blur is a common function in most image processors Photogenics has several different types to achieve different effects. The basic blur effect blurs the image evenly all over, motion blur blurs in a particular direction giving an illusion of speed, pan blur smears the image slightly differently to motion blur,

as if the "camera" was moving instead of the subject of the image. Probably them most interesting is radial blur, this blurs radially outwards from a central point giving the feeling that the subject is rushing towards you.

Burn Through

Reveals the secondary image through the main image where you paint, giving the edge a singed look as if it was burnt.

Cloner

Allows you to seamlessly clone part of the image elsewhere by simply setting the offset and painting on the copy. This is useful for covering up unwanted objects and blemishes in photos and producing fake squadrons of aircraft or families of children :).

RubThrough

Like Burn Through this effect reveals the secondary image but in this case with no special effect at the edge. With multiple layers you can use Rub Through to compose several images over the back ground with each image on a separate paint layer.

File Format Support

Version 4 supports a reasonable range of file formats such as JPEG and IFFs for both loading and saving however there are some notable exceptions. GIF support is missing (this is due to the licensing issues with Unisys) so if you want to create transparent web graphics
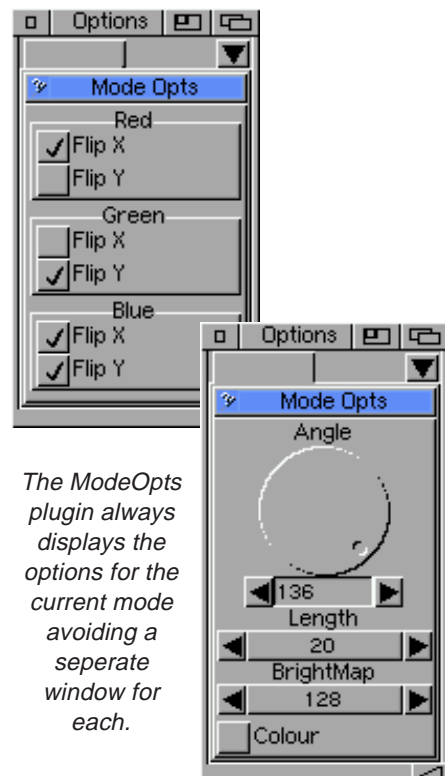
The ModeOpts plugin always displays the options for the current mode avoiding a seperate window for each.

you'll need to use an external package. There is also no PhotoCD support which seems odd as even with the rise of digital cameras this is still a common format for getting your own photos onto a computer.

Documentation

The on-line documentation is in HTML format so you can view it with any web browser and it can include images and formatting. Photogenics uses the useful openurl.library to launch your preferred browser from the help menu. The documentation is pretty comprehensive covering all the paint modes and tools along with the concepts behind Photogenics' operation. At the moment it only has one tutorial but Paul hopes to expand this section soon.
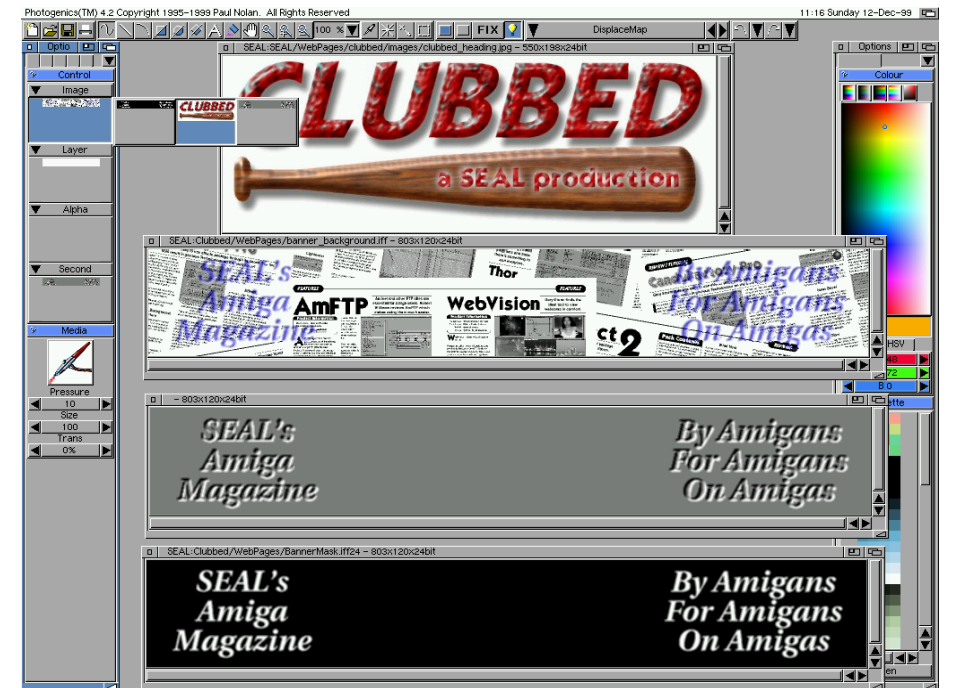
The Need for Speed

You need a high spec Amiga to use Photogenics 4 at its best, especially on large images. The real time nature of paint-on effects can make them pretty frustrating on a slow machine. Instead of getting a smooth curve from a sweeping mouse movement you get a series of straight lines for example. The speed of application depends on the complexity of the effect, the blurs which were some of the worst offenders in previous versions have been sped up dramatically in 4.2. As I mentioned earlier even on an '060 the smear tool can only be used smoothly at quite small brush sizes.

One boon on slow machines is that all the effects are interruptible. This means that as you see the paint mode being applied slowly to your image you can change its options or even select a different effect. Photogenics will immediately stop applying the old mode and start again with the new mode or settings. Another useful tip for painting on processor intensive effects on a slow

The layer system is excellent for compositions.

machine is to make sure experiment mode is on then paint over the area you want to affect using a fast paint mode like 'Paint'. You can then switch to the mode you want to apply once the area's covered, remember to Fix when you're happy.

One nice addition would be a progress bar for the current paint mode as occasionally it's hard to tell what's going on especially if the mode has a very subtle effect or it's applied to just part of the image. This would be particularly useful when layers are being used as the combination of several processor intensive paint modes can lead to really long processing times even on a fast Amiga.

As with any 24bit graphics program a graphics card makes the world of difference to Photogenics. Although it will work on AGA the dithered 256 colour or rather chunky HAM8 display loses a lot of detail from the image you're working on. These screen modes are also very slow due to chipset limitations no matter how fast your processor. Working on large images is quite memory intensive, Photogenics itself needs about 2Mb of RAM to load, plus what ever is required for its screen. Then each image you load needs about 3 times the size of its raw 24bit image data.

Conclusion

Photogenics 4 is a brilliant program, multiple layers are a perfect compliment to the paint layer concept in previous versions. This makes what was already

an excellent tool for experimentation even more flexible. It's important to remember that version 4 is a completely new program so it's not surprising that not every feature of Photogenics 2 has made it into the new version. That said it would be nice to have the wider file format support and AREXX scripting from the previous version. Because Photogenics has a different philosophy to other art programs (on the Amiga and other platforms) it does take a while to get to know it and appreciate the flexibility it offers. Once you have made it up the learning curve you will find Photogenics 4 gives you amazing freedom to experiment at an excellent price.

Version 4.3

Paul Nolan has recently released a public beta version of Photogenics 4.3, this is mainly a bug fix release but it does include a progress bar so you can see how slow operations are progressing and an effect preview which shows you the effect on a thumbnail of the image. The current beta is pretty unstable but when it is released 4.3 will effectively counter one of my few criticisms of Photogenics 4.

Results

Pros
Astounding paint-on effects
Amazingly flexible interface
Absolutely fab for experimenting

Cons
Can't save layers
No feedback on slow operations
No AREXX interface

tasty

ImageFX 4

The heavyweight of Amiga image processing gets another major upgrade, Robert Williams finds out what's new.

The announcement of ImageFX 4 was quite a surprise so soon after the release of 3.2 especially after the very long wait between 2.6 and 3.0. However the upgrade dropped through my door on the weekend of the WoA show so I've had a few of months to get my teeth into it.

Animated

The big new feature in ImageFX 4 is a built in animation system, previously you could only create animated effects using the two external batch processing engines supplied: AutoFX and IMP (ImageFX Multi Processor). The animation system is implemented by extending the existing layers system, instead of having a number of layers stacked one above the other an animation has a number of frames. You use the layer manager window to select frames in the animation, as you would select layers in a still image. As you can move layers in the stack you can move frames in the animation. Some extra VCR style play controls are included in the bottom of the layer manager window which enable you to play the animation directly in the preview window. While this system makes animation easy to use especially if you're already used to the layers system it has the negative effect of making layers and animation mutually exclusive, you cannot animate a layered image.

You can add animated effects to still images or load in a sequence of frames. The sequence can be either an animation in a variety of formats (including IFF and GIF anims) or a set of separate frames numbered sequentially. Once you have some frames to work on there

are basically three types of animated effect you can apply:

Hand Drawn

You can use any of ImageFX's tools to create an image on each frame, you can switch on the light table to see dimmed versions of the previous 3 frames to help place your new image correctly.

Animate Brush

Anyone who is familiar with DPaint's move option will recognise this method of animating. ImageFX lets you take a brush and specify its start and finish positions. The package then moves the brush frame by frame between the two positions. You can also make the brush rotate on any axis during the move.

Effect Over Time

The final option is to apply an ImageFX effect that changes the frames of the animation. This is achieved by using effect over time AREXX scripts which are executed for each frame of the animation you select. A reasonable variety of scripts are supplied and most of them pop up a window allowing you to alter the start and end parameters of the script. ImageFX has a huge library of effects and these take on a whole new dimension when animated. Some of the supplied scripts include, an animated lightning bolt, ripples, bubbles and many more. Creating your own scripts isn't too hard because you can record an effect being applied then compare the recorded script with an EOT one and add the missing details. One thing that I did find a little odd is that there are no scripts supplied that fade one image into another which I would have thought would be a popular option especially with videographers.

