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ISSUE 23 AUGUST 2001



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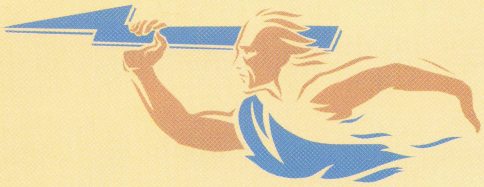

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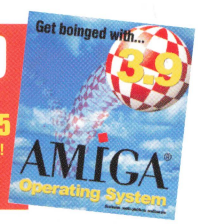

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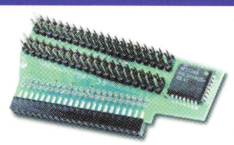

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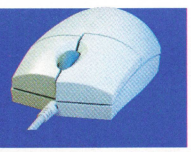

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Socket raise... Power Flyer A... Gold



Mediator PCI 1200 £139.95

Regulars

06 News
Could we be looking at the fastest Amiga ever?

10 Product Watch
More predictions of upcoming events.

12 Rants & Raves
Installation woes and Bill & Fleecy's excellent adventure.

52 Active Gamer
Archer Maclean reveals his dreams to *Amiga Active*.

54 Interactive
Our readers reveal their dreams. We listen.

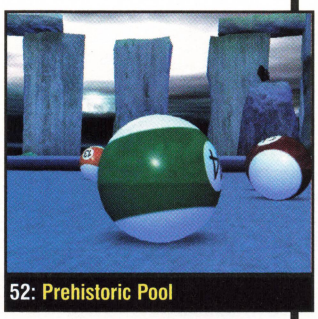
57 Subscriptions
Plus a chance to win a free pair of tickets to WoASE.

58 Guru
At least the Guru knows what he's doing.

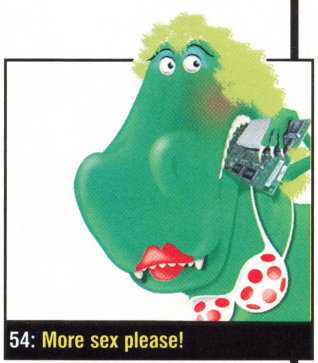
60 Online
To be put through to an operator, press 1 now.

62 Next Month
The ants are taking over. Wouldn't that be weird?

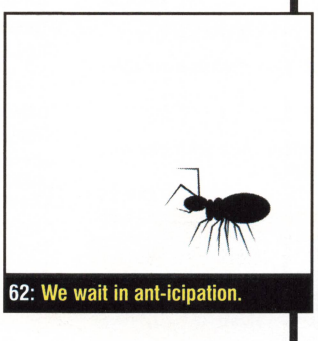
64 Back Page
Whatever happened to the World's Best Space Game?



52: Prehistoric Pool



54: More sex please!



62: We wait in ant-icipation.

Reviews

24 Prometheus
Son of Iapetus, said to have stolen fire from Olympus and to have bestowed it on mortals... or just another PCI busboard for the Amiga?

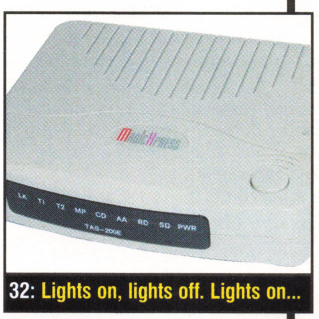
30 YAM
Yet another occurence of the phrase "Yet Another Release of Yet Another Mailer".

32 Modems
Modulate, demodulate. Modulate, demodulate. They all do the same thing, but no two modems look the same. Question is, what should you be looking for in a modem?

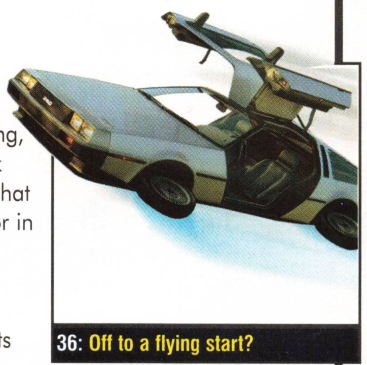
36 NextGen
Following announcements of new hardware clad in stainless steel, and bold plans to sell to the masses, we investigate the futuristic, brushed metal world of Merlancia Industries.

38 Shareware
A decidedly textual theme this month.

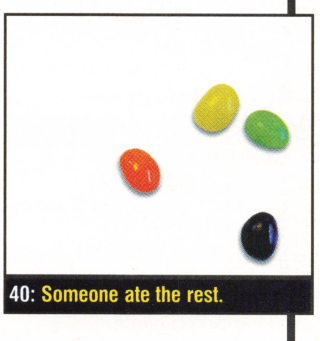
40 Active Media
Discover how the 'net works with the aid of a few jellly-beans. Don't eat them all!



32: Lights on, lights off. Lights on...



36: Off to a flying start?



40: Someone ate the rest.



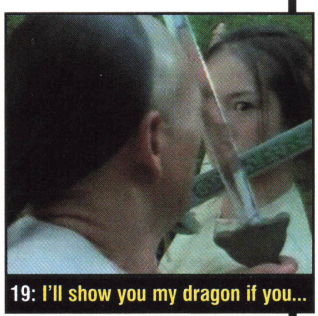


Features

14 Two Computers...
...are better than one. Let's face it, there are some things the Amiga can't do. Some people let their loyalty get in the way of sampling the best of both worlds, but their is a third way. We'll show you how to use an Amiga and PC in harmony.

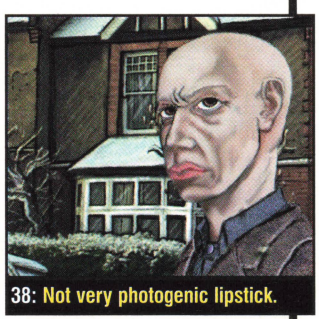

14: Insert floppy in any drive.

19 Digital Video
Moving pictures have come a long way since 1985, but the terminology isn't getting any easier. What is it all about, and what does it all mean for the Amiga?


19: I'll show you my dragon if you...

28 Foreign Invasion!
Getting to grips with the multitude of document formats created by other platforms can be a nightmare. We show you how to ease the pain.

38 Photogenics
Continuing our latest Masterclass series, we look at a few more advanced techniques in Photogenics.


38: Not very photogenic lipstick.

46 OS3.9
Concluding our OS3.9 series, it's time to add some multimedia functionality and divulge some of our top tips for the latest Amiga OS.

AACD 23

Genetic Species

This is the full version of this game, no made freely available to the Amiga community. It is BIG so we had to compress it to make room on the CD for the other goodies we have for you. There is an installer to uncompress it to your hard drive, you'll need around 320MB of free space.



Last Month and Updates

These are two new drawers added to the CD. The CD goes to press before the magazine, so we cannot always include support files for all articles. The Last Month drawer contains support files for articles in the previous month's *Amiga Active*, as well as fixes for any problems that may have surfaced.

The Updates drawer contains links to any updates to previous AACD software. It means you can quickly check for new versions of software you already use as soon as you load the CD.

OS3.9

All the files mentioned in last month's OS 3.9 Masterclass, plus plenty more for this month's article. To really get the most from OS 3.9, read the Masterclasses before trying the software.

...and much, much more!

As always, this is only scratching the surface. Double-click the Welcome icon and have a good browse around the CD for yourself. Our easy-to-use Search program will help if you're looking for something in particular.





ACTIVE News

Amiga Active brings you the latest news from the Amiga industry. news@amigactive.com

The Fastest Amiga Ever?



Before you read any further, check your calendars. It isn't April Fools' Day, is it? Okay, read on.

An Amiga emulator has arrived in the *Amiga Active* offices this month which, if released, will be on the Christmas list of every Amiga owner with a PC.

Why? Because it's fast - and when we say fast, we don't mean *"as fast as a 68k Amiga"* or *"a little faster than an '060/50."* No, when we say fast, we mean this thing will blow your socks off. If we were to show you a video of this Amiga emulator running, you'd probably accuse us of speeding up the tape. And the version we have been allowed to see is already several months old.

We aren't at liberty to tell you who created this emulator, nor can we divulge which software platform it runs on top of. All we can disclose about the host is that it's a small, powerful operating system not dissimilar in many respects to the classic Amiga OS. It isn't Linux, and it certainly isn't Windows.

We haven't had a lot of time to experiment with this emulator ourselves before going to press, but we have been able to run a couple of applications to gauge its performance. Before talking about the results of our tests, however, we should tell you what we can about the technicalities.

Features

The hardware platform is standard x86 PC fare, which means we were able to run this Amiga emulator on a beefy 1.2GHz AMD Athlon. It is a 68k Amiga emulator - PPC doesn't enter into the equation. Current features of the emulation we have been shown include CD-ROM support via CacheCDFS and network support (without TCP/IP on the Amiga side - network calls are re-routed through the host OS). Missing features which either have been - or will be - added to later versions include printing, audio support (via a pre-configured installation of AHI on the Amiga side) and joystick support. AGA chipset emulation is also missing from this early beta version, so classic Amiga games cannot be run, unlike on WinUAE.

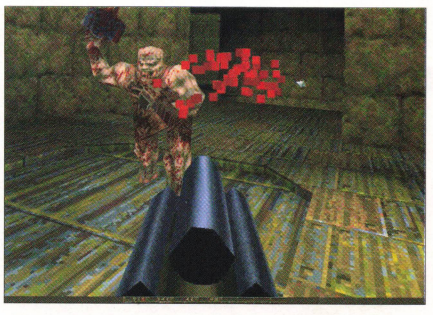
Other games, however, like Quake - the original 68k conversion from ClickBOOM, not the later PPC ports or the 3D accelerated PPC version, GLQuakeWOS - do work. Which is where it gets interesting. A fresh installation of 68k Quake, without any patches or tweaks, runs slowly on even the fastest 68k Amiga. Take a look back at issue 7 of *Amiga Active* and you'll see that we ran 'Timedemo Demo2' from the Quake console on an '060/50 Amiga and achieved a mere 2.9fps (frames per second) at a resolution of 640x480. In last month's review of the WinUAE Amiga emulator with Just In Time compilation engine (also running on a 1.2GHz AMD machine like this emulator), the same fresh install of Quake achieved just over 6fps. Not bad for an emulation, but certainly nothing special.

By contrast, on this Amiga emulator, Quake at 640x480 runs at a slick 24fps and is still playable at 1024x768, where it manages a quite impressive 12fps. Remind yourselves that this is 68k Quake we're talking about. GLQuakeWOS - a 3D accelerated, PowerPC port of Quake, is still a lot slower on an Amiga equipped with a BlizzardPPC accelerator and Permedia2 BVision 3d graphics card (14.8fps at 640x480).

After trying out Quake, we had to try Payback. A quick test with the demo from AACD19 confirmed our suspicions - the Quake test wasn't rigged. It's a little tricky to judge, but after blowing a few cars up we'd say that at 1280x1024, Payback runs at a similar speed as it does at 320x256 on an '060/50.

Action, OS3.9's default movie player, doesn't work on the emulator as yet, but Frogger does. We watched Bill Gates getting pied at full speed, then increased Frogger's window to cover the whole Workbench screen (1280x1024) and watched again - at around 10fps. As for Workbench operation, windows full of icons open like greased lightning and large screen backdrops appear in just a couple of seconds.

There are bugs to iron out, admittedly. But we still can't wait for this Amiga emulator to be released. That's all we can say for now. We'll keep you posted.



Above: 68k Quake. Very big. Very fast.

Editorial

Psion Refocuses

Just as we were going to press, Psion announced that it is to pull away from the comsumer handheld sector and refocus on industrial and enterprise markets and strategic investment.

The announcement comes after an extensive review of its businesses highlighted Psion's continued poor performance in the handheld computer sector and related mobile communications markets.

Psion's planned range of Bluetooth-enabled products for the consumer market, which were due to be launched in the second half of the year, have been cancelled due to the *"slower than anticipated establishment"* of the wireless technology.

Psion's netBook range for education and corporate markets will still be developed under Psion Digital and the existing line of Psion handhelds will continue to be supported and sold, whilst the company's existing IP (Intellectual Property) rights will allow them to develop *"innovative mobile networking products and solutions in high value markets."* Psion also intends to increase revenue by licensing its IP to other companies.

Although Psion Group's provisional revenues for the first half of 2001 are up five percent on last year, revenues for Psion Digital have dropped to £36million from £77m for the same period in 2000. By contrast, Psion's enterprise division, Psion Teklogix - who in March announced a relationship with Amiga's OS partner Tao Group - reported revenues of £63m compared to £17m last year (although it should be noted that Psion Teklogix was created from the merger of Teklogix Operations, acquired by Psion in September 2000).

New Enterprise

"Psion Teklogix, operating in profitable wireless enterprise markets, will show continued growth this year, despite cutbacks in capital spending in North America." stated Psion CEO David Levin. *"It is set to extend its position as our main operating division and we will be launching a new range of industrial products in September".*

Having sold between five and six million handhelds since it entered the market in the 1980s, Psion's decision to focus their attention on enterprise solutions draws a veil over many Amiga users' hopes for an AmigaDE-powered Psion handheld for the consumer market. The business sector, however, has much brighter prospects, with Psion Teklogix and Tao Group working together to provide advanced Java solutions thanks to Tao's intent JTE (Java Technology Edition) which runs on top of Psion's EPOC operating system.

Psion will also continue its investment in Symbian to develop an operating system for the next generation of mobile phones, PCs and handhelds. The company isn't ruling out a return to the consumer handheld sector, although they are unlikely to return before forming additional partnerships.

www.psion.com ▶

Calm before the storm?

It's been a relatively quiet month for us this month, with fewer than usual products being released in the Amiga market. Difficult to believe, we know.

I guess it's only to be expected though, what with it being Summer (well, I'm told it should be happening round about now...). We expect everyone's out rollerblading down the promenade or forgetting to pack the deodorant before heading off to one of the many Summer music festivals. Some of us have to work, you know! So when you're on your way to or from the beach, spare a thought for us, couped up indoors, resisting the urge to go outside and roast meat products over an open flame because we know you'll only drag us over the hot coals if the next issue of AA isn't up to scratch.

There are always notable exceptions, however, and this month is no, um... different. The arrival of the Prometheus was relatively quiet compared to its predecessors, but it gave us yet another reason to open up an Amiga and have a rummage about inside, which is never a bad thing in our book. The latest version of YAM also appeared, giving us yet another reason to use the phrase "yet another" in varied and interesting ways. Then, just as we thought we'd drained the Amiga market dry of news and reviews in preparing this very issue for your enjoyment, a new Amiga emulator lands on our doormat (see lead news story, left) and we duly spent several hours just before deadline grinning like Cheshire cats whilst playing 68k Quake at absurdly high resolutions. Without having to make cups of coffee between screen redraws. We pinched ourselves repeatedly, but I'm happy to report that we weren't dreaming.

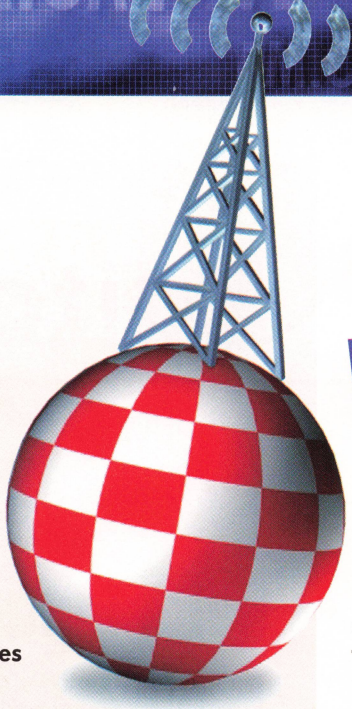
So what can you expect from this issue of *Amiga Active* besides an abundance of features and tutorials on everything from using a PC with your Amiga to touching up a cartoon bloke's lips in Photogenics? How about a flying car in our fresher looking Nextgen section (p36), some pastel coloured peripherals in our Modem Roundup (p32) or some tasty jellybeans that feature quite abundantly in this month's Active Media (p40)? They might have been more abundant, only someone in the office (who Must Absolutely Remain Knameless) was hungry and lacking in self-control!

Anyway, I hope you enjoy this issue. Needless to say we'd appreciate your feedback - and donations to the office ice lolly fund - as always.



David Stroud, Editor.

Maturity and Innovation



Human advancement is widely recognised as being a two-stage process. A new tool, activity or view emerges and is taken on board by a small minority, "early adopters". At this point, the new idea is crude by design. This is both a pull to the early adopters, who tend to love looking 'inside the box' and a push to the vast majority who are interested not in the new itself but in how it will make their lives better.

During this first stage, the entrepreneurs see the potential of the new. They try to 'mature' it, covering up its internals and simplifying its interface so the task becomes more important than the tool itself. In effect, they take the 'techno' out of 'technological', leaving a simple, logical product or service that appeals to the mass market.

The history of computing is one of a new technology that has resolutely refused the maturing process and singularly failed to ignite the promised digital revolution. If any proof is needed, look at where the word "digital" is applied - in very product-centric markets: digital cameras, digital recording, digital TVs - almost everywhere but the one place where it *should* be applied: the computer.

The reason for this is simple - the mass market wants the service, enjoyment and activity without any of the distraction, frustration and pain of having to deal with its implementation. The compact disc is a prime example. The user sees it not as a multiple layers of polymer and metal but as a band's album. They see it as music, and they expect to be able to play that music anywhere - in the car, on the train, when using the computer, in the living room - and they can.

Unfortunately, as is often the way during late maturity, there is often a drive by companies to extend the reach of existing technology rather than take the risk of further innovation.

Amiga saw this happening many years ago, with personal computers and existing software products being pushed as a solution to everything when they clearly were not. We realised that the Internet is wonderful at what it does, but that there was a new type of content around the corner that required the same ease of use and ubiquity, only with a different implementation: executable content.

In the next few weeks, all our hard work, and the hard work of our partners at Tao and the Amiga companies such as Hyperion, e.p.i.c. and Titan will come to fruition when Amiga is able to launch the first set of executable content, firstly for the Sharp Zaurus and then in conjunction with ACE (the Amiga Content Environment) our first desktop consumer product built with AmigaDE technology. Amigans with PCs running Windows or Linux will be able to partake of this immediately, and Amigans buying an AmigaOne and staying with the AmigaOS will have access in OS4.2, when AmigaDE support is added.

This is the future, and Amiga is proud to be back where it is best: out in front.

Fleecy Moss,
Chief Technology Officer Amiga Inc.

Return to World Of Amiga

After deciding that they are duplicating too much effort and diluting too much interest by holding separate Amiga shows, several User Groups from the South-East of England have decided to co-operate on a more substantial Amiga show for the UK - World of Amiga Southeast.

SEAL, the South East Amiga Link, have agreed to convert their standalone Seal-o-Rama show into a bigger event in conjunction with Kickstart, ANT and ASA User Groups, and are working with several of the organisers of the popular WoA '98 and WoA '99 shows. The show, which will be held on November 3rd 2001 at the Poplars Hall in Brentford (just outside London) is sponsored by *Amiga Active* magazine, with the games arena sponsored by Hyperion Software.