ImageFX 4's animation features are useful and make it much easier to produce effect over time animations that would previously have needed AutoFX. The brush move and onion skin animation styles are new and couldn't be easily achieved before. However it does seem to me that so much more could have been offered by allowing the layer and

animation systems to coexist. For example multiple objects (each on its own layer) could be simultaneously animated, animated layers could be faded in and out etc. etc.

New Effects

Three brand new effects are included with ImageFX 4. These effects are implemented as hooks which are loaded by choosing them from a file requester rather than a button in the main interface. This seems rather odd and makes the effects feel like "last minute" additions to the package which they clearly aren't. Here's a brief description of them:

Distorter

This effect allows you to distort your image by dragging its corners. When you select the effect a grid is drawn over the image and you place the four corners where you want them, the grid shows you what distortion will occur. When you click Okay the image is distorted into the shape. This effect can give you the exact result you need very quickly without fiddling for ages with the settings of the Complex Rotate effect. Distorter can also be used on a layer to overlay one image for another, you could use it to fit a new picture into a picture frame on an existing image.
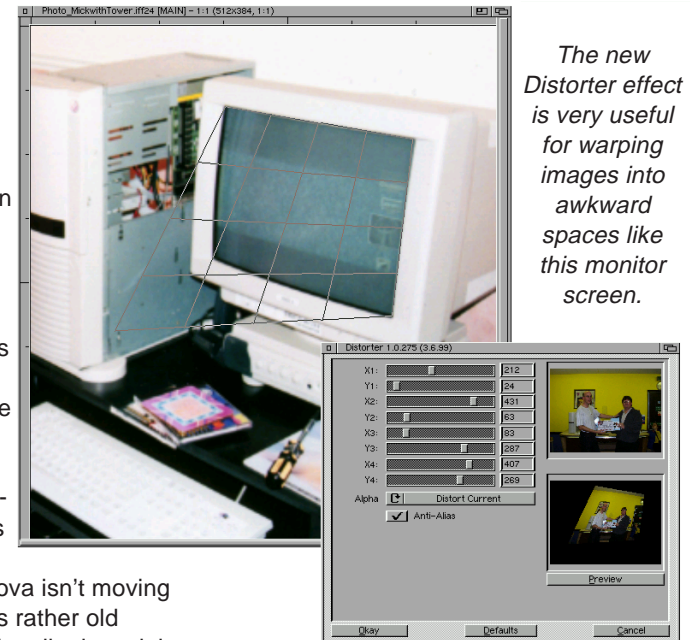
Blob

Does exactly what it says on the tin, creates a gooey, translucent blob of gunk over your image. In true ImageFX fashion there are a wide range of options, you can alter the colour, shape, size, position (you have to manually enter co-ordinates) and even texture of your blob. The effect supports animation so you can have the blob slide over your image leaving a slime trail (ugh!). Quite what you would use it for other than a bit of fun is somewhat debatable though.

Fireworks

A really nice effect that produces bursts of pixels much like an exploding rocket. This is a classic ImageFX effect with loads of parameters to set so you get just the result you want. Because you can also use your own brushes as well as individual pixels for the "particles" that make up the burst I'm sure this effect can be used to achieve all sorts of interesting results. Again this effect is ready for animation.

It's a pity to that the Blob effect and the new Move brush animation requester make you enter co-ordinates manually rather than clicking on the image to pick points. This is tricky to do and tends to end in trial and error or noting co-ordinates on scraps of paper. The previews of some effects are still inaccurate too making them worse than useless. These problems in brand new effects make me feel as if Nova isn't moving away from ImageFX's rather old fashioned and occasionally downright obstructive interface.

Stability

I'm very pleased to be able to report that the first version of ImageFX 4 has been very stable in the couple of months I've been using it. The same certainly could not be said for version 3.x which even in the last 3.2 version occasionally fell over on my machine. As I said in my review the problem seemed to be that not all the modules had been updated to cope with layers, this seems to have been done now and IFX is reliable again.

Other improvements include an updated Text module which works with PostScript fonts (although it seems rather picky on which ones work), has much better antialiasing and works properly with layers. The Lens Flare module has also been enhanced with some more light designs and extra options.

Documentation Again

When ImageFX 3 was only documented by a small addendum to the excellent ImageFX 2.0 manual. Unfortunately version 4 suffers the same fate. The addendum is sadly lacking in detail and while it covers all the new features there are no tutorials to help you use them. ImageFX is such a big complex program (some of the effects alone are as powerful as stand-alone programs) that much of its power will remain untapped without a good manual to take you by the hand. The 4.0 addendum covers all the changes (including the addition of layers and animation) from version 2.0 to 4.0 in 67 pages, the original manual was over 400 pages, I think that says it all.

The new Distorter effect is very useful for warping images into awkward spaces like this monitor screen.

Conclusion

Although the animation system isn't all I hoped it might be when version 4 was announced it is still a very useful tool especially if you're willing to learn how to make your own effect over time scripts. The new effects are pretty good and I'm pleased to see they have the array of options that ImageFX users are used to. The nicest thing of all for me is that ImageFX 4 seems to be back to the rock solid reliability of version 2.6 which seemed to elude even version 3.2. After the major 3.0 upgrade 4 seems pretty minor and many of the defects are still there, yet the upgrade fee is the same. For new users you get a tremendous amount for your money, now if they could just sort out that manual...

Image What?

ImageFX is probably the most comprehensive image processing program on the Amiga. It not only boasts painting tools and a wide range of effects most of which have a huge range of configuration options it also has the following "extras" included:

• An infinite number of layers for compositing effects.
• Scanner modules for Epson (parallel and SCSI) and HP (SCSI).
• A stand alone morphing package .
• Loaders and savers for more file formats than you can shake a stick at including Photoshop.
• Support for CyberGraphX and many older display boards.
• AutoFX and IMP batch processing engines.
• Optional PowerStation PowerPC modules (£75 extra).
• Full AREXX interface including macro recorder.

ImageFX doesn't have the same sort of easy usability as programs like Photogenics but once you master it there is a huge amount of power available.

OS3.5 Issues

There are a couple of problems with ImageFX running under OS3.5. Firstly the background images for both the screen and image windows are corrupted. This seems to be a datatypes problem as replacing the old datatypes solves it or you can rename the files Ghost.iff and BackDrop.iff this removes the backdrops completely. The other problem is that the Classact cycle gadgets used by ImageFX don't work under 3.5 with its new ClassAct-based Reaction GUI system. The solution to this problem is to add the tooltype CYCLE_GADGET=NORMAL to the ImageFX program icon which forces the program to use standard GadTools cycle gadgets.

Results

Pros
Easy to use animation features
Some very useful new effects
Layers now more stable and complete

Cons
Inadequate documentation
You cannot animate layers
Upgrade expensive for its features

tasty

Cam Control

S o you've bought yourself a fancy digital camera, now you will want to connect it to your Amiga right? Apart from Power Computing's camera software that is bundled with the Mustek cameras that they sell, I can think of only one commercial package that is available to the Amiga user, and that is Cam Control from Vesalia Computer.

Cam control provides drivers for a range of digital cameras from various manufacturers (see boxout for details). A separate driver programme is provided for each camera manufacturer, for example the Casio driver is called QVControl. All drivers use the same interface but include different options depending on the capabilities of the camera.

Installation

A standard installer is used to copy the correct driver for the camera you select onto your hard drive. Once the software is installed you can use a separate preferences program to set up the driver. The camera is connected via the serial port so the first thing that needs to be set up is the serial device driver and unit number. If you are using the standard serial port on your Amiga then you can leave these settings as default (serial.device unit 0) but you will want to change them if you have a high speed serial port (such as Port Junior). The default serial speed is 19,200bps which is pretty slow believe me, if you have a fast processor, graphics card or a fast serial port then this should be able to increase this to at least 57,600 (I have mine set to 115,200).

By default Cam Control runs on a Workbench screen, but you can choose its own public screen (a screen requester pops up) which is useful if you don't have a graphics card, but if you do, it supports up to 24bit screens. If you wish to run it on a public screen you can also choose which font for the screen... nice!

Usage

Once the Cam Control software is installed and set up, the next thing is to

You select pictures to download, print and delete using thumbnails

connect your camera to the serial port and switch on (in play mode) and run the software. A window opens showing five options Save film to disk, Save photo to disk, Show photo in camera, Print photo in camera and Delete photo in camera. Save film and save photo are pretty similar in operation, save film will save selected photos to your hard drive and name them by picture number as in the camera. Save photo will save the selected photos allowing you to name each one as it is saved. The default path for each of these options is set by the user in the preferences program.

Once you select your save option a second window opens which lets you select a range of photos and also gives you a preview of the current photo. An overview window can be opened to display thumbnails of all the photos in the camera, you can click on a thumbnail to select that photo, then you can set the orientation of the current photo and see the date and time it was taken. When you click on the OK button the range of photos you selected are downloaded from the camera with a progress bar indicating the total percentage done.

The show photos option allows you to view the selected pictures in a viewer of your choice (set in preferences) and

uses the same selection windows as the save options. Print photo in camera uses either Studio or Turboprint if you have them installed on your machine (it loads the images into Studio or Graphics Publisher), but unfortunately you can't print directly or withWorkbench drivers... shame! We (Robert Williams and I) had to edit the AREXX script to allow printing because it was set for the German version of Turboprint... Achtung!

The last option is to delete images from camera which does exactly what it says on the tin, but why the option would be used I don't know, as all the digital cameras that I have seen have 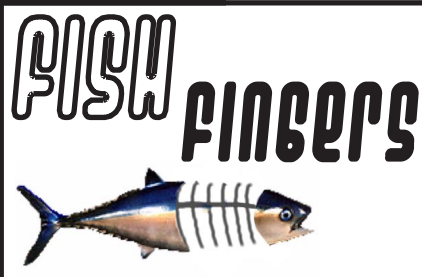this option on the camera! Images can also be loaded into applications that have AREXX support, such as Photogenics, Pagestream and Personal Paint.