Currently confirmed exhibitors are *Amiga Active*, Eyetech, Fore-Matt Home Computing, 100% Amiga, Analogic, Blittersoft and Kicksoft. The show will boast a variety of events including an appearance by Amiga's CTO Fleecy Moss, who will hopefully be demonstrating OS4 and new Amiga hardware, with the possibility of first public displays of AmigaOne and other next generation Amiga hardware and, of course, the delights of a licensed bar.

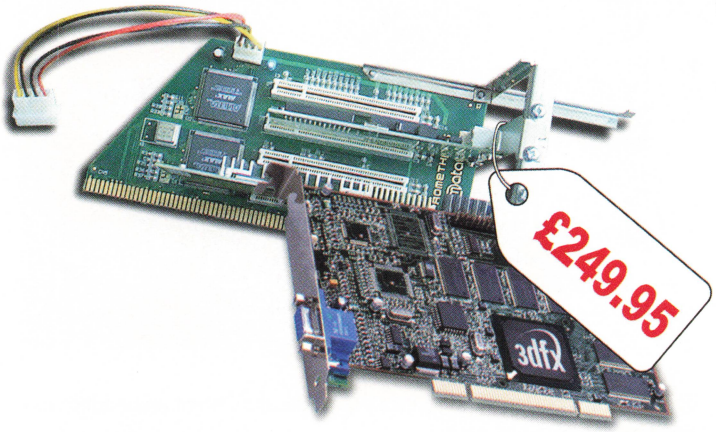
Advance tickets will be available through Amiga dealers shortly. For more information about the show and updates about exhibitors and events that have yet to be confirmed, keep an eye on the World of Amiga web site located at www.worldofamiga.com as well as adverts and further news coverage in *Amiga Active*. Information about our free ticket giveaway for subscribers is on page 57 of this very issue.

Kick More Soft!

The new Kicksoft web site will have gone live by the time this issue of *Amiga Active* hits the shelves. Designed to run on all Amiga browsers, you can access the new site at the usual Kicksoft URL, www.kicksoft.co.uk.

New features of the site include the ability to pay in Pounds Sterling, US Dollars, German Marks, French Francs and even Euros. Payments for the software on offer - which includes Art Effect 4, Pagestream 4, Diavolo and Opus 5 - can also be made via Switch, Solo, Visa, Delta and Mastercard.

www.kicksoft.co.uk



Blittersoft Deals

Blittersoft have announced they are running a deal on the Prometheus PCI busboard for Zorro III Amigas (see our review this issue on page 24) when purchased with a Voodoo3 3000 16MB graphics card.

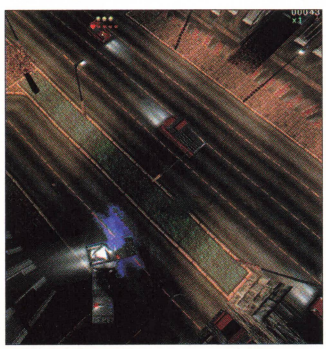
Whilst stocks last, Blittersoft are bundling the two products together for the price of £249.95 (inclusive of VAT). For more information, or to take them up on their offer, call Blittersoft on +44 (0)1908 671122 or visit www.blittersoft.com.

Payback Goes PPC ...and 3D

Since our last update on the PowerPC port of Payback, James Daniels has been hard at work adding a 3D mode to the game.

"[The] new 3D mode rotates the camera with the player and angles it forwards depending on how fast they are going," James tells us. The screenshots reproduced here show Payback running on PPC with full-colour gouraud shading in the new 3D mode. James is quick to point out, however, that, *"the 3D mode isn't finished yet so there are a few graphical glitches in these screenshots."*





Talking Tao

Opening the Way for Content

As I move around Japan I still find it difficult to believe that this is a country with a stagnating economy and deflation. People seem to be getting on happily with their lives, it is still significantly the world's second largest economy, there are more exciting developments going on here in terms of mobile data services than anywhere else - and it remains a fundamental focus for Tao.

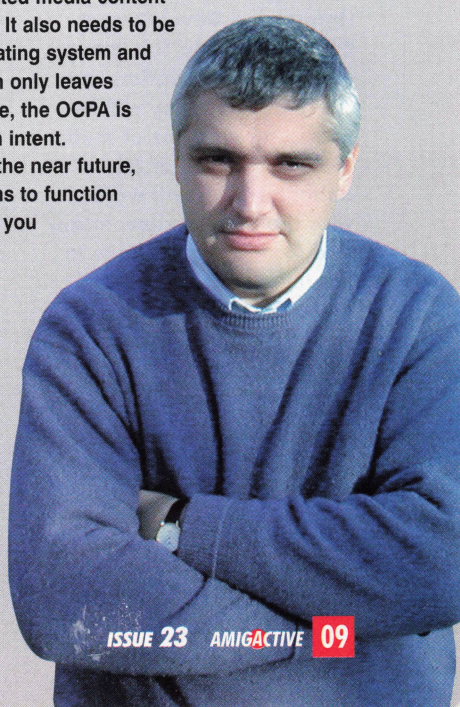
What are the issues in the food chain today? As I have stated in one of my earlier columns, the emphasis for the consumer electronics manufacturers is on bringing a range of differentiated products that can run compelling content to market as quickly and as cheaply as possible. The carriers and broadcasters want to be able to maximise their reach in delivering revenue-bearing content to as many people on as many different devices as possible. For content developers, they need a forum that allows them to distinguish their skills from the rest of the market and provide revenue-generating software. And for consumers, they need to have inspiring, useful or fun software that is easily accessible.

"...inspiring, useful or fun software that is easily accessible."

By the time you read this, the 'Open Contents Platform Association' (OCPA) will have been announced at a press forum in Tokyo on July 12th. There will be more details about this in the next issue of *Amiga Active*, but the creation of this new body will benefit manufacturers, carriers, content developers and consumers because intent enables all of the issues laid out above to be resolved. Essentially, what is happening is that more and more blue chip manufacturers and content providers are agreeing that there needs to be a common and sophisticated media content format that people can write to. It also needs to be independent of hardware, operating system and even computer language, which only leaves one possible solution. Therefore, the OCPA is focussing its entire attention on intent.

We'll delve more into this in the near future, especially after the OCPA begins to function in September. In the meantime, you may wish to ponder on the fact that founder members such as Kyocera, Sharp, JVC, Fujtsu and others form the basis of a solid intent club that means Tao has a disruptive technology that's hitting the mainstream.

Francis Charig,
Chairman of Tao Group.



Merlancia Show
First Signs Of Industry



Merlancia Industries, the offshoot from US Amiga retailers Merlancia, have started to release details of their ambitious next generation Amiga hardware program.

Merlancia have hired a number of well known Amiga industry engineers to work on their plans for a range of Zico specification compliant PowerPC powered multimedia computers, the first of which is due out in November. Amongst the better known names now appearing on the staff pages of Merlancia's web site are CTO Dave Haynie, formerly of Commodore and Metabox, and Chris Aldi, developer of the Reaction GUI system used in OS3.5 and up.

Merlancia have also announced a strategic partnership with Jens Schoenfeld's Individual Computers, developers of Amiga add-ons such as the Kywalda and Catweasel. Individual will be developing the "CLeo" controller device, based on their Catweasel design, which be fitted to their Tsunami workstation to allow reading and writing of Amiga native floppy disks in 880KB or 1.76MB formats.

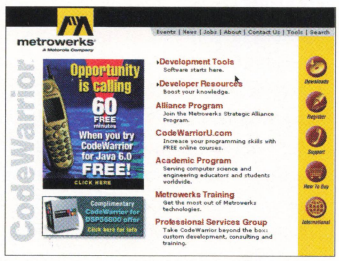
Merlancia's planned range of prestige systems with a unique brushed steel casework motif will include the Tsunami workstation, the Apocalyps desktop system, the Leopard laptop, the Hurricane "Ultra-lite" palm-top, Radian small footprint micro tower system, and Apocalypse ST advanced set-top box. The range are meant to be prestige projects, with current price estimates suggesting that even the low-end devices will be fairly serious products. The range will all be built on PowerPC technology, using a range of different embedded and desktop PowerPC processors.

According to Merlancia's plans the first machine to be released will be the Tsunami, based on bPlan's PegasOS PowerPC motherboard. Three models are currently planned: a 500MHz G4, 733MHz G4 and dual processor 733MHz G4. The motherboard runs on a 133MHz processor bus and utilises PC133 SD-RAM memory in two SD-RAM slots for up to 1GB of RAM. It will offer UltraATA and optional SCSI-III, PCI slots, USB, and an AGP slot, which will be populated with an appropriate Matrox graphics card to fulfil the Zico specifications. Developer machines are due to be delivered any time now, with a public release due by the end of the year. Prices are expected to start at $2000 US.

For more information on Merlancia, check out their web site at www.merlancia.com, turn to page 36 for an interview with Merlancia's CEO, and make sure you read the next issue of *Amiga Active*.

Metrowerks
to bring Codewarrior to intent

Metrowerks are developing their Codewarrior development tools and IDE (Integrated Development Environment) to Tao group's intent, the foundation layer for AmigaDE. They will be providing versions of their IDE, Java compiler and debugger that will work with the SDK to allow intent and Amiga applications to be developed in Codewarrior environment, one of the most popular development environments on a range of platforms including Windows and Playstation 2.



Metrowerks CEO David Perkins said *"Tao's software is being integrated as core technology by world class OEMs - many of whom already use CodeWarrior - for set-top boxes, PDAs, wireless phones, web tablets and other appliances enabling a new generation of premium content for consumers."*

The first Codewarrior release for intent is due in the second half of the year. Metrowerks is an independent subsidiary of Motorola corporation, who are an investor in Tao Group.

New Matrox
Card Finally Revealed

Matrox, Amiga's strategic partner for graphics card support, have finally released full details of their new card, the Matrox G550.

It's known that the G550 is not quite the next generation graphics card from Matrox that Amiga were originally talking about, being more of a half-way house between the developments that are promised for their true next generation chipsets and the now aging G400 line.

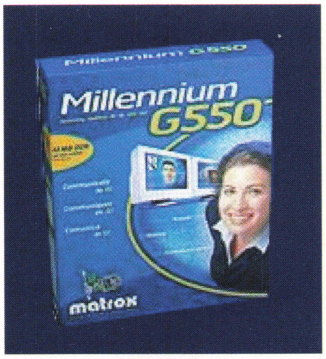
The G550 adopts a slightly unusual position for Matrox in the market, being at the lower end of the premium product price range - estimated price is under $200. The G550 has 32MB of DDR RAM, a 360MHz RAMDAC giving resolutions up to 2048 x 1536 in 32-bit, dual monitor support, DVD playback and a 3D renderer with two pixel pipelines with two texture units per pipeline, offering features such as environmental bump-mapping and matrix palette skinning (vertex shading). Early testers have suggested that the 3D performance is very good if not up to the standards of more expensive top end cards from leading rivals.

One reason Amiga gave for favoring Matrox is that rather than aiming simply for maximum pixel throughput, they develop unique technologies in

Analogic get Apollo

Analogic Computers, one of the leading UK Amiga dealers and repair houses, has acquired the rights from ACT to manufacture the range of Apollo A1200 accelerators. This has enabled Analogic to sell the Apollo boards at specially reduced prices.

The Apollo range includes an '030 40MHz accelerator at under £60 inclusive, going up to the Apollo LC 1260/66, a 66MHz '060 accelerator without FPU at £175 and the full '060 50MHz accelerator at £150. There are no PowerPC accelerators from the Apollo stable, but if you are interested in acquiring a new 68k accelerator for your A1200, surf over to Analogic's web site at www.analogic.co.uk or look for their advert on page 27.



their cards. Matrox certainly live up to their billing with the G550, which included Matrox's new Headcasting engine.

This is a hardware/software solution which allows 3D models of a head to be animated and lip-synched - a kind of hardware Max Headroom generator that Matrox believe will be a great use in tele-meetings and business presentation situations. Whether Amiga will support this feature in the new OS is something we will have to wait and see.

News In Brief

Apache Morphs

A new version of Apache, the most popular web server software, has been released for MorphOS. Featuring built-in PHP scripting support, your MorphOS-powered Amiga can now serve static web pages and process complicated PHP scripts "at lightning speed." Download it from the MorphOS web site.

www.morphos.de

Summer Sale

Haage & Partner have got some good deals going on Amiga products bought via their web site. ArtEffect 4 and AmigaWriter 2.2 are both selling for DM89, FontMachine is going for DM69 and an update to rendering package Tornado3D to version 3.0 (from versions 1.5 or 2.0) is up for grabs at the knockdown price of DM198 (was DM489). Meanwhile, on the hardware side, the HyperCOM 1 serial port can be yours for just DM39. These offers are only available online, whilst stocks last, so nip over to Haage & Partner's web site, stat!

www.haage-partner.com

Virus Help Wanted

Virus Help Denmark are looking for volunteers to translate German documentation for 200 Amiga viruses to English. You won't be paid, but you will have the knowledge that you're doing it for a good cause, so contact Jan Andersen if you'd like to help out.

www.vht-dk.dk

CD32 4 Windows?

Airsoft Softwair have announced the release of a CD32 Games Install kit for WinUAE. A custom version of the Amiga emulator is required, and can be downloaded from Airsoft Softwair's web site. The catch: the kit is only available for download from the restricted area of the web site, which can only be accessed by owners of Airsoft Softwair's Gold Edition CD-ROM (see our review in issue 19).

www.airsoftsoftwair.de

PC ToT

No, not Politically Correct... Tales of Tamar, the Internet turn-based strategy game for the Amiga being developed by Eternity Software is also being developed for the PC and has reached version 0.2. Tales of Tamar promises the ability to link Amiga, Atari and PC in a vast online trading game. Eternity are still after testers for each platform.

New Software

A new version of ClassAction for the Amiga is now available from author Martin Elsner's web site. New features include configurable icons and more advanced archive handling. Martin plans to add more features and release another version later in the year. Keep an eye on Aminet, where it should be available by the time you read this.

Also on Aminet is v4.16 of DirOpus, which is now localised in Finnish, French, German, Italian, Polish and Spanish. Other languages including Portugese, Russion, Czech and Norweigan will be supported in a future update.

Wolf Faust's Universal Filter for Pagestream has now reached version 2.10. You can download the Filter plugin from www.uni.coloraid.de.

Our starry-eyed readers will be pleased to hear that Digital Almanac 3, update 3.8 has now been released on Aminet as misc/sci/da3v38.lha

Product Watch

Once again, you happen to glance upon the Amiga Active product watch and upcoming events listing. We bid you welcome to this ever changing world of times and places.

Mystical ramblings over with, let's not waste any time in telling you what's happening when and where in the Amiga market, as we see it this month. Details correct at time of going to press...

3Q 2001:

- **Repulse** - We hope to have a review soon. Honest.
- **New Mediators** - One of which has recently arrived.
- **SharkPPC G3/G4** - We still think it's nearly here.
- **Earth2140 Missions** - For e.p.i.c's real-time strategy port, reviewed in AA20.
- **PaybackPPC** - See news item this issue on page 9.
- **Pianeta Amiga 2001** - No word yet on dates.
- **Saku 2001** - Vantaa, Finand, Saturday Sep. 1st.

4Q 2001:

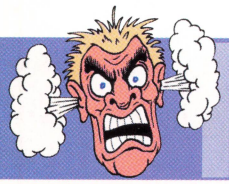
- **AmigaOS 4.0** - Which will require an...
- **AmigaOne** - Rescheduled slightly (see Eyetech's web site) but still on course for arrival by Christmas.
- **World Of Amiga SouthEast** - Saturday November 3rd. See news item on page 8 of this issue and www.worldofamiga.com for more details.

In the distance:

- **AmigaOS 4.2, 4.5, 5.0** - At six month intervals.
- **Many Games** - See AA21's Active Gamer.

If we've missed something out, please tell us! E-mail upcoming@amigactive.com

upcoming@amigactive.com



Rants and Raves

Bill & Fleecy's Excellent Adventure.

Amiga Inc. have, it seems, finally got somewhere. New Amigas with a new OS are due in a matter of weeks. "What next?" asks Andrew Korn.

So, at last, it seems that we are shortly going to get the new Amigas we have been waiting for these many years. Genuine, PowerPC powered desktop Amigas with hardware that brings them bang up-to-date for the first time in who knows how long. An Operating system with the familiar advantages of AmigaOS and a significantly increased functionality, and before long - thanks to the AmigaDE - a software environment that will run on other platforms from PDAs and Set-top boxes upwards that will bring us access to many of those modern formats such as Java that we have been missing. It will also in a stroke provide us with a software layer which will be much more pervasive than the Amiga desktop market, which means that software houses will suddenly have a much better reason for developing Amiga software than they have had in years.

Making the most of the desktop

So far so good, but a good strategy goes far beyond getting the technical solution right. What do Amiga Inc. need to be doing next, and what options are available for them to ensure that the rebirth of the Amiga is a renaissance not a still-birth?

Macintosh users have a market that in some way reflects the Amiga market and in other ways differs from it. Whilst in a much stronger position due to the Mac's dominance in a few niche markets and a parent company that never went bust, the minority position has left its mark, and perhaps the most obvious way this shows up is that despite Apple's attempts to target home users and push the Mac as an entertainment platform, this is still an area the Mac is relatively weak. Mac games and entertainment software is in short supply, and developers are nervous of committing to a small market like this one.

So just think of the advantage if Amiga spent a little time working with Macintosh hardware. I don't mean that AmigaOS should be written to run on Mac hardware - that's something I've believed for a long time, but it's not quite the issue here. Rather I mean that Amiga should ensure that the AmigaDE is a capable enough environment to run desktop-style entertainment software, and should make it available for the Macintosh. Suddenly developers have a new platform to develop for - AmigaDE - which will run on both Amiga and Macintosh computers. This means they have a larger - and more tempting - target to develop for.

Macs aren't the only other alternative computing platform around. Linux has become a popular platform for hardcore computer users, and again has games market that is a little too small for most large developers to consider. However the Amiga DE runs on Linux too, so as a development target it could be offering three target markets for the price of one.

Now comes the key to Amiga's potential future success: marketing. I don't need to tell any of you how important marketing is, but the kind of marketing is of great importance. Amiga simply can't afford to go head to head with Microsoft on huge advertising campaigns, so why not target those smaller markets, and most importantly target developers.

If AmigaDE runs on all these different platforms, then for the first time Amiga offers a unified multi-platform target for developers that could turn a number of markets that are too small to be appealing into a single market that is large enough for developers to want to write for. AmigaDE could be sold as the umbrella solution for all the alternatives to Windows. Of course once the developers are hooked, Amiga can point them to all the Digitial Convergence devices these companies will be able to target too - and if they are feeling really, really sneaky they can point out that the AmigaDE also runs on Windows...

Andrew Korn A

"Amiga simply can't afford to go head to head with Microsoft on huge advertising campaigns..."

All together, now.

Why stop there? Porting the DE is just a matter of ensuring that there's an abstraction layer for the host OS and host CPU. As the latter is already in existence, why not a RiscOS version too?

It would be a minimal amount of work, so we might as well have that little extra market segment too. QNX, BeOS and anything else you can think of offer the same value - let's have them all.

interact !