Conclusion

Well it's the only commercial digital camera software available on the Amiga so it hasn't got much competition, and performs all the basic tasks you need well, but at £30 I would have expected to see more features such as taking photo's from the computer, direct printing support and an easier way to name the photo's from the preview window before they are downloaded from the camera. Having said that it does the job required of it rather well without any apparent problems and is pretty configurable to your requirements.

Mick Sutton

Results

FISH FINGERS

Camedia C1000L

Digital cameras are getting better and more affordable by the day. Mick Sutton looks at a beauty from Olympus.

W hen digital cameras appeared on the scene I have fancied one for myself, but the cameras were very expensive and the image quality not good enough in my opinion, but as with all technological products eventually prices tumble and the quality rises to a point where you think it's time to take the plunge.

As with most devices that you may want to use in conjunction with your Amiga you have to research which ones you can get drivers for, and digital cameras are no exception! So after reading through many reviews of digital cameras that could be used on the Amiga I decided to purchase the Olympus Camedia C1000L. Several factors helped me decide: image size 1024 x 768, renowned Olympus quality lens that offers 3 x optical zoom, overall build quality of the camera, and a recent price reduction bringing it down to £299.

If any of "Clubbed" readers read my column in the issue 3 then you will know the grief that I went through just to purchase the bloody thing once I had let it slip that I was going to use it with my Amiga , but that's another story...!

Hardware

The camera itself is rather unusual to look at compared to most other digital cameras which I have seen to date, looking more like a mini video camera than a stills camera, which I actually like the look and feel of.

As I mentioned before the camera has a 3x optical zoom (as opposed to digital zoom) and that equates to a 50-150mm lens on a traditional camera. There is a

1.8" LCD at the rear along with two rows of buttons to perform various functions. Some of these buttons are dual mode functions depending wether you are in record mode or playback mode, for example in play mode the top four buttons are Delete, Print, Slideshow and Thumbnail. The same four buttons in record mode are Self timer, Macro, Flash settings and Spot metering.

The camera also has another four buttons that are for Menu control, Fix

focus 2.5m, Fix focus 0.4m and an OK button that is used in conjunction with some of the others.

On top of the camera is a small LCD screen that confirms many settings or modes that you select and gives general information about battery condition, quality setting and available shots left on the Smartmedia card. Alongside the LCD there is a selector switch used to set Record or Play modes and a button in the middle to power on/off. Also mounted on top of the camera is the lens zoom control switch which operates pretty much like any other camera of any format, you just push it one way for wide angle, and the other way for telephoto. And finally in the middle of this control is

the take shot button (not shutter release as in most cameras) which when lightly pressed makes the camera auto focus on the object in the centre of the lens, and when fully pressed takes the shot.

The integral flash is rather cunningly hidden in the top part of the case, when you need to use it (an information window in the viewfinder lets you know when flash is needed) just flick the little release lever and up it pops... neat!

One aspect of this camera that drew me to it is that it is actually basically a digital SLR because it meters everything through the lens, and what you see through the viewfinder is what the camera actually sees, where as on many (nearly all) digital cameras with zoom facility the viewfinder is only an approximation of the final shot.

The camera takes four AA size cells which to be honest do not last long but rechargeable NiMH last better and are cheaper in the long run.

The camera is supplied with a 2 MB Smartmedia card that can be replaced at any time with a larger one (I have an 8 MB card) up to 8 MB, or 32 MB if the camera firmware is flash updated (via a PC only I'm afraid).

Finally on the far left hand side of the camera are the various ports such as power (adaptor not supplied), printer (Olympus make a special printer for this camera), and communication which connects to your computer's serial port.

Usage

The camera feels just right in your hands, the balance and where the buttons are located is just right. Switch

the camera on in record mode and you hear the lens motor move.

You are now ready to take a picture, just point the camera at the desired object, press the take shot button part way and allow the camera to auto focus (a green LED in the viewfinder confirms when focus is achieved). Then press the rest of the way to take the shot. You will notice that as soon as you take the shot a red LED on the back of the camera starts flashing (indicating that it is writing to the Smartmedia card) and the image is displayed on the colour LCD screen for about 5-6 seconds.

The quality of pictures depends upon a few things such as the resolution you picked from the menu (available choices are Low 640 x 480, High 1044 x 768 and Super which is 1024 x 768 but in a less compressed format), how good the lighting quality, and if you are in the correct mode for the type of situation you are in (ie macro, force flash for background lighting, spot metering etc).

Most of the time I have my Camedia set to Hi resolution mode which with my 8 MB Smartmedia card gives me about 40 shots.

I have found that the Camedia is at its best in well lit outdoor situations but is also good in less well lit conditions provided the flash is enabled. The only time I have had problems is when dark situations arise and the camera has problems auto focusing (it's auto focus system is not infra red... shame!) indicated by the green LED in the viewfinder flashing. Should this situation occur the Camedia just refuses to take the shot! But all is not lost as the camera has a two fixed focus buttons (2.5 M & 0.4 M) which can be used to force the camera to focus at their preset focal length, and hey presto you still have your shot only maybe not perfectly sharp.

As I have mentioned earlier the Camedia has a self timer (the camera does have a tripod mounting point), a macro mode for those close up arty shots and spot metering for those awkward shots (a black cat against a bright white background for example) and a flash function which is useful should you wish to force the camera to use the flash for fill in light or maybe set it to red eye reduction for portrait shots without the "Devils eyes" syndrome!

Once you have taken the pictures you will no doubt want to see them! So set

the camera to play mode and review them using either the slideshow function or select them individually from the main screen or you may overview them with the thumbnail option, and here's the beautiful part, if you think a picture is not up to your required standard (Crap!) then just delete the bugger and retake it!

Not forgetting of course the best part about digital cameras is that due to the fact no processing is required your pictures are totally private and anything goes (home photography has never been so much fun!), and also you can load them directly into the Amiga to view full screen at your leisure, or if you want print them onto photo paper at any size you want and as many copies as you want... brilliant!

My camera is used a lot for the photos on our (SEAL) website, and nearly all photos printed within the pages of "Clubbed" , so you can see for yourself how useful it can be to us as a user group, for example when Jim Collas came to England in April the pictures taken were on our website that night.

Of course the software that you get with the camera is no use on the Amiga but to my knowledge at least two software packages are available to you that are, these are the commercial Cam Control and the Freeware Camedia available on Aminet.

Conclusion

This camera offers very good digital images, is easy to use and at a price that is more comparable to lesser quality (640 X 480) cameras.

Results

Pros
Excelent picture quality
Large optical zoom
High build quality
Good battery life (on NiMH cells)

Cons
Difficulty focus locking in low-light conditions

Caviar

IBrowse
2.1

Robert Williams looks at the latest version of this popular browser. Colour Screenshot on the back cover...

IBrowse 2 must be one of the most anticipated Amiga programs of the year. With the Internet becoming a part of many people's everyday life a decent browser is becoming a requirement for a viable computing platform. Unfortunately as Internet standards (and proprietary systems) are developing it's hard for browser authors on a small platform like the Amiga to keep up. With support for Javascript and HTML 4 IBrowse 2 goes some way towards closing the gap between the Amiga and the standards commonly found on the Internet.

Java Script

Javascript is a browser scripting language (not to be confused with Java, Sun's cross platform programming language) which allows web pages to be much more interactive. Javascript is often used for trivial "eye candy" but is increasingly used to implement complex interfaces within web pages. Many web pages cannot be used unless your browser supports JavaScript which has shut IBrowse users out of an increasing number of sites. It is tough to get a reliable Javascript implementation as web authors tend to program so their sites-works in Internet Explorer or NetScape rather than following the specs.

Javascript 1.2 support is included in IBrowse 2.x which is the latest version however we found many of sites with JavaScript which either failed to work at all with IBrowse 2 or where only some elements worked. HiSoft seem dedicated to improving the JavaScript implementation and have asked that URLs which don't work are EMailed to them so we hope that the situation will gradually improve.

Printing

A major bugbear in previous versions of IBrowse was its very poor printing support. When you printed a page IBrowse
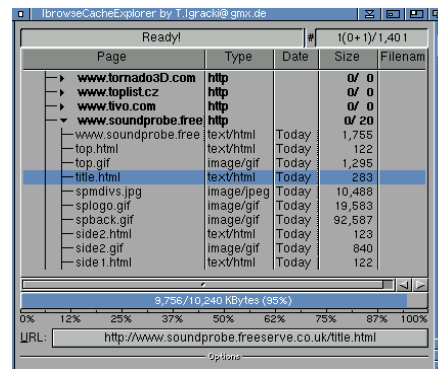
The new Cache Browser.

did little more than strip out the HTML tags and send the plain text to your printer. IBrowse 2 now has three printing options: text, graphical and PostScript. The text mode is still pretty rudimentary and prints using printer fonts, tables and lists are still not handled well (tables are admittedly hard to do). At the time of writing the graphical print option is disabled and will be enabled in a future release. However from the documentation it sounds like this will enable high quality printing on any printer using compugraphic fonts.

The jewel in the crown however is the PostScript option, to use this you'll need either a PostScript printer or a software PS interpreter such as GhostScript. PostScript printing prints the page with smooth scalable fonts and includes images and layout, the result looks really fantastic and is by far the best way to print web pages on the Amiga. Owners of TurboPrint 7 can use its GhostScript support to print webpages on any printer using its enhanced drivers. PostScript printing does currently have a couple of minor limitations; It only prints in black and white not colour and there is no option to scale wide pages to fit on the page.

Improved Browsing

IBrowse has always been able to open as many browser windows as you want however even a high resolution graphics card screen soon gets cluttered. In version 2 a new feature allows you to open several pages in the same window. Each page has a tab at the top of the

browsing area, you simply click the tab to see that page.