Agree? Disagree?

If what you've read on these pages has made you think, we'd like to hear your views. Write to us or email the usual address...

interactive@amigactive.com

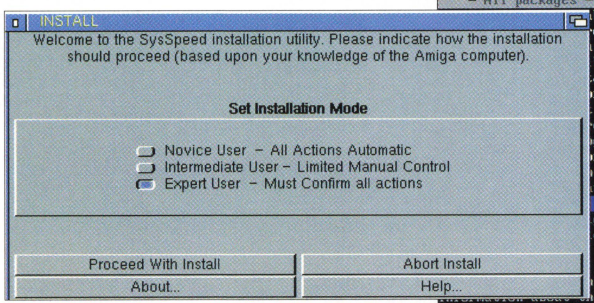
Rants and Raves

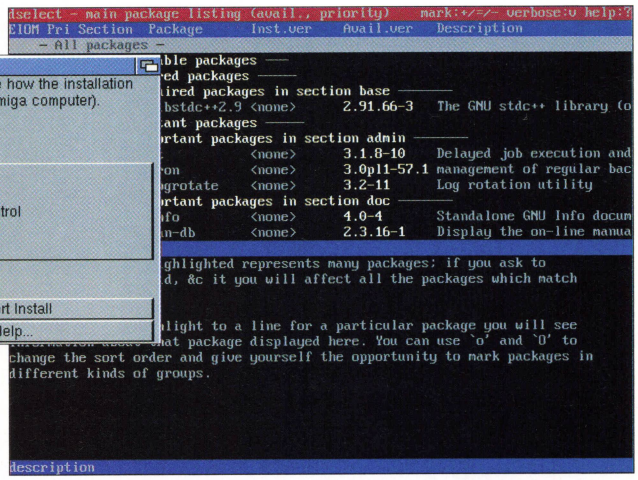


Choose Installation Mode...

Neil Bothwick dreams of the day when installing software is as easy - and as quick - as making a cup of tea.

I have been installing a lot of software lately, on a range of operating systems. It is at times like this that you realise what a pain all of the installation systems can be. Whatever else finds its way into OS 5.0, I really hope it can have a decent system for installing and uninstalling software that treats you like neither a simpleton nor a rocket scientist.





The Amiga installer scripting system is fairly good, provided people use it properly. It's messed up by lazy script authors who use the copyfiles command to copy libraries, instead of the extra two lines needed to use the correct command that checks version numbers instead of overwriting your nice new libraries with old, buggy ones. If I am going to have bugs on my system, at least let me keep the latest versions. It can also fall down when it depends on libraries or programs from other sources. While it would be pointless for every other archive on Aminet to contain a copy of reqtools.library, we need a way for an installer to get the files it needs.

Uninstalling on the Amiga is another matter. With no system-wide record of which programs use which shared resources, there's no way to know what to delete when removing a program, apart from the contents of the program's own directory. This means we end up with a boot drive cluttered with libraries and fonts from programs that we tried and then deleted.

Windows takes the "user is not to be trusted" approach. All of the installation files are bundled in a single executable, so there's no easy way to see what will be installed before you try, not even a way to skim through the documentation to see if you even want to install it. On top of that, there's Windows' insistence on rebooting every time you change anything more significant than your speakers' volume. The self-contained installation package means you shouldn't run into problems with the software not working because of missing components, but it also gives the opportunity to stop other programs working without you even knowing why.

If you don't want to reboot after installing software, try Linux. Many Linux users would rather sell their children than reboot and end their carefully guarded uptime. Installing

"Many Linux users would rather sell their children than reboot..."

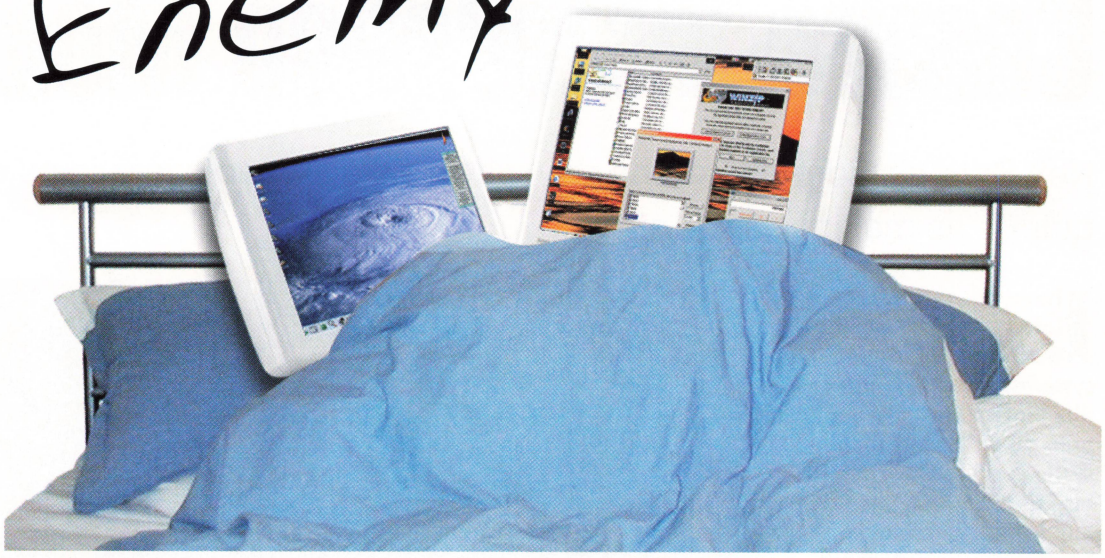
Linux software is so user-friendly: simply download the source code, configure it and compile it. Yeah, right. Admittedly, systems like the RedHat Package Manager make installing pre-compiled software easier, as well as uninstalling it. But then the user gets caught up in a mass of unresolved dependencies. Package A requires a newer version of Package B, so you download and install Package B, only to be told that Package C needs the older version of Package B. So you go chasing down a later version of Package C in the hope this will be compatible. The whole thing turns into a nightmare paper chase across several FTP and web sites. Uninstallling can be just as tricky. It could work, if it was made more informative and user-friendly, offering to download any other packages you need, checking them for dependencies before starting the install process. But it still doesn't give the user any control over what goes where on their system.

So what do I want? I want an installation system that will take care of everything if I so choose, downloading and installing all required components. I also want it to keep me informed about every step of the process if I so choose. I want to have some control over where an installer puts files, rather than having someone else's idea of a suitable organisation forced on me. I want to be able to read the documentation for a program before I install it. Finally, I want to be able to undo all of the above, cleanly, removing all traces of the program while leaving all else unaffected.

Is that really too much to ask?

Neil Bothwick A

Sleeping with the Enemy



Getting a PC doesn't mean turning your back on the Amiga any more. We take a look at the advantages of dual computer ownership.

For a long time we've had the notion that Amiga or PC was a fundamental lifestyle choice. Either you stayed with the idealist's computer and kept your Amiga, or you sacrificed common sense and user friendliness for more power and a wider range of software. You were an Amiga User or you were a PC User. Things change. Nowadays pragmatism has shifted a lot of Amiga users' views of Windows computers - there's a pretty high chance that you, as a reader of *Amiga Active*, have finally given in and got yourself (or someone else in your family) a PC to perform the tasks the Amiga does not.

From time to time we get mails from people who have been forced by necessity of work (or quite frequently familial pressure) to take the plunge and enter the WIntel world, who seem to feel a need to apologise for a betrayal. Perhaps because of all those years of taking one side or another, many people forget that there's a third way, and it is without a question the best option - have both. It's true that PCs can now do some things that Amigas can't. They have USB, they run ultra cheap WinPrinters, they run a whole raft of nice games and they're a lot more likely to work properly with your bank's web site for on-line banking. Getting these advantages does not mean you have to dispose of the advantages you have become used to as an Amiga user.

One thing people have largely missed out on because of the view of PCs and Amigas as deadly rivals is that they can actually work together so well that it's worth considering getting yourself a cheap PC even if you are a dedicated Amiga user; with a bit of thought a PC can become an excellent add-on to your Amiga, saving you considerable time and money.

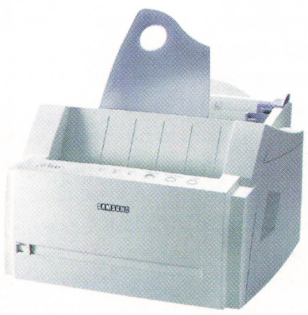
Take two of the aforementioned examples: USB and WinPrinters. All you need to handle this sort of thing is the kind of PC you can pick up as remaindered stock for a hundred quid or less. Look for one in a "pizza box" case and you've got a nice monitor stand into the bargain. By using this PC as a dumb Internet gateway, you can equip your Amiga with broadband Internet access via BT's ADSL, which is only available to USB capable computers at the moment. Using Samba's network printing option, you can benefit from ridiculously cheap Window-only WinPrinters - laser printers start at around £100. You could add the price of a very low end PC to that and it would still be cheaper than most standalone laser printers that work with the Amiga.

Fitting it all in

So for whatever reason, you've got yourself a PC. The first thing that is likely to concern you is space; most people don't have the room (or wallet) for two computers, and all their assorted peripherals - but this shouldn't be much of a problem. The actual computer cases themselves don't have to take up too much room.



Above: Adapt your PC mouse with... a PC mouse adapter like the EZMouse or Punchinello!



Left: The Samsung ML4500, excellent value-for-money laser printing, if you have Windows.

"...a PC can become an excellent add-on to your Amiga..."

Two tower cases next to each other is not such an obtrusive situation and if desk-space is really at a premium, then you can always stick one case under the desk. If you're buying a PC as a workhorse companion for your Amiga then you can look for a machine that takes up a small amount of room; for most of the tasks described here you don't need a real power machine, so keep an eye out for older pizza-box style PCs - that will fit beneath your monitor - or more modern, small cased "lifestyle" PCs using the BookPC or similar miniature casework. If you don't have your PC yet you might consider using Eyetech's EZ-PC case solution, which allows an A1200 motherboard and a PC motherboard to be mounted in the same case.



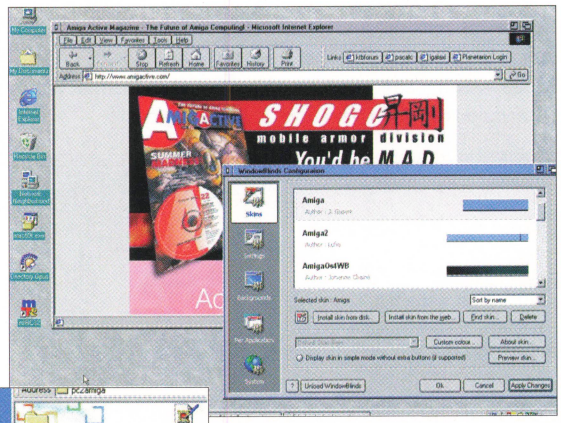
Above: Switch your keyboard, mouse and monitor between two computers with this switchbox from Maplin.

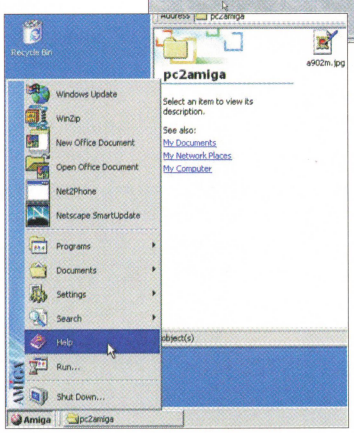
With that out of the way we move onto the real problem; keyboards, mice, and monitors. These are the things that take up real desk-space, and finding enough room for two of each could be difficult. The simple answer is to share. There are add-ons for the Amiga that will allow you to use PC keyboards and mice, and if you have either a graphics card or a scandoubler, you can use any SVGA monitor with your Amiga, too. With these components fitted, there's no reason why the same keyboard, mouse and monitor can't be connected to both your Amiga and your PC.

The chances are that if you've got a towered Amiga you are already using a PC keyboard - most towered Amigas will already have a keyboard interface to allow you to use standard 5-pin DIN or mini DIN PS2 keyboards. If not you'll have to get one. Both Power Computing (www.powerc.com) and Eyetech (www.eyetech.co.uk) supply keyboard interfaces. PC mice can be used with the EZ-Mouse or Punchinello interfaces, from Eyetech and Power respectively. Both plug into the Amiga's mouse port and allow PS2 wheel mice to be connected. Video can be a slightly more complex issue - graphic cards will output to a standard PC SVGA monitor, but AGA won't. You may already use a scan doubler and/or mode splitter to run an SVGA monitor - if not, there are a host of options available to suit any configuration.

Eyetech specialise in these sorts of solutions and even offer ready-to-go Amiga / PC combos with all the switching gear built in. If you're not building from the ground up and already have the necessary hardware in your Amiga Tower then it's just a matter of getting yourself a switch box that will allow you to swap the components from one computer to another. There are many such switch boxes on the market; Maplin electronics (www.maplin.co.uk) do a switchbox (order number VC44X) that will switch monitor, keyboard and mouse between two computers with a single switch. Teknix (www.teknix.co.uk) also do a range of switchers from the cheap and basic to expensive multi-way models.

One problem with this technique is that the image quality will be degraded by a monitor switcher, and in the case of the cheaper ones possibly quite severely. The ideal solution is to use the keyboard and mouse through the switchbox and get yourself a monitor with dual inputs. There are a fair number of these on the market - CTX do 17" and 19" models at the lower end, while Viewsonic, NEC, Iiyama and Sony are amongst the companies that make more expensive models.





Above: WindowBlinds allows you to transform the appearance of your Windows desktop to make it more like Workbench.
Left: Tclock - it's just for fun.

A taste of Amiga

There are a variety of things you can do to make your daily Windows experience a little bit more Amiga like, from the purely cosmetic to the fairly radical. You can get Amiga-style mouse pointers, Windows Icons (there's even an application that converts Amiga NewIcons into Windows Icons), backdrops and themes to make yourself feel more at home. You might also be interested in Kazuto Sato's Tclock, which allows your task bar to be customised as shown in the accompanying picture. More drastic measures can be taken with a Windows skinning utility such as WindowBlinds, for which there are half a dozen Amiga skins available. These can be a little more than cosmetic - the window gadgets are changed, and some of the skins even provide Amiga-like window stacking.



Two Into One

The monitor is one of the most important components to your computer - it's certainly the one you look at the most. It's always a good idea to get the best monitor you can afford, but with two computers that can be expensive - and take up a lot of room.

If you want to make your dual-computing experience a lot nicer, you could invest in a large screen, dual input monitor such as the Iiyama 451 Pro. This monitor costs about £370 (street price). It uses a 19" Mitsubishi Diamondtron screen, which provides a very flat image with good colour balance. The fine horizontal tensioning lines are more visible than with some types of flat tube technology, but this is a fair price to pay for a good, crisp image.

There are two standard 15-pin SVGA connectors on the back, for connection to two computers. A button on the front allows you to switch easily between the two inputs. There is also a pair of speakers built into the stand, which is an added convenience for the dual computer user - one machine can be connected to the monitor and the other to external speakers.

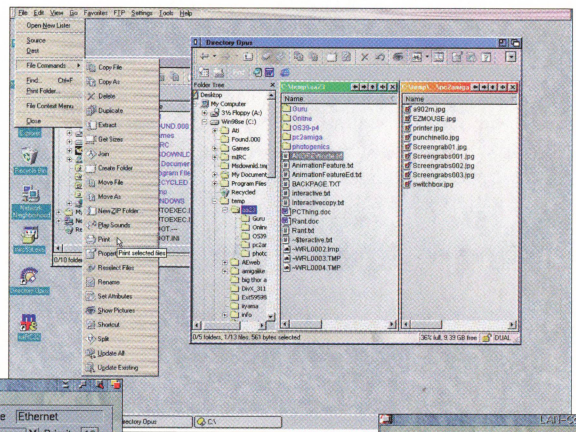
"Yes, it's our old friends Greg Perry and Jon Potter..."

An excellent resource for these little tweaks and tricks is T-Bone's Amiga Stuff web site (www.west.net/~tbone/amiga_old.html) which has links for everything from Amiga style start-up screen replacements to Truetype versions of the Topaz font (presumably just to annoy our Editor).

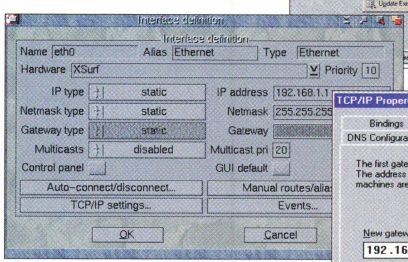
For the ultimate "Amigising" of your PC, head over to www.gpsoft.com.au. Yes, it's our old friends Greg Perry and Jon Potter, who have just released Directory Opus for Windows. Inevitably it's not exactly the same as the Amiga version as it builds upon a different underlying desktop environment, but it does an excellent job of converting as much as possible of the Directory Opus experience to the Windows Explorer file manager.

Directory Opus for the PC is configurable in a way that will be very familiar to users of Amiga DirOpus Magellan, and includes many of those favorite features such as user definable context menus, ZIP files treated as directories and locally mountable FTP transfer with site-to-site capabilities. Just about every aspect of it is dockable, so you can either use separate windows or an Opus 4.0 dual-pane view, or switch between them at will. The various toolbars and menus are again easily configured to suit your own personal working environment and they too can be undocked to give yourself those old Directory Opus style button bars. You can even dock the menu bar with the top of your screen for an extra Amiga-like experience.

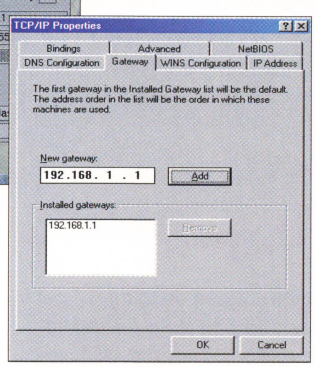
Windows requires something like Directory Opus even more than Workbench does, and it doesn't take long for you to start feeling lost without it once you've tried it, something Amiga users of Directory Opus Magellan will be familiar with. If you're used to the wonders of a well-configured Directory Opus Workbench, installing Directory Opus on your PC will soften the transition to Windows considerably.



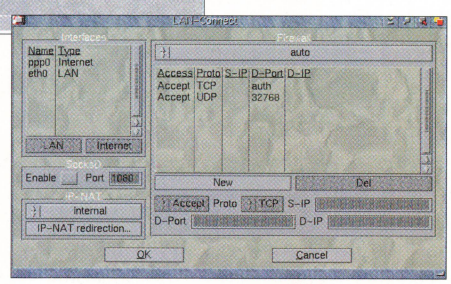
Right: Mmmm, Directory Opus for Windows.



Above: Set up your Ethernet and dialup interfaces as normal...



Above: ...tell the PC where to look for the Internet...



Above: ...then link them in the TCP/IP LAN-Connect section.

Two computers, one modem, no problem

If you have one or more Amigas and PCs, it makes sense to let them all share the same Internet connection. One machine is connected directly to the Internet and acts as a "gateway" for the others. There are three main ways to do this: use an Amiga as the gateway, use a PC as the gateway or use a dedicated box for the gateway. We'll look at each option here in turn.

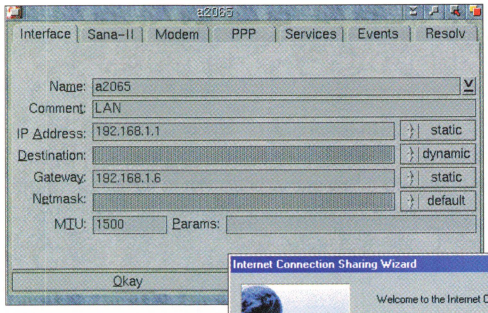
To use your Amiga as the gateway, you will need to connect with Miami Deluxe. Genesis doesn't support Network Address Translation (NAT), which is needed to share a connection effectively. Assuming you have MiamiDx installed and working correctly, you should have two working and tested interfaces, one for your Internet connection and one for your local Ethernet. Edit the Interface Definition for your Internet connection, click on TCP/IP Settings and set "Get dynamic hostname priority" to zero. Click OK until you get back to the main Interface list and edit the Ethernet connection. Set the Gateway Priority to zero. All other settings can stay at their defaults.

Now go to the TCP/IP page, tick the Gateway box and press the LAN-Connect button. Check that your dialup interface is set to Internet and your Ethernet to LAN. Set IP-NAT to "internal" and Firewall to "auto". Click OK and save the settings. That's it; your Amiga will now share its Internet connection with any computer connected to its LAN interface. Moreover, you have a firewall that prevents unauthorised access from computers on the Internet to anything on the LAN. In the context of the firewall, a LAN interface is considered trustworthy while an Internet one is not.

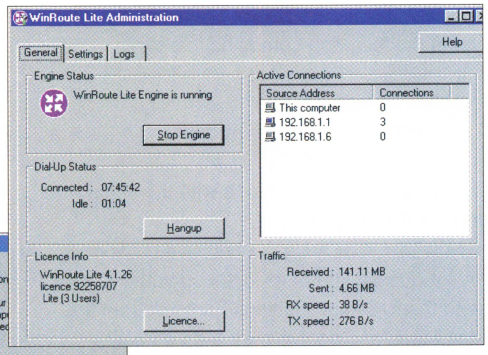
All you need to do now is set each other machine on your network to use the IP address of your Amiga as their Internet gateway. You also need to set the DNS servers on each machine to the addresses listed on MiamiDx's Database page. To do this on Windows, open the Network Settings in Control Panel. Select the TCP/IP protocol for your network card and click Properties. Go to the Gateway tab and add the IP address of your Amiga. Then go to the DNS tab and add the DNS addresses for your ISP. Now your PC is sharing your Amiga's Internet connection.

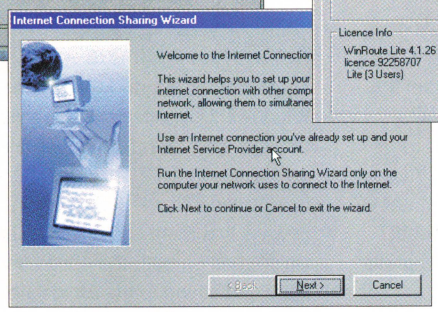
Doing it the PC way

To use a PC as a gateway, you need to install Internet Connection Sharing (ICS), a feature of Win98SE onwards. Select "Add/Remove Programs" from the Control Panel. Select the Windows Setup tab, click on "Internet Tools" and the "Details" button. Tick "Internet Connection Sharing", and then click OK twice. Windows should install ICS; have your CD ready, and start the ICS wizard. The Wizard will offer to create a setup disk for configuring other Windows machines. Skip this if you



Above: Set the PC as the gateway in Genesis' or Miami's Interface definition.





Right: WinRoute provides a secure alternative to Windows' own ICS.

Left: Sharing the PC's connection is only a matter of running the Wizard, securing it is another matter.

"...use an old PC as a dedicated router."

only have the one. Now you need to set the PC's IP address as the gateway in Miami or Genesis on the Amiga.

Unlike MiamiDx, ICS only shares your Internet connection; it doesn't provide any firewall security. An Amiga is reasonably secure anyway, because the script kiddies are only looking for Windows machines to hack, but your PC is highly vulnerable if online for more than a few minutes at a time. There are two solutions. One is to install separate firewall software, such as ZoneAlarm. You can download this from http://www.zonelabs.com. Zonealarm Pro is commercial, but the basic version is free for personal use.

The alternative is to replace ICS with something that has its own security like WinRoute Lite. This is commercial software, but it has been given away on a couple of PC magazine cover CDs recently and could be on PC Plus' coverdisc this month or next.

If your Internet connection is dial-up, either way will work well, although the Amiga is easier to set up as a gateway. If you have a cable or DSL connection via Ethernet, the gateway machine will need two Ethernet cards - one to connect to the net and one for the LAN. This rules out using an A1200 as there is only one PCMCIA slot, and makes using a big box Amiga rather expensive. If you use the basic ADSL service in the UK, you'll have a USB modem, so the PC has to be used as the gateway.

There is a third alternative - to use an old PC as a dedicated router. I picked up an old Compaq P100 for £35+VAT but have also seen 486 base units for £5 at a computer fair. By installing one of the Linux based router systems, you don't even need a keyboard or monitor; everything is controlled by connecting to the router with a web browser from any machine on the network.

Two good examples of this are SmoothWall (http://www.smoothwall.org) and Linux router Project (http://www.linuxrouter.org). The latter fits on a bootable floppy, so you don't even need a hard drive, which makes for a quiet machine. SmoothWall is bigger, but more flexible and easier to get to grips with. The advantage of a separate router is that this machine is only doing one job so it will be stable. My P100 has run for more than two weeks without a problem, and only stopped then because I needed to turn it off.

A "working" desktop computer is more likely to crash or need rebooting when new hardware or software are installed. A separate, old computer, also makes a handy print server for a network.

Printer sharing

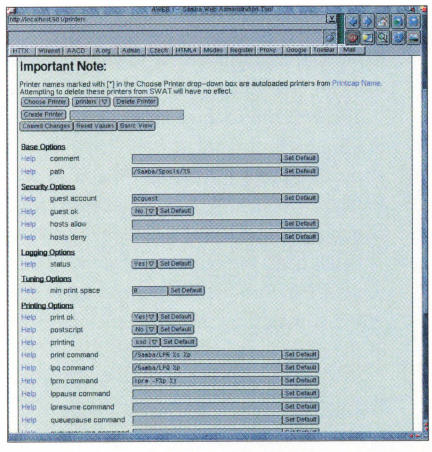
Samba provides a reasonably easy way to share files between PCs and Amigas. We covered the set-up and use of Samba for file sharing in detail in issue 4 of *Amiga Active*. Samba doesn't only share drives; it handles printers too. Let's look at sharing a printer on the Amiga first. AmigaOS doesn't have support for network printing as standard, so we need to add a couple of commands to help with this.

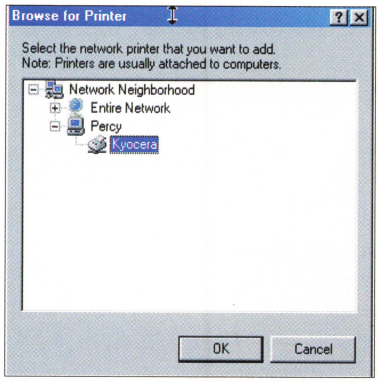
Download ftp://uk.aminet.net/pub/aminet/comm/net/LPx.lha and put the LPQ and LPR scripts into your Samba: assign ensuring the "s" protection bits are set on them. LPQ copies the contents of a file to the printer via PAR:. If you use an I/O card, edit the script to change PAR: to whatever name is assigned to your parallel port, such as PAR00: for the first parallel port on an IOBlix. Create the directory Samba:Spools and within this, create a directory with the name of your printer.

Point your browser at http://localhost:901 to load SWAT and click the Printers icon. Type the same printer name here and press "Create printer". Select the "Advanced Options" button and change the following settings from their defaults:

```
Path            /Samba/Spools/%S
Print command   /Samba/LPR %s %p
lpq command     /Samba/LPQ %p
guest ok        Yes
```

Press "Commit Changes", select "printers" from the cycle gadget and press "Choose printer". Set the path to "/Samba/Spools" and press "Commit Changes". Now go to the Globals section ▶





Above: Telling Windows to print via the Amiga.

and set Printcap name to "/Samba/Spools/printcap". Finally, create your printcap file by typing the following command in a shell:

```
echo "printername"
>>Samba:Spools/printcap¶
```

...replacing `printername` with the name you used in SWAT.

Now that your Amiga will receive network print requests, you have to set up your PC to send them. Select "Settings/Printers" from the Start Menu and double click "Add printer". Select Network Printer and click on the "Browse" button when asked for a network path. Your Amiga's printer should show up here (see picture, above left); select it. Choose your printer's make and model from the next window and continue until Windows prints a test page. This should be saved to your Samba:Spools/Printername directory, and then copied to the printer by LPR.

Printing via the PC

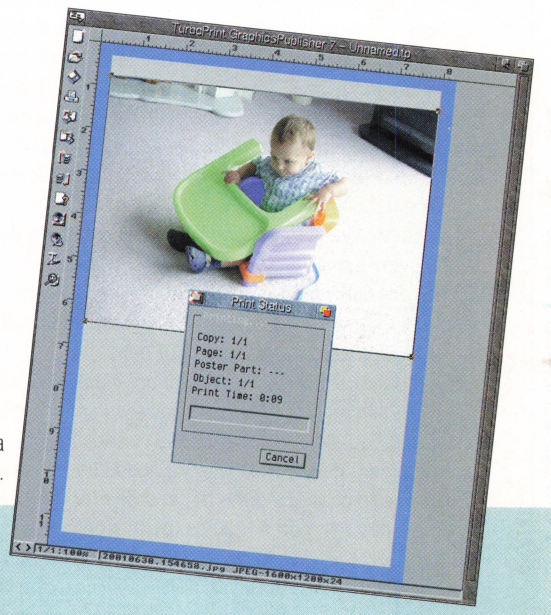
You have probably noticed that most of the setting up work is on the Amiga side. This is because the SMB protocol is part of windows, whereas it has to be handled by separate programs on the Amiga. The same is true when sharing a printer connected to the PC. On that side, all you need to do is right-click the printer, select sharing and give it a name. On the Amiga you now have to print to a file and copy that to the PC's printer using smbclient. The first part can be handled by the CMD program, which redirects printer output to a file. Set the MULTIPLE tooltype or it will exit after the first print. If running CMD from WBStartup, don't forget to add a DONOTWAIT tooltype. TurboPrint users don't need CMD; you can set the output to a file in TurboPrefs.

Now download ftp://uk.aminet.net/pub/aminet/comm/net/sps.lha. You'll need to edit sps.rexx to set the path to your print file and the name of the server and printer. While you're in there, change the reference to "amitcp:samba/bin" to "Samba:bin". Now copy it to REXX: and run it with the command "rx sps". Printing should now be intercepted by CMD and directed to a file, which will be picked up by sps.rexx and set to your PC's printer. All of this should happen in the background. Once it's working correctly, add "Run >NIL: rx sps" to the end of your user-startup.

A universal clipboard

There's one last goody for those using AmigaOS and Windows. How often have you visited a site in an Amiga browser, got several levels deep and then found that it only works in IE? The URL is the width of the screen by now, and you have to retype it in Windows. The good news is that there is a neat little utility called NetClip which runs on both the Amiga and the PC. When you copy something to the Amiga's clipboard, like a URL, it's sent to the PC's clipboard, and vice versa. The bad news is that we don't have a URL to give you so that you can go and download NetClip now, and this month's coverdisc has already gone to the duplicators, so you'll just have to keep typing for another month.

Andrew Korn and Neil Bothwick



Right: Printing from a program on the Amiga to a printer on a PC is fairly straightforward.

Amiga in a Window

There's another way you can bring the Amiga and PC closer - use your PC to emulate an Amiga. Installing UAE is a much simpler process that it looks at first. All the basic software is installed directly by the WinUAE installer, but you'll have to configure it, and you'll need a ROM image.

The WinUAE archive includes a piece of software called TransROM in the Amiga Programs drawer. You'll need this on your Amiga, so either copy it across your network if you've got Samba set up, or stick it on a PC floppy disk and use CrossDos to read it on the Amiga, then use the command "transrom >RAM:kick.rom" in the Amiga's shell.

You'll need to copy the resulting kick.rom file from RAM: back over to your PC. Put it in the Shared/ROM drawer inside your UAE drawer. When you start up WinUAE, click on the ROM tab and select the path to the ROM file you've saved.

WinUAE can boot from a virtual floppy disk using the ADF file format. Transdisk, found in the same place as TransROM, will allow you to create ADF files on your Amiga from floppies.

To boot from an ADF file, create an ADF file from a bootable floppy disk and select the ADF file in DF0: from the Floppies tab on the WinUAE properties control.

The other preferences should be set to match the type of Amiga you want to emulate. You could, for example, set up values that match the A500 so that you can run ancient software that doesn't run on your more up-to-date real Amiga, and another set that boots into a full OS3.9 install. For the latter you'll want WinUAE to boot from a hard drive file. You can simply copy all the files over to a directory on the PC and from the WinUAE properties panel hit the "Hard drives" tab, select "Add directory" and enter the path of the copy of Workbench you made.

If all that sounds a little too much hassle, then $30 gets you Amiga Forever from Cloanto - you'll have legal ROM modules and a Workbench partition ready to go.

WinUAE web site: www.codepoet.com/UAE/index.htm

Amiga Forever web site: www.cloanto.com/amiga/forever

Here's Looking At Moovid...



Our Feature Presentation

Moving pictures have come a long, long way since the days of the Zoetrope, and the jargon isn't getting any easier

Ever since computers became powerful enough to display animated images in high resolutions, experiments with digital video have been carried out to find the best way of compressing and displaying movies. Today, you just have to open a computer magazine to see terms like "MPEG 4", "QuickTime" and "DivX" - but what do they all mean, why is digital video such a hot topic, and how does it all relate to the Amiga?

The principal idea of digital video is to connect animated images with sound and compress them in a digital format for playback on computer equipment or other digital devices. Video sequences can then be stored on digital storage formats such as compact discs or DVDs, rather than on analogue storage media like VHS tape, with the advantage that digitally stored movies won't degrade over time with repeated viewings (no matter what the skeleton told you in adverts for video tape, *"re-record, not fade away"* just doesn't apply to analogue magnetic media). Digital storage also allows movies to be stored with a much higher display quality than you could achieve with traditional tape formats.

There is, however, a big disadvantage with digital file formats: the amount of data involved in storing a movie is titanic. Without employing some clever digital trickery, it just wouldn't be possible to fit a movie on a disc - so how is it done? ▶

Terminology

Huffman table: A table is a pre-calculated set of values used for encoding data. Huffman encoding is a lossless form of compression (unlike lossy compression algorithms like JPEG, where some of the original data is lost) which uses variable length encoding, whereby the most frequently occurring byte values are represented with shorter codes, hence compressing data more than fixed-length encoding algorithms.

Segment table: A form of encoding table specific to the AVI format.

Wave audio: A format commonly used for the audio track in video clips as well as standalone audio files. Other commonly used formats include PCM, MP3 and AC-3 (Dolby Digital).

Ring frame: Used in some animation formats, a video frame placed at the end of a movie which indicates that playback should start again from the beginning, creating a looped animation.

Little endian/Big endian: Motorola/IBM CPUs and Intel/AMD CPUs are different in many ways. One of the differences is how they handle memory. Four bytes of memory containing the value 0xAABB on a big-endian (Motorola-style) CPU written to a file, and then loaded into the memory of a little-endian (Intel-style) CPU will appear 'reversed', as 0xBBAA. When reading or writing 16- or 32-bit variables for a little endian animation format to a big endian CPU (or vice versa), endian-correction is necessary to preserve the data.

Parents/Children: In an object-oriented system, elements which are derived from other, similar elements (parents), are called "children". As an example, you could say that the element "Amiga" is a child of the element "Computer". These terms are used in programming circles to explain concepts in a more understandable fashion, and help with the implementation of animation formats such as QuickTime.

"But let's not forget where it all began..."

IFF and FLI - the beginnings

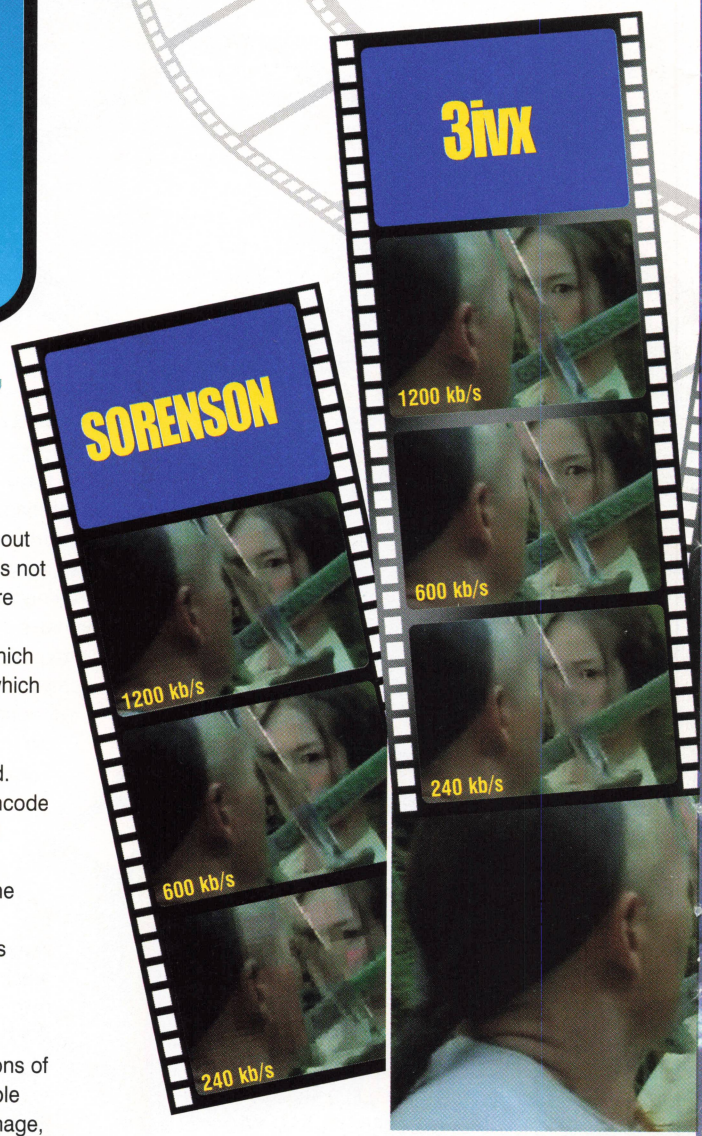
These days, if you want to talk about computer animation and digital video, you'll need to know about terms such as MPEG, QuickTime and DivX. But let's not forget where it all began: the formats that were there from the start, IFF and FLI/FLC.