The useful context menus (which pop-up when you press the right mouse button over an object) are still available but you will be able to customise exactly what options you want to appear in each one (when the interface actually works!). Menu options can be IBrowse built-in commands or even AREXX commands for really complex customisation.

The main change you notice when browsing normally with IBrowse 2 is the great increase in speed. Pages with large tables now appear instantly when they have downloaded where there used to be several seconds delay (even on an '060), image decoding is also very noticeably faster.

Interface Improvements

Probably the major change to the IBrowse interface is the new preferences window. 1.22 has two preferences windows with tabs along the top which made it hard to find the option you were looking for. In 2.x all the preferences are in one MUI Prefs style window with a list of the available pages down the left hand side. There are now even more options than before, the most notable being URL preferences where you can set particular options for a particular website. For example you could choose to switch Javascript off for a particular site which uses it just to pop-up annoying advertising windows.

Many other more minor improvements have been made to the interface and in general IBrowse 2 is nicer to use than previous versions. A good example of this is the cache browser which now splits its list of documents held in the cache into sections, one for each site you've visited. This means that instead of being presented with a list of thousands of individual HTML files and images you can now see just the URLs of the websites you've visited. Double clicking on a URL opens out a list of all the files cached from that site.

another nice touch is the new customisable tool bar, you can decide which buttons will be on the toolbar and add new ones to execute a built-in function or an AREXX script. AREXX scripts can also be launched from fast link buttons.

Documentation

Appropriately on-line documentation is provided in the form of HTML pages,

however as these are an addendum to the printed 1.2 manual it's difficult to know where to look for answers, particularly if you're a new IBrowse user. The actual pages themselves are pretty sparse on information too with many one line descriptions of functions and not enough in-depth explanations or tutorials.

Bad Points (aka Bugs!)

Version 2.1 is a huge improvement over the 2.0 pre-release sold at WoA however it's still not perfectly stable and occasionally locks up on my machine (and those of several other people I've talked to). As I've mentioned a few options are not yet implemented like graphical printing and internal SSL (secure transaction) support (Registered Miami users can use MiamiSSL).

Conclusion

IBrowse 2 is an evolution of previous versions and in my opinion this is no bad thing. The Javascript support (even though it's far from perfect) and better HTML rendering mean more websites are available to the IBrowse user. Browsing is not only faster but the small user interface changes add up to a big improvement in usability. The unexpectedly good PostScript printing is the icing on the cake if you've got a PS printer or TP7. If HiSoft can get the stability worked out and implement all the new features it'll be worth at least a Tasty, as it is...
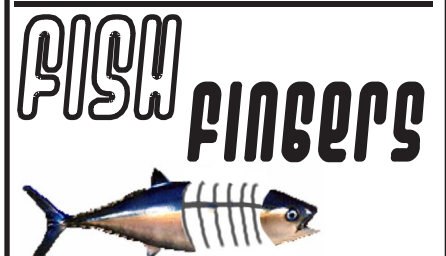
Results

Pros
Fast
Many interface improvements
Better website compatibility
Fantastic PS printing

Cons
Not as stable as 1.22
Javascript needs improvement
Some features not yet implemented

FISH FINGERS

Product Information

Developer:	Omnipresence Intl.
Distributor:	HiSoft
Tel:	(0500) 223660
WWW:	www.hisoft.co.uk
Price:	Full Version £34.95
	1.x Upgrade £12.95

EZTOWER MkIV

Martin Miller's A1200 gets a new home in one of Eyetech's latest EZTowers. Does it live up to the name?

The EZTower is a bit of a beast! Here you can see the 6 5.25" bays and Martin's home-made floppy drive face plate..

Until recently, I have been against putting my desktop classic A1200 into a tower as it's main selling point to me was that it was exactly that - a desktop compact computer, but I have to confess that future upgrade options look more suited to a towered A1200 and internal devices are much cheaper than their external equivalents.

As this was to be a one-off upgrade investment, with future expansion in mind, I decided to go for the Eyetech EZ-Tower, EzKey2 keyboard adapter / PC Keyboard (Yes, I know - but they are not too bad when you get used to them!), Economy Buffered 4-way Interface / EZ-IDE Software, and the CD-ROM / A1200 Audio Mixer/Adapter. The total cost was £198.80 including carriage.

The system arrived within 2 days by courier in a large, very well packed box. I unpacked and checked everything and set about reading the instruction booklet. This looks photocopied and some of the pictures could have been better, but it seemed to cover everything.

The Eyetech Tower is an impressive looking beast which stands about 62cm high (that's about 24. 5 inches in old money!). It has a total of 9 drive bays which should be more than enough for anyone. In fact, after completing the conversion, you will soon realise that there is a fair sized empty space in the bottom of the tower, which I found ideal for a few internal bays from a stripped down PC. The tower also features individually removable side panels, which I found to be a brilliant idea.

The instruction booklet warns that "If, having read the book you feel that this work is outside your abilities you should not attempt to carry out the fitting". Well, I consider that I am good at DIY and have a reasonable background electronics knowledge, so I got stuck in.

Unfortunately, I encountered a number of silly niggly problems which really should not exist, considering how long this tower has been in production. This made me a bit despondent and disappointed. After all, £200 may not be much to some people but it was to me. To summarize the problems:

1. The DF0 faceplate did not fit the internal floppy drive without considerable manipulation, and when it did eventually fit, you could not insert a disk unless you had a long finger nail to poke it in with! I eventually made my own faceplate using a plastic blanking plate from the tower - it works fine.

2. The plug on the audio mixer/adapter did not fit my HiSoft CD-ROM socket so I had to dissect the plug, squash the pins and push them onto the CD-ROM individually.

3. Neither of the pre-drilled holes on the blanking plates matched the cut-outs in the tower's back panel, requiring filing with a needle file.

4. The keyboard interface advertised with the tower in Amiga Format was the EZ-Key2 which is the universal adapter for PC or A4k keyboards. The version sent was the EZ-KeySE for PC keyboards only. I did query this with Eyetech and was told that the advert was wrong (it has now changed). They offered to exchange it if I returned it along with £3 in stamps! So, allowing for the postage to send it to them as well I didn't bother. Nevertheless, the error was not mine, so I couldn't see why I should have to pay at all. The main drawback of the PC keyboard is that

some keys are not mapped correctlythey are # \ ¦ ~ ` ` and the HELP key. The F11 and F12 keys are the Left and Right Amiga keys, the END key seems to be the HELP key. I tried the Windows Keymap on Aminet and found it did not help, neither could Eyetech themselves.

5. The finger grip on the right side panel appears to bind against the internal middle shelf, making it awkward to get a nice clean fit. A little bending with some grips and an extra screw at the rear cured this.

6. I felt that additional support would be beneficial to the bottom front edge of the A1200 to prevent damage from pressure when trying to fit those tight-fitting expansion boards, so I added a small bracket with Araldite and secured it with a plastic strap.

As I stated, these are silly problems which could easily be cured in production, but the tower cost a lot and took longer to complete than I bargained for. The 4-way buffered interface, however, was very easy to set up and allows plenty of future expansion.

If you happen to be using a 2.5 inch Hard Drive it would be worth considering a longer cable when you order your tower, it can then sit in it's cradle on top of the PSU with 4 sticky tabs. Another option might be to secure it to the motherboard somehow, but I think future access might be difficult.

Rear of the EZTower showing how the A1200 is mounted and the connectors (including the optional audio mixer). One of the side panels is removed.

The end result was a very impressive tower which looks good and works well. I am very pleased with the finished conversion, and so would you be, but be prepared to be a bit inventive to overcome any problems you encounter.

A final note for users of PC-Task: When you use Control + Alt + Delete to reset MS-DOS, the PC Keyboard option with this tower will also reset your AMIGA!

Results

Pros
Plenty of room for expansion
Reasonable price
Easy access removable side panels

Cons
Niggly problems which should have been resolved as this is the 'Mk4' Keyboard interface maps keys oddly

FISH FINGERS

BMon

I brought my BMon from the Eyetech stall at the WoA '99, along with some other bits, as having a PPC card and BVision I was having the lack of AGA blues. This was mainly because the wife complained she "couldn't play her games any more" and I also missed some of my AGA programs. So on the way home on the train I read through the photocopied, double sided, A4 instruction sheet and looked at the collection of wires, ribbons and connectors. Having arrived home I soon discovered that I had lost the A4 instruction sheet but luckily it's not that hard to install.
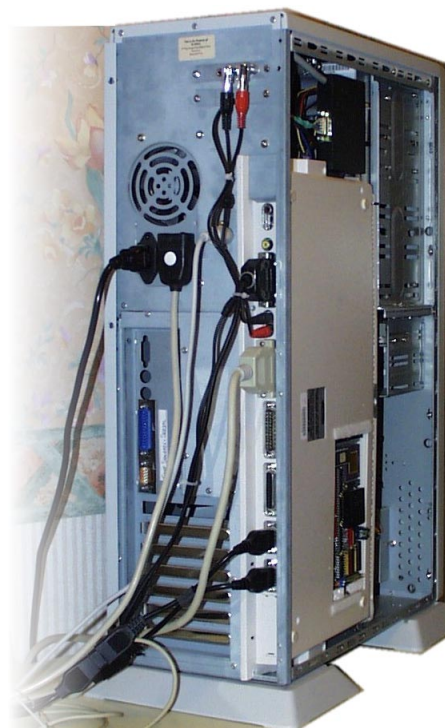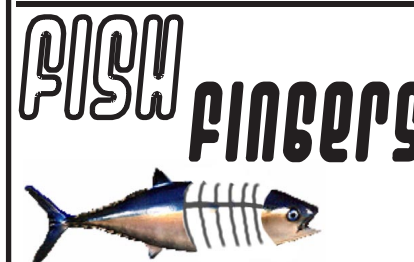
I have an Eyetech external EZVGA scandoubler so I was supplied with the correct ribbon connector for this which loops from the VGA connector in to my tower and connects to the BMon. When used with a BVision, as I do, you have to remove the PCB, with the VGA out connector, from the BVision and connect the BVision ribbon to the BMon. Then on the other end of the BMon there is a new VGA out for you to connect your monitor to. This outputs scandoubled AGA or graphics card output which is selected by a remote switch which you mount on the front of your tower. This is done with a 5 1/4" bay blanking plate that comes with the BMon switch attached. There is a 2 core cable that goes from the switch to the BMon and a supplied tower connector cable. Right, so you're all connected up. Time to switch on and test your new purchase.