IFF animations mostly used the ANIM7 format which was developed by Sparta, Inc. ANIM7 is a format which complies to the IFF framework, which itself was developed by Electronic Arts in co-operation with Commodore when the Amiga was being developed. The general idea of the ANIM7 file format was to encode the first frame of an animation (as an RLE-Encoded image - see boxout on page 22), then describe the following frames in terms of their differences with the preceding image. Normally, the frame used for comparison would actually be two frames earlier, as ANIM7 uses two buffers (hence the term "double buffering"), which are displayed alternately.

Like all formats in the IFF framework, ANIM7 is organized in so-called "chunks". Chunks are sections of data which are given a four-letter name - for example "BODY" for the main image data of an IFF ILBM image, or "DLTA" for the Delta (differential) Information of a video frame in ANIM7. Each frame after the first for an ANIM7 video just has an "ANHD" (Animation Header) and "DLTA" (Delta Information) chunk - in other words, ANIM7 is a pretty straightforward animation format.

FLI/FLC (also referred to as FLIC) was an early animation format designed by Autodesk, Inc. (makers of the Computer Aided Design package AutoCAD for the PC). The older FLI format is limited to a resolution of 320x200 pixels, while the newer FLC format supports multiple resolutions. There is also the FLX format, which is an extension to FLC supporting 15-bit animations, used mainly by PC software packages Tempra Pro and 3DStudio Max. As if three formats weren't enough, there are three other formats derived from FLI: FLH, FLT and CEL files - but these are rarely used.

Like IFF, FLIC files store their data in chunks. There are chunks for the Huffman table, the file header, segment table and several chunks for the actual frames of animation (containing image data, palette information, wave audio data and so on). FLIC files are organized in frames, and the last frame is usually a ring frame. All data inside a FLIC file is stored in little endian format. See the boxout on Terminology for explanations of these.



Above: The same frame of a movie, encoded with different codecs and at different bitrates. Notice that 3ivx gives the best high quality image (main picture) and that 3ivx's quality doesn't suffer as much at lower bitrates compared to Sorenson and Microsoft encoding.

Video CD Standards

VideoCD:
The main standard, also supported on the Amiga.

CDi:
A custom format from Phillips.

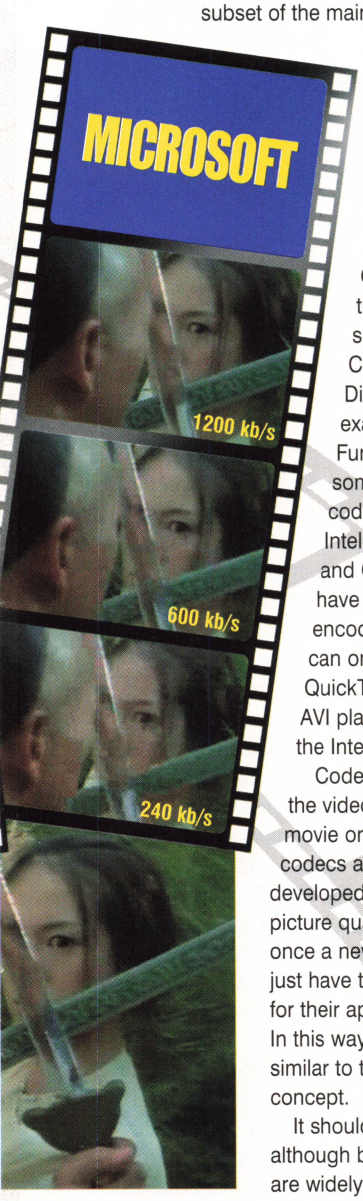
VCD 3.0/Super VCD/HQ-VCD/CVD:
Several MPEG-2 based Video-CD standards, mainly used in Hong-Kong.

DVD:
MPEG-2-based, usually uses AC-3 for audio.

QuickTime, AVI and codecs

QuickTime (QT) is the video format implemented by Apple, and used in MacOS. Many digital cameras also store movies in QuickTime format, which can then be downloaded to a Macintosh and edited by applications which understand the format. QuickTime data is organized in a similar way to the "chunks" structure used for IFF and FLI, only these chunks are called "atoms". Also, while chunks are very simple data structures, atoms are objects - they can have parents and children. QT data is stored in big endian format as the Mac, like the Amiga, is based on a big endian Motorola processor.

What QuickTime is to the Macintosh, AVI is to Windows. The AVI format was defined by Microsoft (it is based on their RIFF file format). Both formats describe how video and audio data are synchronized, and both are based on so-called "codecs". Think of a codec as a subset of the main file format. Because there are many different codecs used to store video files - each with their own benefits and drawbacks - an application only needs to know about the main format, such as QuickTime, and not about the individual codecs such as Intel Indeo, Cinepak or DivX, for example. Furthermore, some of these codecs - like Intel Indeo - exist for both AVI and QuickTime, but if you have a QuickTime movie encoded with Intel Indeo, you can only replay it with a QuickTime player, not with an AVI player that also understands the Intel Indeo codec.



Codecs are used to encode the video and audio data in a movie or animation. Because new codecs are constantly being developed which offer increased picture quality or smaller file sizes, once a new codec appears, users just have to install the new codec for their application to support it. In this way, the codec system is similar to the Amiga Datatypes concept.

It should be pointed out that although both QuickTime and AVI are widely used, AVI has one disadvantage - files are limited to 2GB in size. There are extensions to the AVI framework which do not have this limit, but not all applications support them. On the other hand, QuickTime has no such size limitations.

MPEG

In 1988, the ISO Committee founded the Motion Picture Expert Group (MPEG) to define a standard for digital video and audio replay. This lead to the MPEG-1 and MPEG-2 file formats, and just recently, the MPEG-4 standard which provides the basis for modern video formats like OpenDivX and 3ivx.

The main goal for Digital Video at the time was to raise the bandwidth of TV Satellites. If a channel could be compressed to 25 percent of its data, four channels could fit into the place normally occupied by one. Compression would also make it possible to offer "Video-On-Demand" for the first time in TV history.

But an increase in the number of television channels wasn't the only result of these new video formats: with digital compression came the possibility to store movies on a CD and view them on a computer. One of the goals of MPEG-1 (the first version of the MPEG video standard) was to make it possible to play movies from single-speed CD-ROM drives, which could transfer data to the computer at a rate of 150KB/s.

There was also a third aim realised by digital video: live video streaming over the Internet. With the latest version of the MPEG format, MPEG-4, many people see this streaming capability as the most important aspect of Digital Video - indeed, Apple saw this as a very important application for QuickTime.

All of these applications - from TV to video streaming over the Internet - used a new form of encoding data:

"...the codec system is similar to the Amiga Datatypes concept."

lossy compression. The algorithm used to encode the video checks for elements of a picture which it needn't encode - either because they haven't changed since the last frame or because they won't be noticed by the human eye. Being able to skip this data means that every time a movie is saved with lossy compression, the quality of the picture decreases - but if you save or edit it just the once, you usually won't notice. Lossy compression leads to smaller files, and with new techniques to improve compression algorithms, it was possible to achieve better quality pictures than you can get from a traditional video recorder.

How does MPEG work?

Whether we're talking about MPEG-1, -2 or -4, the method of encoding video data - the algorithm - always works in the same way. MPEG-4, the latest standard, is much better in terms of compression ratio and quality, helped greatly by the fact that it doesn't have to concern itself with running from single-speed CD-ROM drives that were around at the time of MPEG-1. With this hardware restriction lifted, the authors of the MPEG standard were free to produce a much better video format. As a result, an MPEG-4 movie can be up to 11 times smaller than the same video encoded as MPEG-1 - and at a much higher quality.

Despite this technical progress, the principal algorithm is the same for all MPEG standards. An

MPEG Development

MPEG-1

Resolution: NTSC: 320x240, 30fps. PAL: 352x288, 25fps.

Notes: Using interpolation, the resolution can be raised to 704x480 (NTSC) or 704x576 (PAL) at the cost of quality. Image quality is comparable to standard VHS tape.

Data transfer rate: 1.38 Mb/s.

MPEG-2

Resolution: NTSC: 640x480, 30fps. PAL: 720x576, 25fps.

Notes: MPEG-2 was developed when the broadcast industry wanted a higher-quality standard which used higher data rates.

Data transfer rate: 6.50 Mb/s.

MPEG-3

Notes: Was planned as the MPEG standard to be used with HDTV (High Definition Television). In the end, a special version of MPEG-2 capable of displaying up to 1920x1152 was used for HDTV and MPEG-3 was never released. The data transfer rate of this special version of MPEG-2 reached 80 Mb/s.

MPEG-4

Resolution: NTSC: 640x480, 30fps. PAL: 720x576, 25fps.

Notes: The latest version of the MPEG standard.

Data transfer rate: Between 5 and 10 Mb/s.

MPEG-7

Notes: The next MPEG standard is still in development. Rather than just a video format, however, MPEG-7 will be a standard for organising a much broader range of digital content, allowing such possibilities as "searching" within multimedia files for specific information.

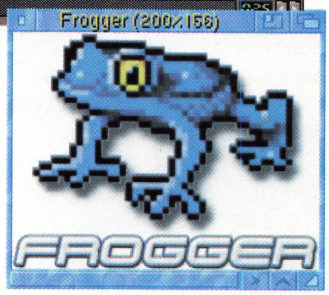
Interested in learning more about MPEG encoding? Take a look at the MPEG FAQ, available at http://www.crs4.it/~luigi/MPEG.

MPEG encoder collects statistical information about the data to be encoded (such as pixel arrangements in a frame) and then uses a compression algorithm which, among other things, reduces the amount of higher frequency image data by using a "Discrete Cosinus Transformation" (DCT).

Each frame is then divided into so-called "Macro-Blocks" (usually 8 or 16 pixels square). Using "Movement Vectors," the encoder then compares the Macro-Blocks to see how they change over time. It is assumed that most of the image stays the same (only some details changing over a more-or-less static "background").

As well as Movement Vectors, it is also necessary to examine the changes in the Macro Blocks themselves, which is where DCT comes into play. DCT calculates a "higher frequency" and a "lower frequency" part of the Macro Block data. Then a quantization occurs (an algorithm which removes data whose frequency is too high to be noticed by the human eye if it is missing). This is the part of the compression which is lossy. Of course, the author of the algorithm has to be careful that there isn't too much quantization - if there is, the resulting video when played back will be noticeably blocky (a symptom commonly found in badly-recorded MPEG-1 movies).





"Despite this technical progress, the principal algorithm is the same for all MPEG standards..."

This quantized data is then encoded using "Huffman encoding" (see boxout), which uses three types of frames called I-frames, P-frames and B-frames. An I-frame ('Image' frame) contains the complete image data for that frame, as it is not possible to predict every image detail from earlier frames. A P-frame ('Predicted' frame) recreates a picture based on changes since the previous frame, reducing the amount of data which needs to be encoded. Lastly, a B-frame ('Both' frame) gets predicted from both directions - from frames coming before and after it in the movie. In this way, by using movement vectors and quantization, a very high compression ratio is reached.

And now there is DivX...

The latest standard to emerge, DivX, is perhaps the most confusing of all, because "DivX" has a lot of different meanings. Originally, the term "DivX" was used by a provider of a "pay-per-use-DVD" service, Circuit City. This so-called "DIVX" (note capitalization) has nothing to do with the video format, so don't be confused by it.

There are several video formats which use the DivX name. The original DivX was a format implemented by Microsoft. This was an MPEG-4 codec which used the ASF- or AVI-Framework. As Microsoft at that time wanted to force their ASF-Format onto the world (some things never change...), they discouraged AVI support in DivX, and dropped it in the final version of their DivX - a move which, unsurprisingly, wasn't held in high regard by most people.

If you asked a PC user to convert an animation into DivX today, however, Microsoft's DivX format is not the one they would use. Today, the widely accepted form of DivX has the exact name "DivX ;-)" (yes, with a smiley). This is an unofficial hack on the DivX format to provide a "DivX with AVI Support". Like Microsoft's DivX, however, "DivX ;-)" can only be replayed using Microsoft's technology - either on Windows, using Microsoft's video player on the Mac, or on x86-based Linux systems using the Windows DLLs (Dynamic Link Libraries). As such, an Amiga port of "DivX ;-)" is absolutely impossible.

Luckily for us, then, that the authors of "DivX ;-)" finally decided to make an OS-independent DivX-like format called OpenDivX. Their goal was to provide MPEG-4 technology to all operating systems, including the Amiga. Their web site can be found at www.projectmayo.com, where you can also download the Amiga client. This uses Moovid as player and is supplied in the form of a special opendivx.library. Although Moovid is a commercial program, its author has thoughtfully provided a special version for free download which can only play OpenDivX, so people who do not own Moovid can try it out. Currently, the Amiga client does not yet support sound, but Moovid's author recently stated that sound support is one of the main features on his to-do list, to be implemented in the future.

Independent of Project Mayo, Happy Machines Inc. - the authors of the Macintosh Version of "DivX ;-)" - decided to create a new MPEG-4 based video formats for all platforms (including the Amiga, as they have a close cooperation with Eyetech). This format is called 3ivx (pronounced: "Thriv-X"). Their web site is at www.3ivx.com, where you can download a 3ivx client for AmigaOS. Users of 68k and WarpOS get a special free version of Moovid there (which can only replay 3ivx), whilst PowerUP users get SoftCinema with 3ivx-Support.

On An Amiga Near You...

Here are some of the movie players currently available for the Amiga. Take a look at our coverdisc this month for the latest versions. Here's what formats they support:

AMP: MPEG, Radius Cinepak, Microsoft Video 1, JFIF JPEG, Apple Video, Microsoft RLE8, Microsoft RGB.

AMP2: MPEG, Video-CD, FLI/FLC.

Frogger: MPEG, Video-CD, PSX Movies.

SoftCinema: Apple Video, Radius Cinepak, CCITT H.263, Intel Indeo, Intel Raw, Microsoft Video 1, Apple Graphics, Apple Animation, Photo JPEG, Motion JPEG, 3ivx, OpenDivX.

Moovid: Intel Indeo, Microsoft RGB, Microsoft Video 1, Radius Cinepak, RLE, Intel RAW, Cirrus Logic AccuPak, Apple Animation, Apple Graphics, Apple Video, 3ivx, OpenDivX vmpeg: MPEG (comes with full player-source-code).

Both companies decided to go for a multi-platform strategy and have big potential as a result, although it remains to be seen which of the two formats will win out in the long run. 3ivx uses a QuickTime framework (Happy Machines are very Mac-oriented people) while OpenDivX uses an AVI framework.

The most exciting encoder technology is doubtless owned by 3ivx. As you can see from the image on page 20, 3ivx is capable of very high image quality even at low data rates (maximum compression). Happy Machines believe live video streaming is a very important application of MPEG-4 based video formats. Their codec is freely available for decoding purposes, while the encoder is commercial - in the case of OpenDivX, both decoder and encoder are freely available - but the encoder in particular is less powerful than 3ivx's encoder. Compared to 3ivx, the makers of OpenDivX decided to put more work into the decoder than into the encoder. As a result, OpenDivX already runs at around MPEG-1 speed on the Amiga (low resolution OpenDivX movies, anyway).

Which codec will "win" remains to be seen: on the one hand, you've got the fast and high-quality Encoding of 3ivx, whilst on the other hand, OpenDivX offers fast replay. Against both of these efforts is the marketing power of Microsoft. Only time will tell who will win, although it is to be hoped for the Amiga's sake that it's one of the OS-independent formats.

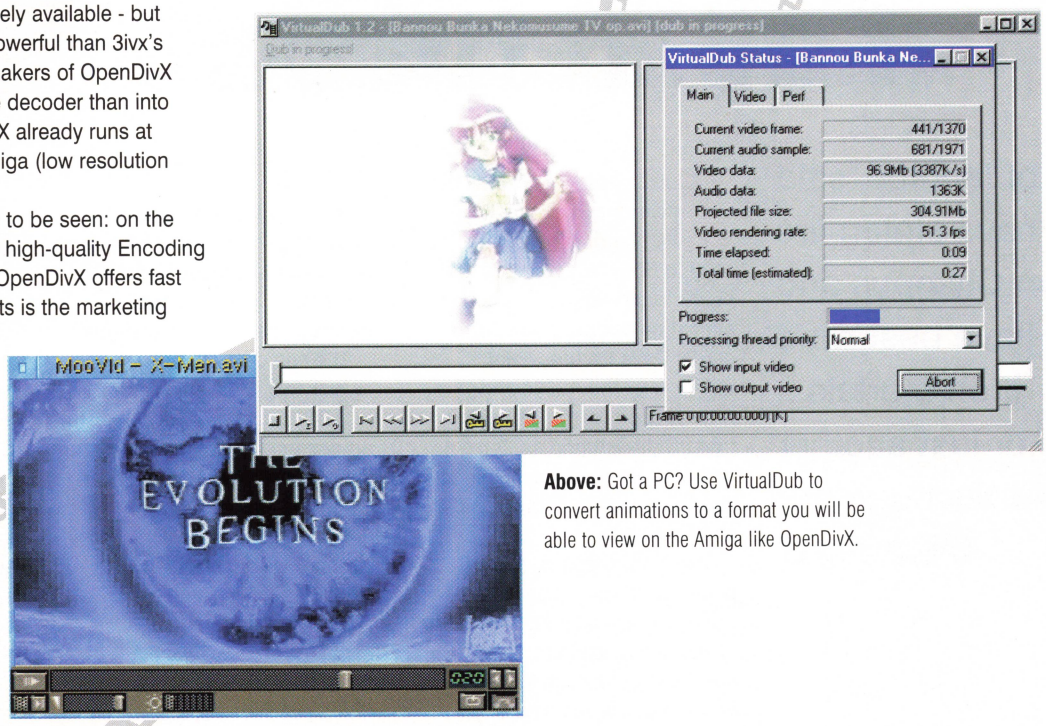
Video on the Amiga

There are several good video players for the Amiga. The best four are AMP (PPC via WarpUP), SoftCinema (PPC via PowerUP), Frogger (WarpUP, PowerUP or 68k) and Moovid (also PPC and 68k). 68k-only players CyberAVI and CyberQT might be worth a look if you don't have a PPC card in your Amiga, but don't expect decent speeds from anything but the fastest 68060. RiVA, an MPEG video player, is also an option for 68k Amigas. AMP and Frogger are primarily MPEG Players, although both also support a number of AVI and QuickTime Codecs (and in the case of AMP2, FLI/FLC animations).

If you want to play Video CDs you are advised to use either AMP2 or Frogger. Note, however, that there are several Video-CD Formats, and Video-CD players only support the "real" VideoCD-format - not formats like CDI or SVideo-CD. AMP2 and Frogger are also able to replay AC-3 (Dolby digital) audio as well as the more common MPEG 1 audio streams.

An important issue for Amiga users is how to convert DivX ;-) movies into a decent format that we can play on the Amiga. Sadly, as with decoding, conversion is only possible on the Windows platform. But those of you who have a PC sitting alongside your Amiga will be pleased to hear about the Public Domain software "VirtualDub" - available at www.186.pair.com/vdub - which can be used to convert movies to an Amiga-friendly format like 3ivx or OpenDivX. In the case of 3ivx you will need the commercial encoder, but the OpenDivX encoder is free. Sadly, opendivx.library (the Amiga player) can only replay movies compressed with version 0.47 of the OpenDivX standard - VirtualDub uses v0.48, but an update of the Amiga player is planned for the near future.

Converting something like an MPEG-4 animation, however, requires a powerful computer and even then a *lot* of time. Also, damaged DivX :-) files can cause VirtualDub to fall over, although the Windows Media Player might still be able to replay the damaged files. If this is the case, it may be possible to "skip" the damaged frames (if there aren't too many of them) by splitting the animation into several parts which can be joined together again once the corrupted frames have been removed. It might be ugly, but then you're not using an Amiga to do the conversion, after all.



Above: Got a PC? Use VirtualDub to convert animations to a format you will be able to view on the Amiga like OpenDivX.

"The most exciting encoder technology is doubtless owned by 3ivx..."

Converting a movie with VirtualDub is simplicity itself. Once you've started the program, open a video file with the "File > Open Video File" menu option. From the Video menu, select "Compression" and choose the destination format (e.g. OpenDivX). Leave the "Full Processing Mode" option enabled. As the Amiga version of the OpenDivX player under Moovid doesn't support sound, audio can be disabled for the time being, before selecting "Save AVI File" from the File menu. Then all you have to do is wait for the conversion process to be completed, and voila! A movie file that you can now play on the Amiga - or will be able to once the Amiga's opendivx.library supports the latest OpenDivX standard.

Steffen Haeuser A

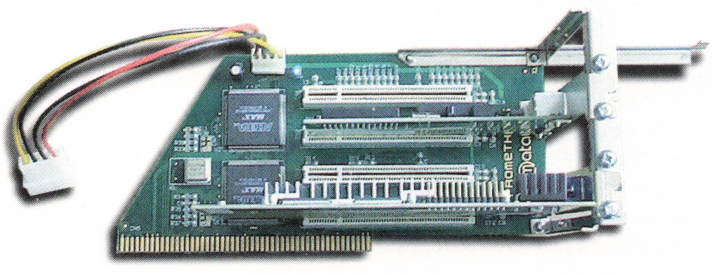
Name Prometheus
Price £199.95 ex. VAT
Developer Matay: www.matay.pl
Supplier Eyetech: www.eyetech.co.uk or phone +44 (0)1642 713185

PROMETHEUS PCI

Son of Iapetus, said to have stolen fire from Olympus and to have bestowed it on mortals... ...or just another PCI busboard for the Amiga?

Zorro cards for Amigas are scarce and expensive. PCI cards for PCs are easy to find and are made in a bigger price range. There are almost no budget price Zorro cards. Dave Haynie, chief designer of the A3000 and A4000, is on record as saying that PCI is as good as Zorro III or better. So it makes sense to use PCI cards in an Amiga if at all possible.

The Prometheus card is a bridge card which plugs into a Zorro III slot in an A4000 or A3000 and holds four PCI slots. It has a similar function to the ISA bridge cards which have been available since the A2000 came out, giving the user a link between the Zorro bus and a standard PC bus.



Below: The Prometheus fitted with Voodoo3 graphics and PCI ethernet cards.

The Card

This is a high quality product. It comes packaged in a full-colour box, with instructions leaflet, CD, power lead, graphics card extension cable, and metalwork.

The board carries only a crystal, two Altera chips and the four PCI sockets. Altera chips are programmable logic devices, and are available in many varieties. Basically, they replace large numbers of traditional logic chips, while allowing the board designer to change the logic on the fly.

The EPM7128S chips used here are set up by Altera specifically for PCI interface logic, with a bus speed of 33MHz. This is the usual PCI speed, but a few recent cards can operate on a 66MHz bus. Besides the PCI functions, there is plenty of space for the designer to add his own logic, which will have been used here for the Zorro III interface.

You will see logic chips from Altera (or their main competitor Xilinx) on many recent cards. The BoXeR project uses them to emulate practically everything that is on an A4000 motherboard in one main chip. They are essentially logic implemented in EEPROM hardware, which like Flash ROM can be erased and reprogrammed at any time. Traditional boards with fixed logic chips often carry little bits of wire where a mistake in the logic has had to be patched. A board using Altera chips has only to be reprogrammed.

The quality of construction of the Prometheus is very high. It's interesting to see that this quality of manufacture is available in an ex-Communist country such as Poland: it suggests that the economy is making good progress. The card comes with a 5 year guarantee. If Matay are

"The quality of construction of the Prometheus is very high..."

24 Prometheus	30 YAM 2.3	38 Modems	38 Shareware	52 Active Gamer
Yet Another PCI solution for the Amiga. This time for Zorro III equipped models.	Yet Another release of Yet Another Mailer. Now open source, now version 2.3.	They all do the same thing, but what should you be looking for in a modem?	A distinctly textual feel to this month's offering of Amiga shareware.	Little happening on the Amiga games scene this month, so we take a break!

Reviews Contents

planning to be in business for at least five years, they must have plans for future products. It will be interesting to see what else they produce.

Two metal parts are provided. The card is not a full-length Zorro card, and a straight piece of metal is attached to the rear corner of the card and screwed to the Amiga's back panel, holding the card rigidly in its slot. A metal frame attached to the rear edge of the card holds the screws that keep the PCI cards upright and rigid. These parts are well made, strong and with accurately threaded holes. They are easy to attach to the card.

Installation

The Prometheus will work in any Zorro III slot, but not in Zorro II. It does not interfere in any way electrically with other Zorro cards.

Installation is very simple: you fix the metal parts to the card, insert any PCI cards you have, push the Prometheus into a Zorro slot and run the Install script on the CD. If you are not already running Picasso96, you also have to install that. The graphics card drivers are named Prometheus, not Voodoo3 (it is not clear how other cards will be distinguished). A Prometheus.library is installed in the Expansion drawer: this seems to be the main driver for the card itself.

The problems with installation are physical. In a Desktop A3000 or A4000, you can install the card in any of the four slots, but the PCI cards will always prevent you from putting the cover back on the computer, unless you have only very small cards (such as some ethernet cards) and don't use the metal frame.

You may as well use the top slot, in which case the cards will stick up about 8cm above the usual top level of the computer. If you are happy to run the computer with its top off, no problem. The Voodoo3 card runs very hot, so it may not be safe to leave it exposed like this if small children are around - common sense applies here.

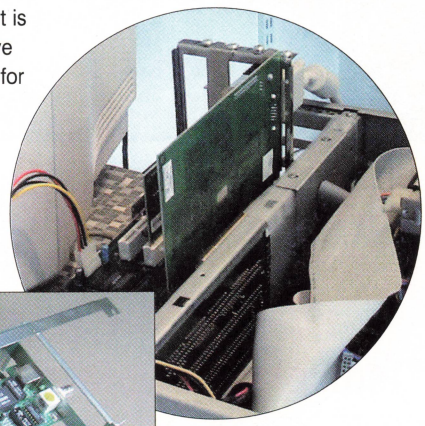
In a tower case, the PCI cards will lie parallel with the bus board and may block off several, or even all, the Zorro slots. In the Power Tower (manufactured by Elbox) used for this review, the Prometheus could be positioned in the fourth slot if the lower drive bay frame was removed. The floppy drive would then have to be mounted in a 5 1/4" bay with a suitable (low cost) kit. Alternatively, the card could be mounted in the first slot if you don't need to use any Zorro cards - PCI cards may replace all of them for some users. At least a tower case will allow you to install a Prometheus and replace the cover.

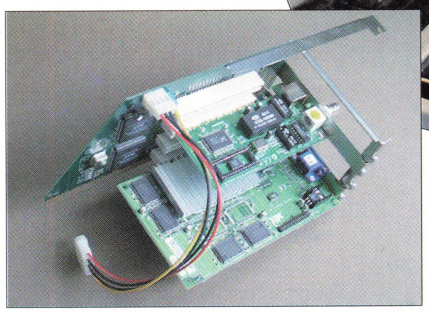
PCI Cards and Drivers

There are thousands of PCI cards on the market, but they are of no use in an Amiga unless there is Amiga driver software for them. Providing these drivers will be the main work of the Amiga community for the forseeable future. Fortunately, there are volunteers. Matay provide full support for developers, including a free Software Development Kit (SDK) which should help to promote the development of drivers for the Prometheus. It is rumored that Amiga Inc. have been using the Prometheus for developing drivers for AmigaOS 4.0, while the AmigaOne hardware is being developed.

At time of writing, there is a good driver for the ▶

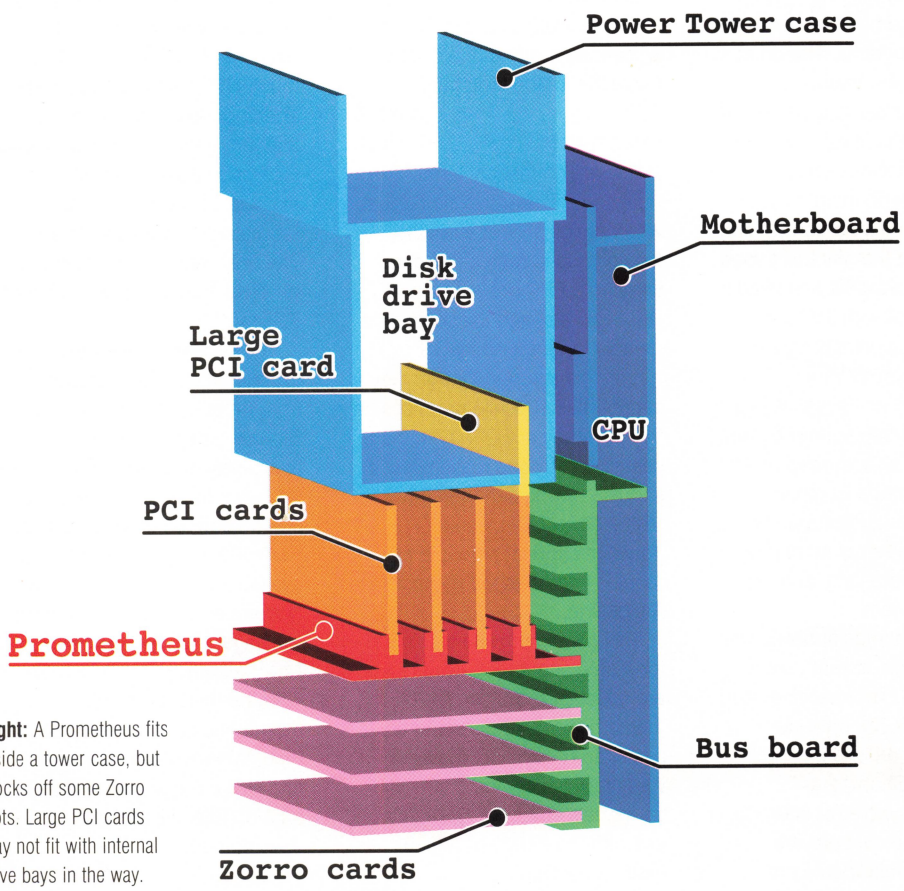
Below: The Prometheus installed in an A4000 desktop.



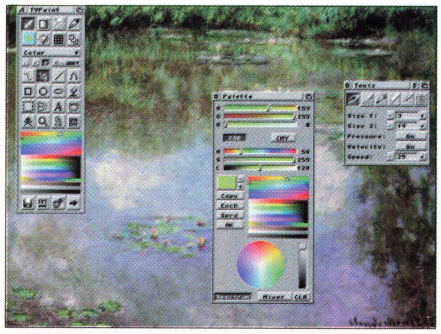


Left: The Prometheus fitted with two PCI cards, from another angle!

"...a tower case will allow you to install a Prometheus and replace the cover..."



Right: A Prometheus fits inside a tower case, but blocks off some Zorro slots. Large PCI cards may not fit with internal drive bays in the way.



Left: The 24-bit paint program TVPaint running on a Voodoo3 card. Artwork by Monet, from the Web Museum.

"...a solution for A3000 and A4000 owners who are reluctant to buy an A1200 motherboard just for temporary use in an AmigaOne..."

Voodoo3 graphics card, and a beta driver for an ethernet card. An update to the ethernet driver is promised for later this week, so there is no point in commenting on the current beta driver in detail. I think we can assume that it will be working by the end of July.

The Voodoo3 works in 2D on both 68k and PPC, but so far in 3D only on PPC. 3D on 68k is promised - this will probably be too slow for games, but useful for 3D design programs. The great advantage of the Voodoo3 over other graphics cards available for the Amiga is that it runs in 24-bit colour at resolutions up to 1600x1200 (depending on your monitor). Even higher resolutions are claimed in the manual. I used it mainly at 1024x768. It worked particularly well with TVPaint, an excellent 24-bit paint program which was formerly very expensive, but nowadays is free. Another good free paint program, Perfect Paint, also showed at its best, as did Image Engineer, Pagestream, and Photogenics. Draw Studio was not so happy - movements were jerky and left trails behind them.

The game demos supplied with the Prometheus currently work only with PPC. The machine used for testing was 68k only, but Simon Glover reports that both HereticII and Shogo are "extremely playable" at 800x600, and that PPC movie players Frogger and SoftCinema are working very well. Later releases of the drivers will increase speeds even further.

Some Amiga graphics cards, such as the Picasso line, have pass-through circuits or flicker fixers, so that you can combine the AGA output from your Amiga with the graphics card output. Obviously there will be nothing like this on a PCI card. Therefore you will need either a second, Amiga-friendly monitor or TV, or a scandoubler and one of Eyetech's BMon switchers.

The Future

Matay are on friendly terms with Amiga Inc. They have stated that when AmigaOS 4 is available, they plan to source a PCI card carrying a PPC processor and RAM sockets, and they expect to be able to adapt AmigaOS 4 to run on this setup. Although they cannot make definite promises on this until they actually try it, there seems no obvious reason why it shouldn't work, although the Matay AmigaOS 4 would doubtless appear a couple of months later than the Eyetech AmigaOne.

This should provide a solution for A3000 and A4000 owners who are reluctant to buy an A1200 motherboard just for temporary use in an AmigaOne. It seems very unlikely now that there will be models of the AmigaOne for use with the A4000 or A3000 motherboards.

There are of course other possible solutions on the horizon from Elbox, Merlancia and others. It is too soon to say which of these will appear, or when, or which will suit which Amiga users. Experienced buyers of Amiga equipment will remember many companies promising products in the past which for various reasons did not materialise.

The time to make decisions about AmigaOS 4 or later will be when it is in the shops. In the meantime, the Prometheus is here now, it works perfectly with one model of graphics card and drivers for other cards are being developed. The company appears to have a good attitude and Matay can be welcomed as a new Amiga company that promises good things.

Is it worth it?

The Prometheus card is not cheap. In round figures, a Voodoo3 with the Prometheus is going to cost about £100 more (including VAT) than an Amiga graphics card such as the Cybervision 64. However, if you also want to add an ethernet card, you will save half of that, because PC ethernet cards are much cheaper than Zorro ones. The Voodoo3 is more advanced than any Amiga card, and drivers for Matrox cards are also expected to appear, giving Prometheus owners a choice. The only real problem is the physical space occupied by the PCI cards.

The choice between this product and similar solutions from other companies such as Elbox will depend on the availability of drivers for the cards you want to use. If you want to use a Voodoo3 card in an A3000 or A4000, the Matay product is available and working now. By November, if all goes well, there will be far more products to choose from.

In the mean time, the Prometheus can certainly be recommended as an excellent and well thought out product with a lot of potential for future development.

Don Cox

Distribution

Matay themselves are selling the Prometheus in Poland, but the Prometheus also has a number of other distributors worldwide. Contact your nearest distributor from the list below:

Austria and Germany:
KDH Datentechnik
Phone: +49 (0)7451 555111
Web: www.kdh-datentechnik.com

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United States of America:
Compuquick Media Center
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Raymond Computer
Phone: +1 651 642 9890
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Prometheus

SYSTEM: Any A3000 or A4000

SUMMARY: Fully working PCI slots, but it may be awkward to find space for it. Good Voodoo3 driver.

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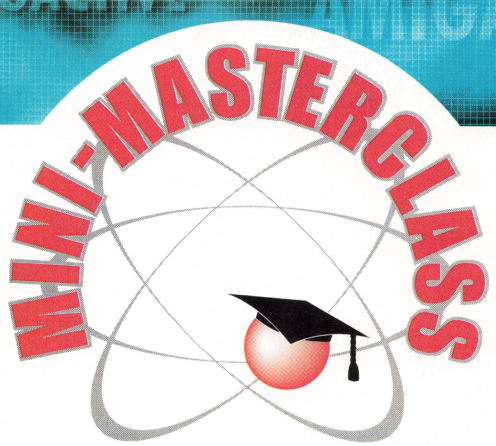
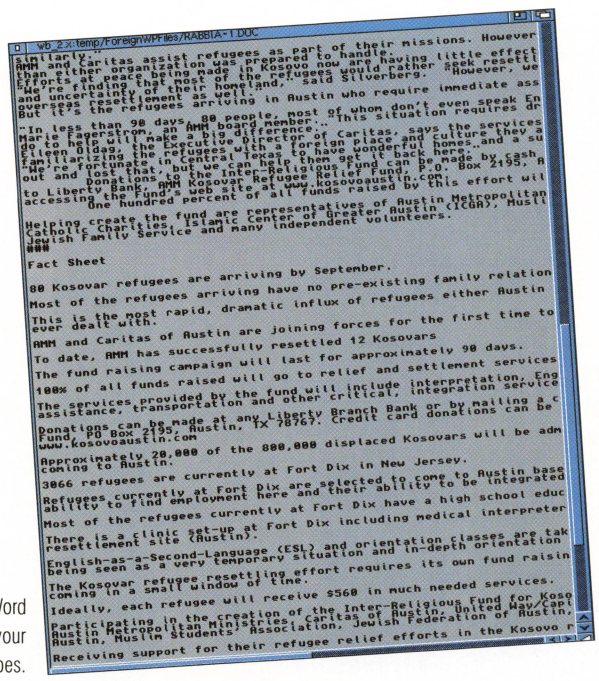


Foreign Invasion!

Steve Folberg wrestles with text files from other planets - sorry, platforms - with the latest releases of Doc Datatypes and Next...

In issue 14 of *Amiga Active*, Andrew Korn lamented the aggravation of being an Amiga user in a world dominated by Microsoft Word. *"The problem with Microsoft Word,"* he wrote, *"is that... very often people assume that everyone else in the world uses Word, too. This is unfortunate, as the MSWord document format is horribly bloated, only runs under Windows and Mac, and as it is a proprietary format it's hard for people to develop document viewers."*

As the last American President was wont to say, *"I feel Andrew's pain."* My Amiga is my sole computer at home, and I receive a fair amount of office-related e-mail there. Just today, I received a critically important business document attached to an e-mail in guess-what-format from our pals in Redmond? (*"ProWrite 3.1?"* Guess again!) And what if some chum of yours sends you an e-mail attachment in an even more *"fringe"* format, like Ami Pro for Windows or a Palm OS text document? Are you sunk? Hardly. It turns out that with the ingenuity of our plucky Amiga shareware authors backing you up, no Windows (or Gates) will stand between you and the babel of text and wordprocessing formats out there.



Right: Got a Word document? Open it on your Amiga with Doc Datatypes.