Now hopefully this is where mine and your experience will differ. What happened with me was that although I had a picture it was very colourless, almost grey. After a loan of a friends monitor to make sure mine was OK we deduced that there was no red output from the BMon. So after a phone call to Eyetech my new piece of kit was winging it's way up to Stokesley with the promise that it would be checked and returned in perfect working order. A few days later I was informed that indeed the red output was faulty cause by some stray flux and was now on it's way back to me. On receiving my newly repaired BMon I connected it all up and switched on.

What followed next I would hope is very rare and I know of two other BMon users who have had no problems what so ever. But as I am reporting my experience of the BMon I will tell all. So I switched on my Amiga and there was this small puff of smoke from the back of the BMon switch. I quickly switched off and on close inspection of the switch's PCB I saw one of the tracks had burnt out. Now any person of sound mind would have packed up the BMon and had it winging it way back up to Eyetech but oh no, not me. I get out my trusty soldering iron and set about repairing the track. I set it all back up, switch on and... puff... another track burns out. So I repair that one too, set it back up, switch on and... puff.... a third track burns out. Well I'm on a one way road now, I can't return it so it's out with the soldering iron for a third time and, as they say, third time lucky every thing was OK.

Once it was working I must say that the quality of both AGA and graphics card display is excellent. I can't detect any degradation in either outputs, they are both rock solid, sharp and clear. Now when I, or should that be the wife, double clicks that Slam Tilt icon on my workbench I just need to flick the switch and there it is. I must emphasize that the problems that I encountered are probably very rare if not a one off and as my two friends have had no problems then I guess it's "only me". So in conclusion overall the BMon is an excellent piece of kit and despite the problems I faced I would recommend it as must buy to all those with a graphics card with no AGA pass through.

Jeff Martin

Results

tasty

Wasted Dreams

Gary Storm looks at the first release from newcomers Digital Dreams Entertainment

Picture yourself waking up after a crash, on your newly-colonised planet. Picture yourself being shot at by Aliens with very dodgy hair... are they jealous of yours? Do they want you for kinky B&D games?

This (and more) is what you must try and discover in this 1 or 2 player arcade 'brain-em-up'. It plays like a breeding program between Guybrush Threepwood (Monkey Island), Conrad Hart (Another World and Flashback), and the queens from the Chaos Engine. And that ain't bad, if it's pulled off properly (I can't help it... these in-nuendo's have a life of their own), and it generally has been.

Viewed from a slightly off-isometric perspective, it's up to you to put the pieces together (not only of yourself after that crash) and solve the mystery. Amazingly, the story (for once) is actually very good and plausible, with a 3d animation intro that really sets the scene and draws you into the Wasted Dreams world. The atmospheric music and sound effects in the game take you even deeper into unreality ...and bam! You wake up to the digitised speech from Star-Soap hell. It's an added bonus, sure, but after you finish laughing at the characters, you'll just skip it and read the text instead, making up your own dodgy soap voices along the way ("A luv u Rickay-Alien-Dude!").

Armed with a laser, and a smile, you must survive, kill aliens, find goodies to pick up and use, talk to people and solve the puzzles with only your joystick and the 'ALT' button for company (which sounds suspiciously like a night spent with a picture viewer directed at the seedier parts of your hard drive. Hmmmm). Thanks to some ingenious design and forethought, this control system works rather well, as whenever you're over or near something (or some-

one) of importance (an ammo clip, door, rock, metal thing (really)), an animated icon appears in the inventory bar the joystick does all the doing, and the 'ALT' button does all the selecting (would have been nice not to have to hold it down all the time when you want to select something though... small point). A lot of thought has gone into the control system. Overall it's intuitive, and you can't get much easier than direction and fire.

It takes a little getting used to the movement, but it's not that detrimental to the game as a whole. What isn't so much fun is the fact that the screen area isn't too large, and aliens can shoot you off-screen before you even smell their hair-gel. This isn't normally a good thing (and they definitely shouldn't be able to shoot you like that), but it does add to the tenseness and atmosphere, so be

[text obscured by screenshots] humans as well (crewmates, [...] and I fail to understand why, [...] rescuing an engineer, he asks [...] turn a book to a friend (???).

[...] an excellent game, and I don't [...] go for the brain-teasers. It has [...] that balance of frustration and achievement which is essential for what is in effect an adventure with an arcade slant. There are quite a few points in which it might have been better (movement, visible screen area, B-movie soapy cheesy dialogue), but at the end of the day it's fun to play and is very competent. If you like things like Monkey Island and Flashback (at least), you'll like this. Try it out today.

Results

tasty

would blow it up?), but you'll survive. You may not have much hair left, but you'll survive.

Which is why it's a damn good thing the saving and loading is so quick and easy. The game is played off the CD, and each of the six possible saved games are written to the S: directory on your hard drive. Excellent.

Wasted Dreams is full of nice little touches, such as the sparks that appear when you shoot forcefields, and in-jokes (try opening the door a lot at the bottom right of the military compound). You'll have to have a leap of faith for some of

At first you'll die a lot, as you become accustomed to the game. Then you'll get frustrated as you try to solve it's puzzles. It's not easy trying to get into the mind of the programmers (especially when it's a hard enough job to get into your own mind). Persevere though, and you will attain satisfaction. Once you get through the lack of body-shield (outer space deodorant?) you have(n't), and get through the twisted programmers puzzles to make it to the recharger, you'll be a happy space-bunny. You'll find most of the clues logical, so when you get given a locker key, maybe it'd be a good idea to go and find the locker it belongs to? Some of the clues are pure evil though (who would have thought that a red rock chucked into a generator

[text obscured] way around the world (and positioning of enemy), by dodging and using whatever cover you can.

Product Information

Developer: Digital Dreams Entertainment
Available: Forematt Home Comp. & most games dealers
WWW: www.dd-ent.com
Demo and on-line reg. available
Price: £28

The Wanderer

Robert Williams listens to the first CD from prolific MOD composer Jogeir Liljedahl

Anyone who has browsed the /mods directory on Aminet will remember the name Jogeir Liljedahl, because his music modules stand away from the normal techno fare with moving acoustic guitar pieces and many mellow tunes.

The Wanderer is Jogeir's first CD and contains new versions of many of his most famous modules, re-recorded to a professional standard with live session musicians and sounding better than ever. The 14 tracks on the CD range

from mellow and relaxing to bright and invigorating, each one has its own character and the compilation never gets "samey" as sometimes happens with instrumental tracks. I particularly liked the deep "soundscape" tunes like Overture and Mystified 2000 which sweep you away on a sea of sound. Another great track is BeetleMix '99 especially if you enjoyed the "chip tunes" of old (although this is rather more refined!).

The CD is a proper pressed disc and is nicely packaged with a beautifully designed inlay. I would have been interested to see was some information on how the tunes were recorded and in particular whether the Amiga was used during production though.

If you like his modules on Aminet or just enjoy relaxing instrumental music I think you will like this CD. If you'd like a taster of the tracks, MP3s of a selection are available at the LynneMusic website or you can download some of Jogeir's modules from Aminet's mods/jogei directory.

Product Information

Artist: Jogeir Liljedahl
Publisher: LynneMusic
WWW: www.lynnemusic.com
Price: $19 (£12 approx.)

Results

tasty

TzerO

On the 24th of March 2199, the T-Zero dimension was discovered. Unfortunately the denizens take umbrage at you gate-crashing, and decide to attack Earth. So you are sent to wipe them out instead. Good politically correct stuff then :)

Firstly, you'll need to have as much chip-ram free as possible... OK, ALL your chip ram. I made a theme in D-opus Magellan II as basic as possible (no colours, no textures etc) to enable T-Zero to live. To get the Story Mode to run, it's even more chip ram hungry... you might have to run from the Early Startup menu's 'Boot with no startup-sequence' option!

The Clickboom quality and slickness shines through as soon as you hear the first atmospheric sounds and the first pictures of the intro. A sexy lady's voice informs you of the background, and offers you advice on the 3 (beautifully presented via rotating 3D craft) fighters you can choose: Gordon Maj - excellent firepower, but not as nimble. My beast of choice. Mantar 2 - Average and well balanced. Suzer 4 - The smallest ship with the greatest manouverability, but can't handle the biggest weapons.

So strap yourself in and attack the hordes of enemy in their horizontally scrolling dimension, and marvel at the graphics, the sounds, the animations in the background (which you can turn off to save processor speed if you need it) and the sheer smoothness of T-Zero.

There are two game choices, Arcade or Story Mode. Arcade is obvious, and Story Mode is dependant on the pick-ups you make which in turn dictate which route you travel through the worlds. Story Mode is definitely easier, as it actually gives you some continues.

This game is definitely a challenge, even on 'easy' (your other choice is

'hard' ...eeek), and there are loads of excellent weapons to pick up from the fallen enemy. Each time you pick up a certain coloured weapon power-up, you'll increase the firepower of the corresponding weapon (guns and plasma for instance). Don't think you'll be able to blindly pick eveything up though, as there are anti-powerups which reverse your movements and short-circuit your weapons (not a good idea), so you'll need to actually think a bit in T-Zero... rare for a shoot-em-up. You may also not want to pick up certain powerups (like plasma) as I found that 'guns' were a better bet to keep upgrading. The Nuclear blast and any other special weapons you acquire are triggered by pressing the shift, alt or Amiga buttons.