Readers of the original article will already be familiar with Amarpreet Singh Mund's Doc Datatypes. This shareware product has gone through several updates since issue 14. Bugs have been squashed, speed and feature improvements have been made and a fair number of new word processing formats have been added (see the boxout, below right, for a complete list of currently supported formats). The Doc Datatypes allow you to open and read any of the many supported text formats in Multiview, and do a *"Save As..."* to save the text you've read. Sadly, you'll be left with only ASCII text (although paragraph breaks and indents are often saved, depending upon the format).

A notable exception to the ASCII-only rule is the Palm DB text datatype, which can be saved out of Multiview in its native format (making Doc Datatypes a great companion to Ralph Torchia's wonderful Spitfire2 Palm desktop, reviewed in issue 12). Also, tables in documents are saved out in CSV (comma separated values) format, which many wordprocessors can convert back into tables.

"...also recognises a variety of archived formats..."

Next!

New to this roundup of foreign WP format solutions is a document reader that's been around for ages, called Next, written by Juergen Klawitter. Currently at version 3.01 (the latest version is available on Aminet under text/show) you might think of Next as *"More on steriods."*

Next will read documents created in Microsoft Word and Write, as well as Windows Help files(!), WordPerfect, RTF (with text styles displayed) Wordworth, Final Writer and AmigaGuide files, binary files (executables) and a variety of Macintosh and PC DOS text formats. It will display HTML files with clickable links (no frames, though) and will even use datatypes to display embedded pictures. Next also recognizes a variety of archived formats (including Zip, Tar and LhA/LZX) and will transparently unpack and read them if the appropriate unpacker programs are installed on your Amiga.

Next incorporates more thoughtful convenience and productivity features than can be covered here, many of which are easily accessed via a left-mouse-button

"...an incredibly polished and powerful piece of software, especially considering that it's free!"

pop-up window. Goodies include selectable font display, powerful Find, Go To and Bookmarking facilities, printing with headers and page nunbers and document information and statistics (word count). Next is an incredibly polished and powerful piece of software, especially considering that it's free!

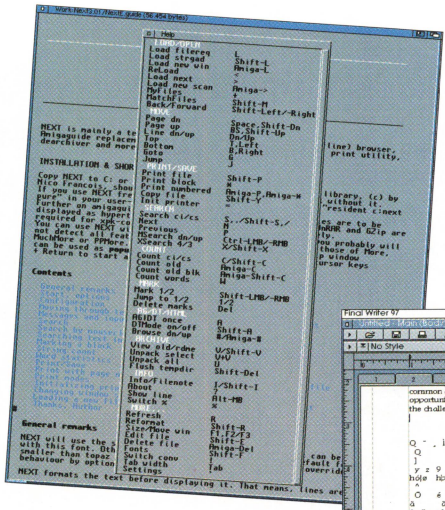
In an informal test, I saved a group of twelve PC and Macintosh e-mail attachments that I've received attached to e-mail messages in YAM and fed them to both programs. Results were interestingly mixed. Only four of the files were read cleanly by both programs (two of these were in Windows MSWord 8, one in Word 9, and one in Word9 for the Mac). Next 3.01 also effortlessly opened one very long file in Word8 format, for which Doc Datatypes only displayed a blank Multiview window, and Next also handled another Word file for which Doc Datatypes only displayed binary garbage but no text.

Additionally, Next 3.01 opened two Mac Word 5.1 files, (albeit with the text preceded and followed by binary garbage characters) which Doc Datatypes refused to load at all. But then, along came a Mac Word 5.1 file which Doc Datatypes opened flawlessly (and with footnotes intact!) while Next mangled the text with lots of binary junk. In general, Next was much faster than the Doc Datatypes at opening Word files.

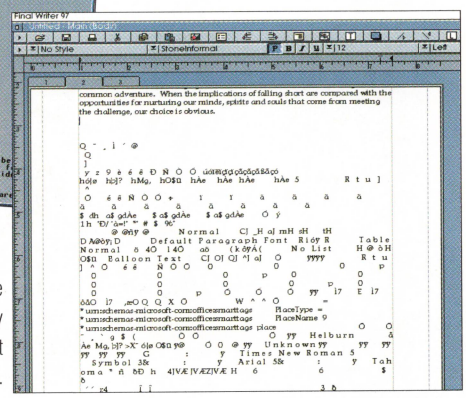
A Word9 for Windows file refused to open in either software, bringing us to the final, *"quick and dirty"* method for opening almost any foreign wordprocessing file: Final Writer 97. If you have FW97 (or, to a lesser extent, Wordworth 7) will actually open most binary wordprocessing file formats. You will have to strip away a fair amount of Microsoftian binary bloat from the beginning and end of the document (although from those sections you can often glean *"fascinating"* information such as the exact path to the document on your friend's computer and a list of every font installed on his or her system).

I'd recommend having both Next 3.01 and the registered Doc Datatypes on your system. Doc Datatypes are cheap (and the author includes a demo version of Find File, an advanced file finding utility, with the registered version of the Doc Datatypes package), Next is free, and between the two of them there will be few, if any, word processing files that you cannot read on your trusty Amiga.

Steve Folberg A



Left: Next, with its rather comprehensive menu. What kind of file would you like to open today?



Right: Amiga programs like FinalWriter can open binary word processing file formats, but you'll need to do some cutting.

What's up, Doc?

According to the Doc Datatypes documentation, the following formats are supported:

- DosWord 4, 5 and 5.5
- WinWord 1, 2, 6, 95, 97, 2000
- Write 3.1
- MacWord 4, 5, 98
- MS Works 3, 4
- OS 2 Word
- AmiPro 1, 2, 3
- WordStar 3, 4, 5, 6, 7
- WordStar 2000 1, 2, 3
- WordPerfect 4-9 (DOS, WIN [inc. OLE WP docs], MAC, UNIX, VAX)
- Amiga WordPerfect 4 (which is the same as WP 4)
- WordPerfect Notebook
- WordPerfect Program Editor/Ed Editor
- WordPerect Macro Editor
- Plan Perfect
- DataPerfect
- LetterPerfect
- Rich Text File
- Pocket Word 1, 2
- XyWrite III
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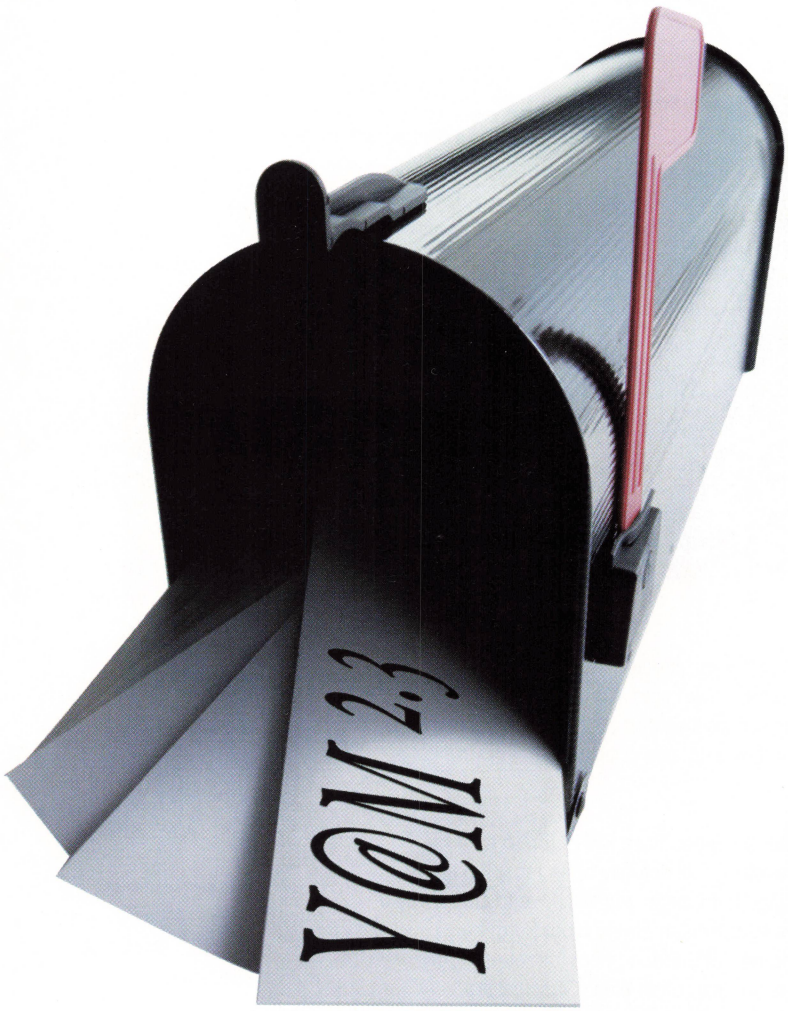
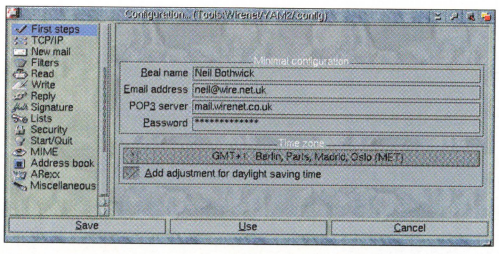


Yet Another Release of Yet Another Mailer.

When Marcel Beck released version 2.2 of YAM (Yet Another Mailer) he announced that he no longer had time to develop it and was making it open source. This has often signalled the end of an Amiga project, or its fragmentation into several incompatible pieces. This time, however, it worked: Marcel co-ordinated efforts on YAM and version 2.3 has now been released.



Above: This may be all you need to set up when getting started.

Filtering

Mail filters make it much easier to organise your e-mail. A few well setup filters can separate mail from different sources, each mailing list can have its own folder, mails from important people can be highlighted and spam can go straight in the bin without you ever seeing it.

Setting up a filter of a mailing list is easy, but it helps to put a little thought into it. You may be tempted to filter on the "[listname]" that so many lists put in the subject line, but what happens when someone sends you a private reply without removing the list text from the subject? The To: address is tempting, but what happens when someone sends the same mail to a number of lists?

The best solution is to filter on something that always appears in mails from that list and never in any other mails.

Setting up

YAM is far and away the most popular e-mail program on the Amiga, and it's not hard to see why. Installation was simple (YAM requires that you already have MUI installed but contains any extra MUI classes it requires). The installer doesn't do anything to set up YAM for your e-mail account, so you have to configure it before you can use it.

YAM's configuration program has more options than you can waggle a piece of wood at, but it also has a handy "First steps" section. Provided your e-mail address is of the form username@isp, you can usually set up the essentials on this one page. Naturally, you will want to explore the various options later, but this page (pictured, below left) is often enough to get going.

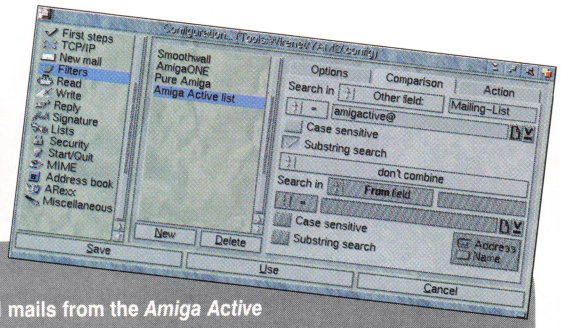
If you have an e-mail address like user@hostname.isp, this won't work and you'll have to edit the details in the second, TCP/IP, section. Unfortunately, the documentation for the First Steps section doesn't tell you this. You will need to enter your SMTP server or you won't be able to send e-mails. On a normal dialup Internet account, the POP3 server is used to collect mails from your mailbox at the ISP and the SMTP server is used to send e-mails.

Once you have configured the basic settings, you can collect, read and write e-mails. YAM is intuitive to use, after downloading mails you are presented with a list of them, double-clicking any one of these shows you the message, while icons across the top of the various windows perform all the common functions. It is this immediate ease of use that made YAM so popular. Even in the early days of the 1.x version, when the feature set wasn't that impressive, its ease of use made it the ideal choice for many people. The range of available functions and features has improved greatly since then.

Filtering for flexibility

The easy availability of mailing lists through services such as Yahoo means that many people receive a significant proportion of their mail from such lists. Having all your mail dumped into one area, with the various mailing lists mixed up with your private mail, does not make for easy mail reading. This is one of the major limitations of AmigaMail, as supplied with OS 3.9. YAM has some comprehensive filtering options to move mails into different folders (see the 'Filtering' boxout, above).

"...far and away the most popular e-mail program on the Amiga, and it's not hard to see why..."

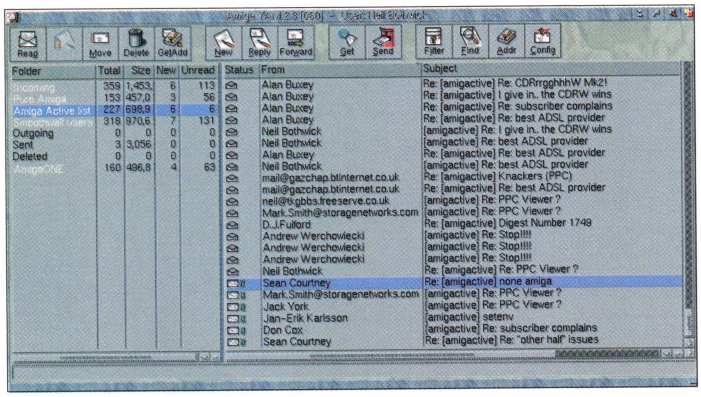


Right: Picking out all mails from the *Amiga Active* mailing list, to move into their own folder.

For example, all mails from the *Amiga Active* mailing list contain the header:

Mailing-List: list amigactive@yahoogroups.com; contact amigactive-owner@yahoogroups.com

No mail from anywhere else has this, so a filter that looks for the string "amigactive@yahoogroups.com" in this header should be 100 percent reliable. You should also be safe just checking for "amigactive@", which has the advantage that it will still work if Yahoo! sell their list service to someone else.



Above: A full listing of all mails in each folder, read and unread.

Filtering isn't only used for mailing lists, though. YAM is capable of collecting mail from more than one mailbox, your private and work mailboxes for example. You wouldn't want your private and work e-mail mixed up, you probably wouldn't want replies to your work e-mails to contain an irreverent tagline, and you will want to reply to them from a different address. A folder can have different settings for address and signature. you can set up an alternate salutation for replying to certain domains but not on a folder by folder basis. Taglines are also set globally. This makes mixing business and private mail a little tricky, but certainly not impossible.

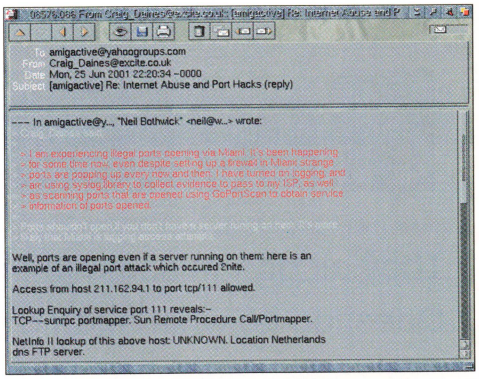
The main use of filters is to move mails to another folder, but there are other options. You can play a sound when a filter is matched. This would be annoying if it happened often, but can be handy for notifying you of important mails. Filters can also execute commands, so you could call RequestChoice to show a requester instead of playing a sound. Filters can also delete mail, useful for dealing with spam.

Adding with ARexx

YAM has the two features needed to make it almost infinitely extensible, an ARexx port and a number of users willing to write ARexx scripts for it. There's a good chance that anything you want to do, that isn't already handled internally, can be dealt with by an existing ARexx script. If not, you can grab your ARexx manual and either write one of your own or alter one of the existing scripts.

If you don't want to see the adverts at the bottom of mails from Yahoo Groups mailing lists, or you don't like the way the list name is inserted into the Subject header, there are ARexx scripts to remove these. YAM can be set to run ARexx scripts at certain times, such as before or after downloading mails.

This also makes it possible to have YAM check whether you are online and if not, put your Amiga online before collecting mail and drop the connection afterwards. There are even ARexx scripts to enable YAM to function as a usenet newsreader. Although a dedicated newsreader would be better for this job, the scripts are fine for the occasional posting.



Above: Reading a mail. Notice the different icon set, which is just another image file.

For and against

There are some niggles with YAM. The main one is that it displays all messages in each folder, read and unread. If you keep your mails for some time before deleting or archiving them, your folder lists become very cluttered. An option to show only unread mails would make life so much easier.

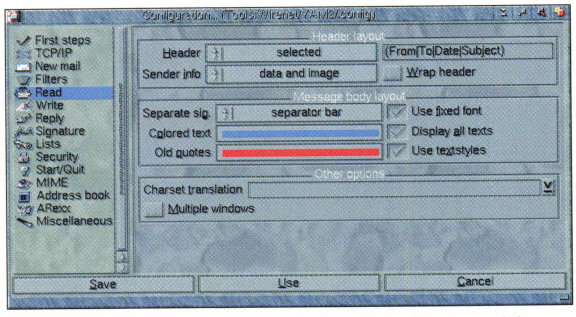
After mails are downloaded, YAM presents a summary of how many were downloaded and how many were moved by filters, but it doesn't do this for each individual filter. YAM can also be relatively slow when dealing with large numbers of mails and filters, but this is a fairly subjective observation.

On the plus side, the use of MUI makes it as easy to customise the appearance of the program as it is to configure its functions. The icons for the toolbars are read from IFF-ILBM files in the YAM:Icons directory. Changing them is as simple as copying over some new images.

Overall, unless you want usenet news and e-mail integrated in one package, YAM is worth a look. It may not have the power user features of other programs, but it is far easier to get started with.

Neil Bothwick

"An option to show only unread mails would make life so much easier."



Above: Whatever you want to change, you can probably change it here.

YAM 2.3

SYSTEM: **WB 2.1, MUI, an Internet connection.**

SUMMARY: **Easy to use and free to try. Definitely worth a look.**

Modulate, Demodulate

They all do the same thing, but no two modems look the same. Question is, what should you be looking for in a modem?

A modem is a modem is a modem, right? Well, there's a certain amount of truth to that. Many modems are based on the same chips from Rockwell, so their technical specifications are all but identical. However, there are differences in the implementation, as well as physical differences that affect the suitability or appeal of particular modems. We're looking at four modems here. The Hayes Accura uses Hayes' own chips, the rest are generic Rockwell modems. All of them are V90, the standard for 56K modems.

Gone are the days when setting up a 56K modem was a black art: all of these models worked out of the box with the default settings. The initialisation string used for all of them was "AT&FW2". AT&F sets the modem to the factory default settings, W2 forces it to report the connect speed after connection, as some modems report the serial speed by default.

Testing times

The modems were hooked up to the four serial ports on an IOBlix card in an A4000 and configured identically. Connection was through Miami Deluxe, using the same Interface and Dialer settings throughout. The tests were repeated for each modem and the best results taken. We took the best instead of the average because slower results tend to be the result of factors other than the modem, like noisy phone lines. The line used was a recently installed and tested BT line of good quality.