The only game of comparable worth to T-Zero is 'Project X', the Team 17 classic. T-Zero is very similar in style and execution to Project X, except that T-Zero has the added danger of obstacles in the screen... floating islands that harbour enemy gun emplacements, spikes and walkers. Don't get too close to these masses, as they aren't very generous on the collision detection (i.e. the detection is too good and you'll need to be damn careful). The islands can also make effective cover from enemy shots as well, but most of the time you'll be swearing at them.

The screen is vertically slightly larger than the visible screen, and you can see these edges when you fly towards them. When you reach the screens extent, the ship has the ability to roll on it's side, which is helpful as some unassailable enemy can reach even further north or south than you can, so rolling to avoid them is good.

You definitely have to learn to be careful in this game. It's easy to let the bloodlust take over, or be greedy and grab that extra star or power-up - but it's not worth

[...] if you're [...] to end [...]food-[...] on the [...]

[...] obligatory end-of-level boss [...] you'll have to learn the pattern of their attack to defeat them. I found the first boss to be easier than most of the first level (luckily).

Clickboom have initiated a very good save system for T-Zero. In effect it gives you 10 save slots on your hard-drive. If you 'start at 0' and die after reaching the second world (with 2 ship's left), you can 'continue at 0' and return to the start of the second world (unfortunately with what you left with - two ships... no easy ride here baby). The same rules apply for any other start number you choose, as the save will be allocated there.

Playable on just about any AGA equipped Amiga with 16Mb of RAM, and fantastic in one or two player modes, T-Zero is a modern classic, and shows that gameplay rules over polygons. Get blasting!

Gary Storm

Product Information

Developer: clickBOOM
Available: Foramatt Home Comp. & most games dealers
WWW: www.clickboom.com
Demo and on-line reg. available
Price: £30

Results

Caviar

Get Layered

Layers are a feature that adds significant flexibility to bitmap graphics programs (layers are also used in other types of application such as structured drawing, CAD and DTP but we'll concentrate on bitmap graphics programs here). When you use a traditional bitmap package like a paint program or image processor everything you do has an effect on the original image. If you want to change what you've done or move it your only options are to undo or if you just want to alter something in place mask it off to avoid spoiling the rest of the image.

In a package supporting layers instead of altering the image directly you place new elements, which could be painted on or an imported image onto separate layers. Each layer can be thought of as a piece of glass sitting above the original image. Each layer can be moved independantly so you can reposition elements on a layer in relation to the original image and the other layers. You can change the order of the layers so you choose which elements appear in front of others. Most packages allow you to use special effects to change how the layers combine together. A common effect is transparency so you can see some of the background and any lower layers through the transparent elements. At any time you can add or remove layers from the image. Finally layers allow you apply special effects to one layer independently of the others. For example if you feel the background is too dark for the foreground elements you can simply lighten the background without effecting anything else.

What Programs with Layers are Available?

As far as I can find out there are four bitmap graphics programs available for

the Amiga that support layers, they are:

ArtEffect - Haage and Partner £80
ImageFX (3.0+) - Nova Design £150
Photogenics (4.0+) - Paul Nolan £75
TVPaint - NewTek FREE

I haven't used ArtEffect so I couldn't comment on its layer functions, you can read reviews of ImageFX 4 and Photogenics 4 in this issue, I described ImageFX's layers further in my full review of version 3 in issue 1. TVPaint is available free to download but you must have a graphics card to use it. Its layers implementation is limited to three layers but apart from that is very powerful.

Resources

It is worth bearing in mind that working on layered images can be very memory intensive, each 24bit layer has to be held in memory possibly along with an alpha channel image. Even quite a low resolution image can quickly use a big chunk of RAM and that's without considering undo buffers and other memory hogs. ImageFX and ArtEffect have built-in virtual memory system to help deal with huge images but as soon as this has to be used processing times increase rapidly, Photogenics is limited by your physical RAM.

While I don't think layers are inherently more processor intensive than traditional image processing they do encourage you to combine effects. If you want a fast response you'll need the most powerful CPU you can get your hands on. My 060 system maintained an acceptable speed while creating the high resolution image on this issue's cover, and I would imagine you'd get similar performance out of an '040 on video resolution images. On slower system be prepared to wait!

Tutorial Intro...

In the tutorial on the following pages we're going to use the layers functions of your image processor to composite two images then add a glow to the foreground image. Because we're using layers you'll find it's easy to adjust the effects until you're completely happy and even when the image is finished you'll be able to change it and try out different effects.

I will go through the process step by step in both Photogenics 4.2 and ImageFX 4.1 (version 3.x is very similar) for owners of both packages. If you own ArtEffect or TVPaint you should be able to perform similar steps in those packages too. If you don't have a package with layer support this tutorial is a good way of learning how they work in practice. You'll also notice that each one has its strong and weak points which, depending on your intended use, might sway a buying decision.

TIP Both Photogenics and ImageFX have recently been updated, it's a good idea to use the latest non-beta version of these packages. If you're on the Internet you can download the updates from http://www.paulnolan.com and http://www.novadesign.com respectively. If not give us a ring and we will arrange to send you the updates for the cost of postage.

The two images I've chosen are a swirly space background and Commodore's much maligned CD32 console. You could use any images you like, for example you could compose photographs over a background or use text to make a poster or sign.

ImageFX 4.1

1 Open the background image.

2 Open the Layer Manager window by clicking on its button just to the left of the RGB channel selectors on the main panel.

3 Now we'll load the image we want to compose onto the background as a layer, click on the popup menu gadget in the Layer Manager and choose Load Layer... . In the file requester choose the second image.

4 If you need to resize the image is make sure its layer is selected in the Layer Manager then use the Size/Scale option to change its size. Then use Move Layer from the Layer Manager popup menu to drag the image roughly where you want it.

Now we want to remove the background from the subject of the image so it is composed directly onto the background. ImageFX uses a monochrome alpha channel to control what parts of the image are transparent so first we need to create one for our layer...

5 Click the Alpha button then choose the Create... option and then the Matte button in the Create Alpha Channel window. This creates an all white alpha channel so the whole image covers the background.
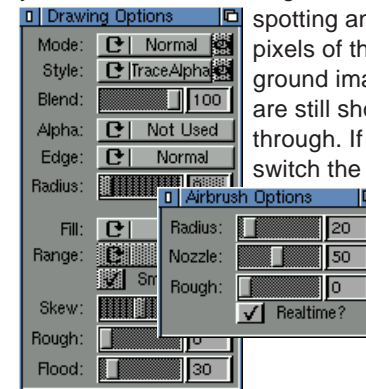
To let the background show through around the subject we need to paint black onto the alpha channel in the areas we want to be transparent. ImageFX provides an easy way to do this using its TraceAlpha drawing style. This applies the selected colour to the alpha channel while you paint on the actual image. Combining this with the air brush we can make areas transparent by painting with black selected and restore by painting with white.

6 Double click on the air brush tool in the main panel to bring up its options window then double click on one of the other drawing tools to open the Drawing Options window.

7 Choose a suitable brush radius (20 is usually a good starting point) and select Realtime in the Airbrush Options window and choose the TraceAlpha style in the Drawing Options window.

8 Select the black colour in the palette window and start painting on the areas of the foreground image you want to remove. If you make a mistake and remove too much just select white and paint the missing bit back on. Remember that you can use any of ImageFX's drawing tools to add and remove portions of the image.

TIP: Use the Alpha/Swap function to take a look at the alpha channel image you've created, this is a good way of spotting any stray pixels of the foreground image that are still showing through. If you switch the drawing style to Normal you can paint white and black directly onto the alpha channel.

NOTE: In my version of ImageFX TraceAlpha mysteriously stops working if I zoom in or out while using it, if this happens to you make sure you choose a suitable magnification before you start work.

9 Once you're happy it's probably a good idea to save your image so you can play with the other options with out fear of loosing your hard work. Click the save button then choose the INGF format in the Saving... requester, this will retain the layers, alpha channel(s) etc.

Next we'll add a glow around the foreground image, you can use the same technique to create a shadow too.

10 As a pattern for the glow we're going to use the alpha channel from the foreground so we need to copy the foreground layer. Select it in the Layer Manager and choose Clone Layer from the popup menu, you'll see a duplicate entry appear. The glow layer need to be below the image layer so while it's still selected choose Layer Down from the popup. While we're here we'll also give this layer a more descriptive name, double click on the Glow layer in the list, in the Layer Settings requester clear the Name: gadget and name the layer "Glow" then click Okay.

11 To make the glow a suitable colour we'll fill the whole layer with the colour we want, the alpha channel will take care of which areas are transparent. Make sure the Glow layer is selected then pick a suitable colour from the palette window, I'm choosing a nice lime green! If you wanted to create a shadow you'd choose black at this point. To stop the fill operation clearing your carefully prepared alpha channel click on the "A" button at the top of the main window, this protects the alpha channel. Now choose

Layers Tutorial

By
Robert Williams

The foreground image is placed on a layer over the background.

The background is removed so the subject sits on the background image.

The final image, complete with stylish green glow!

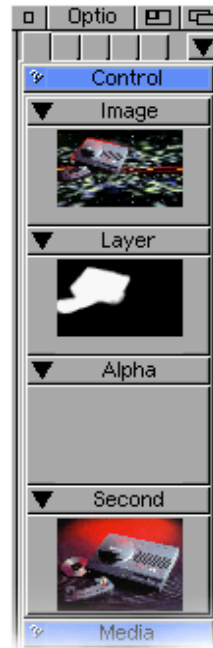After a bit more work in ImageFX... See the back cover for full colour!

Photogenics 4

1 Open the background and foreground images.

2 If you need to re-size the foreground image you can do so using the Image/Scale/Choose Size menu option. Make sure the foreground image is selected in the Image selector in Control plugin in the Options window before you select the Size option or you'll scale the wrong image.

3 Make the background the current image by selecting it in the Image selector then make the foreground image the Secondary image by selecting it in the Second selector.

4 Select RubThru on the drop-down paint mode in the top toolbar. Make sure the Draw Tool (continuous line) is selected then draw on to the layer with the left mouse button, you'll see the secondary image show through. If you make a mistake you can rub off any excess using the right mouse button. If you need to you can adjust the Pressure and Size settings in the Media plugin. You can also use the other drawing tools with the left or right mouse buttons to add or remove parts of the image.

TIP: Try using the polygon tool to add or remove large areas then the air brush at a small size to do the detail work (this applies to both ImageFX and Photogenics).

6 At any time you can move the foreground image around and position it over the back- ground. To do this click the Position Layer Tool (hand icon) then drag the layer into posi- tion. You will notice the Option window changes to show the Tool Opts plugin, here you can exactly position the layer by editing the Position co- ordinates. If you click the Real Time check box to see the layer con- tents while you drag.

The Glow

7 From the Layer popup menu in the Control plugin choose Move Paint Layer to Alpha. Click on the image selector and choose the alpha chan- nel image from the selection. From the Image popup menu choose Copy Image.

8 A copy of the alpha channel should appear on screen, if necessary cleanup the image removing any stray white areas by painting over them with the "Paint" paint mode and black selected in the Colour plugin (second tab of the Options menu by default). Click FIX.

9 In the Control plugin select the back- ground image in the Image selector.

In the Layer popup menu choose Move Alpha to Paint Layer, the fore- ground image should reappear. The second copy of the Alpha channel will be used as a template for our glow.

10 Choose New.../Paint Layer from the Layer popup menu to create a new layer for the glow. In the Alpha selec- tor choose the alpha channel copy we've just created and cleaned up. So we can see what we're doing choose the "Paint" paint mode from the popup and pick a colour in the Colour plugin (I'm using lime green again!). Now click the Fill Paint Layer button (the filled square just to the left of FIX).

11 Move the glow layer below the fore- ground by selecting Move/Down from the Layer popup menu. Now select the alpha channel image in the image selector.

12 Select the background image in the Image selector and choose the layer without the alpha channel set. Click on the Move Layer tool and make a note of the X and Y co-ordinates. Now swap to the other layer, click Move Layer and enter the same co- ordinates so the layers line up. Press Return after entering each co- ordinate to see the layer move.

13 Choose the Blur paint mode and fill the paint layer. The Mode Opts plugin should appear in the Options window, experiment with the H and V radius settings to get a good soft edge for the glow (I used 12.5 for both radii). Take a look at the composed image to see the effect when you change the settings. If you need to bulk out the glow try increasing the Gamma of the alpha channel slightly with the Adjust paint mode. Pick it from the drop-

ImageFX 4.1 Continued...

Buffer/Fill then click Draw Colour in the requester. Press "R" on the keyboard to re-draw the preview and you should see a coloured shadow slightly offset from the foreground subject. Click on the "A" again to un-protect the alpha channel.

The glow really wants to have a soft edge that spreads out behind the subject, as the edge is controlled by the alpha channel we need to process it to soften its edges.

12 Choose Alpha/Swap to see the alpha channel, next choose Convolve/Gaussian Blur then set the radius to a high value (I usually use 5) and click Okay. Once that's finished apply it again with the same settings to get a really soft edge. To bulk out the glow a bit so it sticks out behind the subject use the Balance effect with the Gamma (Ga) function set to 127.

Depending on the size of your images and the effect you want to achieve you my need to alter the strength and number of times you blur and increase the Gamma of the alpha channel.
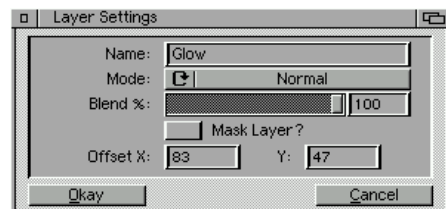
13 Now lets line up the glow underneath the foreground image, double click the foregound layer in the Layer Manager and make a note of the X

and Y offsets in the Layer Settings requester, click Cancel. Double click on the Glow layer and make its off-sets the same as the foreground's, click Okay. If you were making a shadow you would simply offset the shadow layer from the foreground.

Now our image is basically complete layers allow us to change things and experiment even at this late stage. Here are some things to try:

Double click either the foreground or glow layer in the Layer Manager and try the different Mode options, each one combines the current layer with the ones below it in different ways.

Choose a layer in the layer manager then apply any ImageFX effect to it, you can alter any layer independantly of the other. For example if you felt the background was too dark you could simply pick it then use the Balance effect to match its brightness to the foreground.

Choose a layer then do an Alpha/Swap to reveal its alpha channel, then try applying effects to its alpha channel, click swap again to see the result. I find the Distort effects and Effect/Straw particularly interesting.

When you've got an image you're happy with or you want to import into other programs choose Flatten Layers from the Layer Manager popup menu then Save the image in a common format such as IFF ILBM or JPEG. It's a good idea to also save the image as an INGF before flattening the layers so you can work on it again if you want to.

Photogenics 4 Continued...

down, fill the paint layer then gradually increase the Gamma value in the Mode Opts plugin until you're happy.

Now the basic image is complete experiment with Photogenics' range of paint modes, remember you can always create a new paint layer to draw on so you don't damage what you've already done. When you're happy save using the savers tab in the NGIO plugin (the last tab in the Options window by default). This way you can choose a format to save in and change options if the saver has them (for example JPEG quality). Unfortunately Photogenics can't

save with layers intact so if you think you'll want to work on this image again it's a good idea to save the individual elements of the image (separate images, alpha channels etc.) separately.

Mini Review:
VisionFX

Available From: Aminet (gfx/ifx)
Shareware Fee: $5 (£4 approx.)

VisionFX is a collection of shareware modules for ImageFX which take advantage of PowerPC processors using Phase 5's PowerUP system (the modules also work under WarpUP using Frank Wille's ppc.library emulation). Currently VisionFX consists of three enhanced modules and two new ones:

JPEG Loader/Saver - Compressing and decompressing JPEG images can be a slow operation so this module particularly benefits from PPC acceleration, saving a large JPEG is about 5 times faster than the standard saver running on an '060. On loading a JPEG there are several options to enhance its quality and saving offers an optimise check box which can reduce file size.

PNG loader/Saver - The new PNG saver is about 3 times faster than the standard version, a welcome improvement.

VFXForge - One of the great new features in ImageFX 3 was the FXForge effect which allows you to use effects designed for Adobe Photoshop's Filter Factory. One with this effect is that it's much slower than standard effects as the filters are interpreted. VisionFX's PPC version was amazingly over 17 times faster than 68k on the filter I tried, amazing! VisionFX goes even further by adding a Filter Manager which allows you to easily preview filters from a list.

ASCII Saver - This new saver generates a text representation of your image, it can save plain text and a number of other formats such as HTML and ANSI.

Volume Light - This brand new effect simulates a volumetric light source, you can set the number of rays that radiate from the light source and change its size and position. The rays settings can create a beautiful effect.

Although VisionFX currently contains a small number of modules all of them are fast, reliable and integrate seamlessly with the ImageFX. The JPEG loader/saver is so commonly used that the speed-up is extremely useful and the speed up in FXForge makes the module much more useable. VisionFX is well worth the low registration fee.

Back to Basics
2: DOSDrivers

Robert Williams explains the Amiga's DOSDriver system which allows you to access a variety of devices eaisly.

D OSDrivers are used to make devices available to AmigaDOS, this process is called mounting a device. There are two types of device you can mount, physical devices such as CD-ROMs and logical devices which exist only in software such as a recoverable RAM disk. Each DOSDriver is a ASCII text file which describes the characteristics of the particular device, the name of the DOSDriver file is the device name used by AmigaDOS, so for example a CDROM DOSDriver might be called CD0.

If you want a device to be mounted every time you start your Amiga then you place its DOSDriver in the devs/DOSDrivers/ drawer of your boot partition. This is carried out by the following mount command in the startup-sequence:

```
C:Mount
DEVS:DOSDrivers/~(#?.info)
```

There is also a storage/DOSDrivers/ drawer where disabled DOSDrivers are kept, at any time you can mount a device by double clicking on its DOSDriver, which has Mount as the

default tool or by issuing the following shell command:

```
MOUNT devicename
```

Where devicename is the name of the device you want to mount.

To disable a DOSDriver simply drag it from the devs/DOSDrivers to the storage/DOSDrivers drawer on the Workbench, when you re-boot, the device will no longer be available. Similarly to make a device available at all times drag its DOSDriver from storage/DOSDrivers into devs/DOSDrivers then re-boot or double click its icon to mount it immediately.

Occasionally it is useful to disable a device without re-booting, to do this you use the following ASSIGN command:

```
ASSIGN devicename DISMOUNT
```

This is useful when editing a DOSDriver as it allows you to test a changed configuration without rebooting.

For a physical device to be mounted two pieces of software are required which are refered to in the DOSDriver: a device driver and a handler. The device driver accesses the physical hardware connected to the computer, the handler interfaces the device driver to AmigaDOS. So for example a device driver would be supplied with a SCSI interface and a handler, for example a CD-Filesystem, would be used to access hardware attached to that interface (in this case a CD-ROM) from AmigaDOS (and hence the shell or Workbench).

Editing a DOSDriver

In the vast majority of cases a pre-defined DOS driver is available either included with other software (for example with a CD file system) or from Aminet (for example many DOSDrivers which allow you to read PC ZIP disks are available). In these cases you'll probably only need to change the DEVICE and UNIT fields to point to your hardware. Any other changes you might need to make will be explained in the documentation.

When you edit a DOSDriver it is usually a good idea to move it into your Storage/DOSDrivers drawer before you make any changes as a wrongly configured DOSDriver can stop your Amiga from booting.

Some DOSDrivers come with some of their fields setup as icon tooltypes so you can easily alter them. When you need to edit the settings in a DOSDriver always check the tooltypes first as they override the settings in the file. To do this click once on the DOSDriver's icon so it's selected then choose Information from the Workbench's Icon menu. If you see the fields you want to alter in the Tooltypes list then just click on the one you want to change and edit its value (the part

after the "=" sign). For example the tooltypes of a CDROM DOSDriver might look like:

```
DEVICE=scsi.device
UNIT=2
```

If there are no tooltypes set in the icon you will need to edit the DOSDriver file itself to do this open a shell and type:

```
ED Devs:DOSDrivers/XXX
```

Where XXX is the name of the DOSDriver you want to edit. A window will then open and you can edit the various fields in the DOSDriver. To change a setting just edit the value after the "=" sign on the line you need to change.

When you're done choose Save from the Project menu then Quit ED.

If you've moved the DOSDriver into storage you can now double click on its icon to see if it works, if you get a "Device XXX is already mounted." error message try dismounting the DOSDriver as mentioned above. Once the DOSDriver is working properly you can safely move it back into the Devs:DOSDrivers drawer if you want it to be available after every boot.

Logical devices usually only need a Handler as they are created purely in software and do not need to communicate with hardware.

The device driver to use is sepcified in the DEVICE and UNIT fields of the DOSDriver and the handler is specified in the FILESYSTEM field.

About Device Drivers

Many pieces of hardware are supplied with their device driver on disk, this file is usually copied into the devs: directory during installation. Other devices have their device driver stored in a ROM on the device, this means the driver is available straight away before the OS has loaded. Device drivers are called xxx.device it's important to remember that the name is case sensitive (unlike many other aspects of the AmigaOS).

If you need to mount several file systems on one physical device (e.g. FFS and CrossDOS on DF0) grab mfs21.lha from Aminet (disk/misc). This utility mounts one device and passes calls to the appropriate file system thus preventing DF0??? icons when a PC disk is inserted and vice versa.

Device drivers for the Amiga's built-in devices are available in the kickstart ROM, this allows an A1200 to boot from its built-in IDE interface for example. Confusingly the device driver for the A1200 and A4000 built-in IDE is called scsi.device, this is a carry over from the A3000 which had a built-in SCSI controller accessed from the scsi.device. As some hard disk software was hardcoded to access the scsi.device Commodore decided to use the same name to prevent incompatibilities.

Many devices can have several units attached to them, for example SCSI interfaces can have up to 7 different units connected and a fast serial board can have several serial ports. Therefore a particular unit attached to a device is refered to by the device name and its unit number.

Eeeh When I Were a Lad...

The concept of DOSDrivers was introduced with AmigaOS 2.1, so how were devices mounted in earlier versions of the OS?

In these earlier version a file called the mountlist, stored in the Devs: directory was used. This file has a block for each logical device, for example CD0 which started with the logical device name followed by lines defineing the various parameters controling the device very similar to a DOSDriver. Each logical device then had to be mounted using the Mount command from a shell. If you wanted to mount a device every time you booted you had to add the command to your startup-sequence or user-startup. DOSDrivers represent the same information in a different way allowing you to easily enable and disable logical devices from the Workbench.

CD0, PC0, PIPE and RAD

When you install AmigaOS four DOSDrivers are available:

CD0 - Commodore CD-Filesystem

This DOSDriver can be used to mount a CD-ROM using Commodore's limited CD-Filesystem designed for the CD32 and CDTV. This file system has problems with many discs, even ones designed for the Amiga so it is best to use one of the alternatives available from Aminet or included with most IDE and SCSI controllers (see the "CDROM Explained" feature for more).

PC0 and PC1 - CrossDOS Filesystem

This DOSDriver allows you to read PC formatted disks in your Amiga's floppy disk drive (PC0 relates to DF0 the internal floppy and PC1 to DF1), the DOSDriver works with both double and high density floppy drives. After you mount PC0 by double clicking it two icons will appear when you insert a disk in your internal floppy drive. One for DF0 and the other for PC0, if you insert a PC disk you'll be able to access files on it which an icon DF0: BAD is shown on the workbench indicating that a non-Amiga formatted disk is in the drive. If you insert an Amiga disk you'll be able to read it as

normal but no PC0 icon will be shown as it automatically hides itself. This does pose a slight problem if you need to format a PC disk on the Amiga as you can't see the PC0 icon for a blank disk and formatting the DF0 icon will use the Amiga format. The only option is to format from the shell:

```
FORMAT DRIVE PC0: NAME MyDisk
```

Replace MyDisk with the name you want to give the disk and be careful to double-check you have typed the command correctly, don't format the wrong disk by mistake!

PIPE

The PIPE device transfers data from one program to another using temporary storage in RAM. A PIPE is used when the output of one program needs to be used as the input of another and is usually applied to shell commands that output text which must be immediately processed by another command. As one program outputs data it fills a FIFO (first in, first out) buffer (4Kb by default) in RAM, as the buffer is filled the second program is passed the data. If the receiving program cannot accept the data quickly enough the PIPE buffer will fill eventually pausing

the sending program until it begins to empty.

RAD - Recoverable RAM Disk

The recoverable RAM disk creates a virtual disk which you can use like any other. The clever thing about it is that it will survive a warm reboot, this gives you a very fast disk that you can boot from. When most Amigas were floppy disk based the RAD disk was used a lot by people who had a reasonable amount of RAM as they could copy their Workbench disk to it then re-boot and access system files very quickly without disk swapping. In these days of fast cheap hard disks there aren't many uses for the RAD, however you can use it as a destination for DMS disk images that would otherwise have to be written to a real floppy. You can then copy the files to your hard disk or even boot from the RAD, which is ideal for demos distributed in DMS files. You may need to edit the RAD DOSDriver to alter the size of the RAD :

```
HighCyl = 79
```

HighCyl controls the size of the RAD, each cylinder is equivalent to about 11KB so 79 allocates about 880KB, the size of a standard Amiga disk.

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AmigaOS 3.5

AmigaOS 3.5 is here! In issue 5 we'll be bringing you a massive feature on the new OS. Is the upgrade worth it for you? Will it work with your existing hardware and software? How to get the most out of the new features. We'll dig out all the information we can for you.

CD Writing

It's easier and cheaper than ever to create your own data and audio CDs using your Amiga. We explain how CD writing works and what uses you can put it to. We also plan reviews of Amiga CD writing software and a round up of the available CD writers.

Reviews

- fxPaint - We review this brand new paint package/image processor from German developer Innovative.
- Wildfire 7 PPC
- MakeCD
- PFS 3
- Netconnect 3
- NewRog - Is this the best newsreader on any platform?
- EIDE 99 Interface and Software
- GrandTVAmazing

Support

- Back to Basics: Monitors and screenmodes
- Hard Drives - We guide you though choosing and installing a new harddisk including jumping the 4Gb barrier. Plus how to get best performance from your current drives.
- Cinema 4D Tutorial

Plus

News, interviews, hints and tips and much more.

Clubbed Issue 5
is planned for
April 2000

Gallery
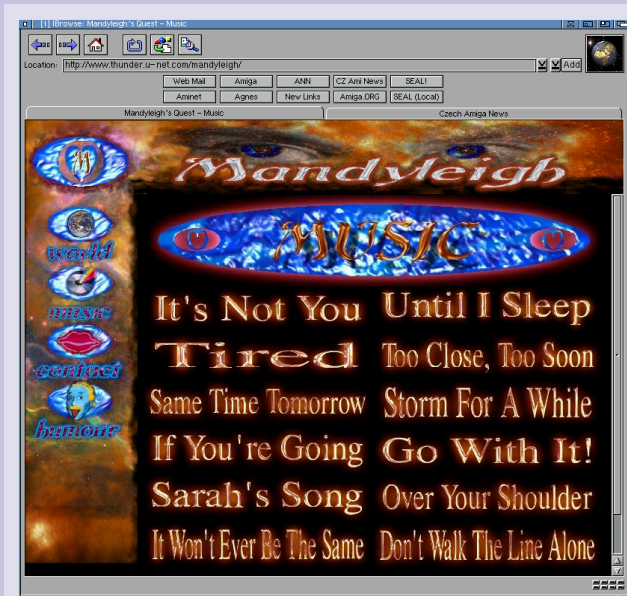
Eagle-eyed readers will notice this shot also shows IBrowse 2.1's interace complete with browser tabs.

Mandyleigh's Website

By Gary Storm

Ingredients:

Photo of Mandyleigh's eyes. Various nebulae (www.nasa.gov). Aqua bitmap (buttons). Icons modified from web pictures.

Destructions:

Buttons and text courtesy of Candy Factory Pro (PPaint for the button masks). Vigorous blending of fire effect, resize, rub-through etc. with Photogenics 4. Chuck in the web and taste-test with IBrowse 2, Voyager 3, AWeb, Nutscrape and Internet Exploder.

http://www.thunder.u-net.com/mandyleigh/

Visitors

VISITORS By Roy Bu

SEAL

SEAL by Roy Bur

Headland
By Roy Burton

Roy has been busy with Cinema 4D again and has produced the nice rendered images above.

I really like the 50's sci-fi feel of visitors and keeping to simple black and white has much more effect than the same image would have in colour.

When we first started SEAL a 3D seal for the logo was suggested but no one was up to the job of modelling a good one. Well Roy seems to have come through here with a model that looks really good, maybe just a bit more work on the texture is required to get a less "plastic" look.

Headland is another atmospheric image with a great choice of sky in the background.

In the mag...

Photogenics 4.2

Here's a quick montage of some of the great paint-on effects available in Photogenics 4 (reviewed on page 18). If you look closely you'll see paint-on fire and stars forming the background, DisplaceMap, BasRelief and pixelise applied to the text which was generated with Photogenics' text tool. And plenty of smudge and blur to blend everything together.

Layers Tutorial
Here's our tutorial composition after a bit more work in ImageFX 4. Both the background and the glow's alpha channel were distorted with the Distort/Liquid effect. The CD32 layer was copied and combined with the original one using the Screen layer mode.

http://seal.amiga.tm