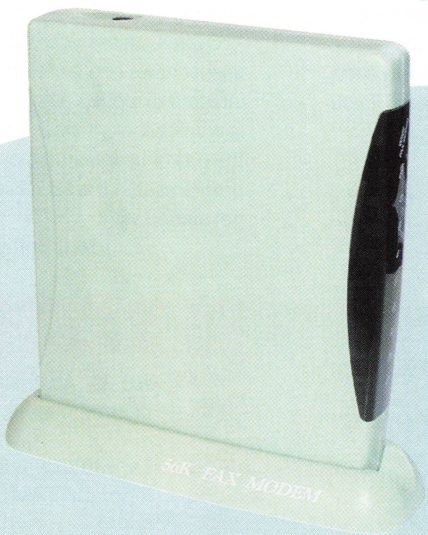
We used a script that connected each modem and reported both the connect speed and the time taken to negotiate a connection (we hate waiting for a modem to dial and negotiate. Then three 100KB files were downloaded from a local FTP server. The use of a local server at the ISP meant that only the phone connection was being tested and external network issues were eliminated.

Modems employ compression on the data they transfer, to squeeze the maximum possible bandwidth out of a phone line. The first file we tested was an archive. This type of file doesn't compress, so it tested the speed and quality of the connection. This is the sort of speed you can expect downloading files from Aminet, or loading web page graphics.

The second file was text, and downloaded a lot faster because it is compressible. This is the sort of speed you would get downloading news or web pages (e-mail is slower because of the stop-start nature of the mail download process). The third file was 100KB of spaces. This tested the throughput with maximum compression. It wasn't significantly faster than the text file for each modem, showing that the compression was already giving a data rate faster than the serial port could handle. All modems were connected to the computer at 115,200 - none of them would communicate with the IOBlix at 230,400 which would have resulted in faster text transfers on all of them.

Surprisingly, the Hayes was slower than the other three, despite coming from the industry standard manufacturer. The performance of the

"...much easier to see what was going on..."



Power

- Price: £69.95 (bundle)
- Power: 01234 851500

This was the most striking of the modems tested, although it may look more at home in a bathroom than by a computer (unless you've put your Amiga in a pastel green tower case). What at first looked like a soap dish was a stand to mount the modem vertically - a nice idea, saving on desk space. When in the stand, the power switch is on top. Unlike the other modems, this one used a different colour LED for the RD lamp which made it much easier to see what was going on, rather than trying to work out which of the eight identical looking LEDs was the important one. Apart from the colour (a matter of personal taste), this is a well designed modem that performed well in all tests.

"...both disappointing and surprising..."

	POWER	HAYES	DYNALINK	CREATIX
CONNECT SPEED	44000	41333	45333	45333
CONNECT TIME (S)	30.4	37.3	31.2	31.2
ARCHIVE FILE (KB/s)	4.32	3.55	4.59	4.16
TEXT FILES (KB/s)	10.19	10.20	10.01	10.13
EMPTY FILE (KB/s)	10.14	10.44	10.37	10.47

rest was so close as to make no difference in real life. Note that the lower connect speed of the Power modem did not result in slower transfers, as connect speeds are a poor guide to the quality of a connection.

More lights than Blackpool front

All modems sport an array of eight or nine LEDs. These have two functions: to inform and impress the user. Many of them give no useful information in general use. The important ones are CD, SD and RD. CD (Carrier Detect) lights up when the modem establishes a basic connection. SD and RD (Send and Receive Data) are sometimes marked Tx and Rx (Transmit and Receive). They indicate that the modem is transferring information. In a normal download situation, you would expect the SD light to flicker while the RD lamp should be on almost constantly. Each time the RD light goes out, it means the data flow has stopped.

Another feature that all the modems here share is a power switch. There was a trend to omit these from modems recently, but they are back now. It is useful if the modem should hang for any reason, as switching the unit off and back on again is the best way to reset it. It also means you can switch it off when it isn't being used.



Dynalink

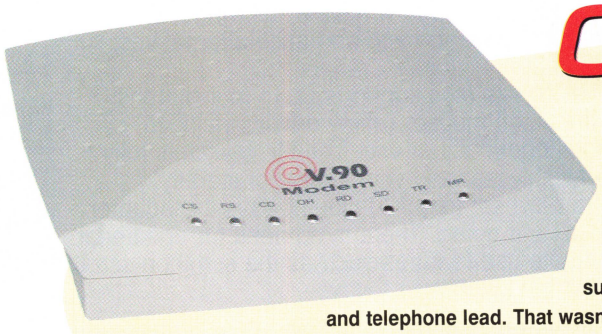
- Price: £55 (to July 31st)
- Eyetech: 01642 713185

The Dynalink is the smallest of the modems here, and is finished in a nice silver instead of the ubiquitous computer cream. The power button is on top, easy to reach but needing a positive press so it's unlikely to be turned off by accident. The ports on the back are covered by a hinged panel, which looks nice when the modem is not connected, but gets in the way when you have leads plugged into it. However, it is easy enough to remove the panel.

This modem performed well, and consistently. It recorded the fastest download in the archive test, although the advantage was fairly small. This and the Power modem share the honours for design and functionality - the only difference is the styling, which is a matter of personal taste.

"...the fastest download in the archive test..."

Creatix



- Price: DM119 (£37)
- Creatix: www.creatix.de

This is an odd one. The modem is made in Germany and came supplied with a German power supply and telephone lead. That wasn't a problem for the test as we were able to use the lead and PSU from the Power modem, but it's no good if this is the only modem you have. The box was in both German and English, but the manual was only German. The modem performed well, but unless it is supplied with the correct leads and documentation for wherever you live, you'd be better off with the Power or Dynalink modems.

Hayes

- Price: £69.99
- Hayes: www.hayes.co.uk



The Hayes is a nicely designed modem, narrower than the others and with a flat top. This means it takes up less desk space, and lets you put things on top of it. However, a pile of books or a cup of coffee on top of a modem may interfere with cooling during the summer. The performance of this modem was both disappointing and surprising, as it performed worse than any other on test. It may be that things could be improved after some experimentation with different init strings, but this shouldn't be necessary these days. A modem should work well out of the box, without the owner having to delve into the black art of AT commands. This one didn't.

"...no good if this is the only modem you have..."

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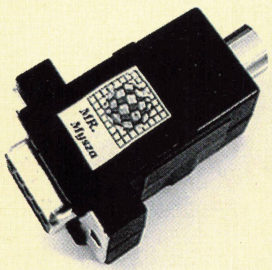

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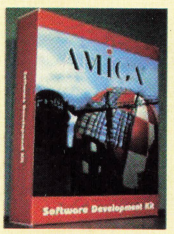

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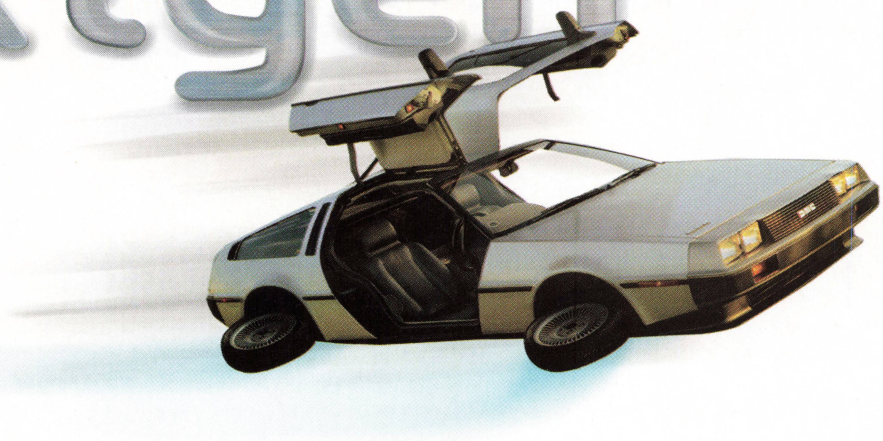


Following announcements of new hardware clad in stainless steel and bold plans to sell to the masses, *Amiga Active* investigates the futuristic, brushed metal world of Merlancia Industries.

Amiga Active: *For the benefit of those who aren't in the know, tell us a little about Merlancia's background - where and when did you start out as a company?*

Ryan Czerwinski: Merlancia started out as a trade name for products developed by Plainview Electronic Design; or rather, the products that I designed while I was a part of that company. PED was an industrial product supplier and design firm, founded in 1977/78. They carried Commodore products, as well as Apple and Atari, which they were selling to the industrial and consumer markets.

I was VP [Vice President] of Hardware Design as well as co-founder. Unfortunately, during the course of business, the President, and other co-founder decided that he was deserving of a larger cut of the profits, so I left the company and started to work under the new name of Merlancia Design LLC.

Merlancia has ever since strived to create impressive industrial and consumer products - we have served the Amiga community from its roots in 1983. Now known as Merlancia Industries, we are currently working on a complete range of medium- to high-end multimedia devices for both consumer and industrial markets, as well as low-end devices aimed at the consumer market. We have several partnerships pending, as well as the partnerships and alliances that we are already involved in. Exciting news is just around the corner in more ways than one.

AA: *Who works for Merlancia?*

RC: We currently have a staff of about 12, featuring such luminaries as Harv Laser, Malcolm Brenner (PR), Chris Aldi, David Crawford and others. We will be releasing more detailed information on who is doing what soon... but for the time being, here's some background on a few of our employees.

As President and CEO, I am responsible for the final specification on all Merlancia products, as well as some of the design work (both logic and component level design) and marketing focus. I am also responsible for most of the contracts and partnerships.

> **"...currently working on a complete range of medium- to high-end multimedia devices..."**

Harv Laser is our Managing Director and Assistant to myself. Harv is the original founder of the AmigaZone, which started its life in 1985 as a Commodore64 area on a long-defunct service called American People/Link and has been running continuously ever since. Besides Sysoping online, Harv has written for just about every North American Amiga-specific magazine that ever existed. Among his writing credits are the Amiga chapter in John Dvorak's Guide to Desktop Telecommunications (Osborne-McGraw Hill, 1990), helping to edit the late Rob Peck's book 'The Amiga Companion', and of late he's gotten into this whole HTML thang and is now creating web sites. He also has way too many collecting fetishes and not nearly enough money to satisfy them.

Dave Haynie is our CTO. If you don't already know who Dave is, let's just say the guy is 'legendary'. Dave is currently working on the design of the scalable board that will be used in the Apocolyps desktop, the Apocolyps ST, and the hurricane UltraLite. The board is designed to be scalable and can utilize for several different processors. Dave's goal is to make a difference in a compelling area of new technology - he is particularly interested in new media/technology convergence. Before joining Merlancia as Chief Technical Officer, Dave held the technical reigns at Metabox Corp., a company which was initially set up as a sales arm by Metabox AG. Dave set the technical direction for this effort, helped negotiate separate-company status with the AG and designed both an NTSC version of the "Phoenix" system and a follow-on design that

solved my major complaints with the Phoenix as used in the emerging 'advanced' applications of living-room computers.

Dave is undoubtedly most famous for his work at Commodore, where he was employed as Senior Hardware/Systems Engineer from late 1983 through mid-1994 when the company collapsed. His "Deathbed Vigil" video documented the sad shutdown of Commodore's West Chester, PA facilities, and the break-up of the legendary engineering team who were scattered to the four winds.

As a boy, our PR Specialist, Malcolm J. Brenner, spent his childhood running barefoot through the New Jersey swamps outside his parents' log cabin and never dreamed he would someday rise to fabulous wealth, vast fame and untold power as Merlancia Industries' director of Public and Press Relations - and so far, he hasn't. Malcolm, a professional journalist by training, has left a job at a New Mexico newspaper behind to come and work for us.

Finally, Merlancia's Senior Software Architect, Chris Aldi, is best known for writing the ClassAct/ReAction APIs used in AmigaOS 3.5 and 3.9. He is currently working on parts of iFusion as well as the interface for our system firmware and other software items yet to be announced. There are more people working for us, but I'll tell you about them another time.

AA: What is Merlancia's goal?

RC: World Domination? No, no, that's too boring. We have been very busy the past several years trying to move the Amiga platform forward. We plan to promote our products to the global masses, not just the current limits of the Amiga community, therefore reviving the Amiga platform as a market standard and bringing new light to the current Amiga community. Our products are pinned up directly against Apple's G4 product series, and we are hopeful to push our products to such agencies as ILM [Industrial Light and Magic] and Spielberg Studios.

"...we are expecting good relations with Spielberg Studios, as they have used Amiga systems..."

AA: Apple? ILM? Spielberg? You're not just name-dropping here are you?

RC: Ah, if you knew Steven, like I knew Steven... Actually, we are expecting good relations with Spielberg Studios, as they have used Amiga systems in the past, but ILM is another matter. If our system proves useful, they will utilize it. ILM already has a large investment in their hardware and they - or companies like them - would need to see an excellent reason to switch. Our system is suited for rendering and video production, but is perhaps not powerful enough for them. It still remains to be seen what we can do, but it is all dependent on the software we can provide, as well as the hardware it runs on.

We are very enthusiastic about the market appeal of our products. After Apple officially killed CHRP, there hasn't been an affordable PowerPC platform available to the public, not to mention an affordable multimedia creation system. Apple currently has the top of the consumer market and the low to mid-end industrial market all to itself. We plan to target those same markets as well as the top-end industrial market. If the quality is there, and the price is affordable, it will sell... that's the theory. Our system includes all the features you'd find in a high-end Apple G4 (and more) for a tad less than the G4 costs.

AA: Who will Merlancia be working with to achieve their goals?

RC: We have some very exciting partnership announcements up our cuffs - we're just waiting for the right time to announce them. We have already announced one strategic alliance, however: with Individual Computer/Jens Shönfeld. Jens is already a familiar name in the Amiga community thanks to his classic Amiga hardware enhancements (Catweasel, Buddah, X-Surf and so on). He is currently working on the CLeo custom chip for our MMC series systems. Unfortunately I cannot reveal more at this time. We will be making more announcements shortly.

AA: What is your relationship with Amiga?

RC: We are involved with a number of negotiations with Amiga Inc. at the moment. Needless to say that Amiga is aware of what we are doing and we have a good relationship with them.

AA: So when will you be releasing your first systems?

RC: We have already announced the Merlancia Tsunami system, a MultiMedia PowerPC based tower system. Other systems that we have lined up include a desktop multimedia computer, advanced Set Top Box for digital convergence and X-Casting, multimedia laptop, space conscious micro tower, palmtop and handheld systems, all of which will be PowerPC-based.

We plan on a pilot release of the Tsunami system, for developers, in early August, and a final release in November. Other systems will follow at two to four month intervals. All of these systems will be in stainless steel cases.

AA: Yes, we've noticed the abundance of stainless steel. What is it with that?

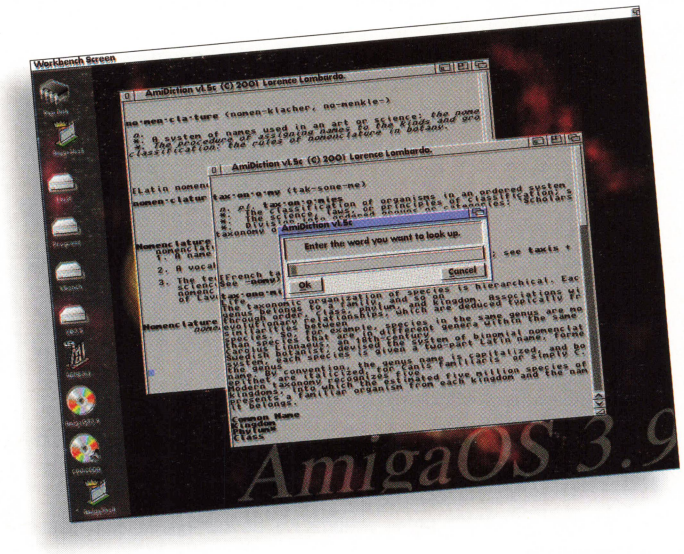
RC: Well, let's just say that I've considered having all the walls in my living place panelled in stainless steel, with silver, grey and black carpeting and steel/crystal furniture. Hmm, maybe next year...

More info: www.merlancia.com



Active Shareware

An online dictionary, a text editor and a help system give a decidedly textual theme to this month's pick of Amiga shareware



Dictionary corner

Sometimes while tip-tapping away at your keyboard - whether you're simply firing off some e-mail correspondence or authoring your next bestseller - you find yourself in need of looking up the meaning of a word; and that dictionary on the bookshelf in the next room is just too far away. What do you do? Well, with AmiDiction (comm/tcp/AmiDiction.lha) you can find a definition online.

AmiDiction is a clever little client program which can be used to look up words using the online dictionary available at www.dictionary.com. Start the program, enter the word in the requester, and - network bandwidth permitting - you'll have an instant definition appearing in a window before your very eyes.

AmiDiction's interface is rather basic - a fully-fledged GUI would be a lot nicer than the simple console interface provided here - and, dare I say it, an ARexx port would be a tremendously useful addition, but it works well as it stands.

Moreover, the definitions at www.dictionary.com include etymologies, pronunciations and often famous quotations and example usages. All we need now is for AmiDiction's author to support an online Thesaurus and we'll never need to leave our typing seats again. Unless we need more coffee.

The naked editor

You can never have too many text editors, that's what I say. Finding one that you feel comfortable with is essential to being productive on a computer, so the appearance of a new editor for the Amiga is always a significant event, especially when it is a piece of software as swish as BareEd (see text/edit/BareEd.lha).

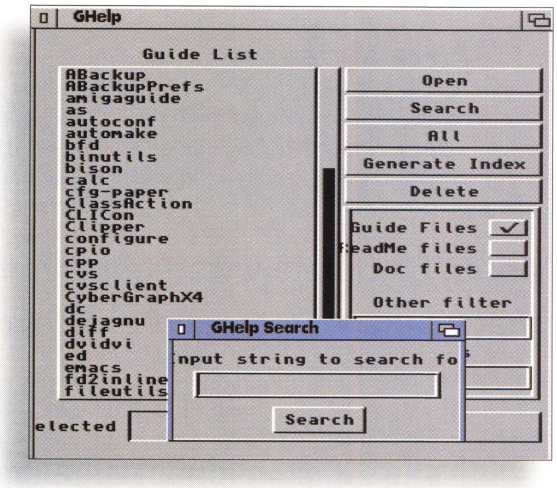
BareEd is, as its name suggests, a simple editor. In fact, it started out as a replacement for the old Workbench notepad. As such, its unique feature is that it can use any monochrome Amiga font, whether mono-spaced or proportional. Only a single font may be used per document, but you can select the font style and foreground and background colours for the document. The text is saved as plain ASCII, but the font and colour settings are stored as Tooltypes in the file's icon - so it will look just the same next time your reload it.

Despite its inchoate state, BareEd has many of the features you would expect of a text editor: cut-and-paste, search and replace, bookmarks and so on. The interface for highlighting text is unusual, however. Instead of dragging with the mouse, you double-click to start a selection and single-click to mark its end.

BareEd has several more advanced features, too, such as an as an ARexx interface and a revision control system. Much work has to be done yet - the undo function doesn't appear to work at all at the moment, for instance - but this is an impressive beginning.

"...font and colour settings are stored as Tooltypes..."

Getting help



Despite being universally regarded as a user-friendly operating system, the current Amiga OS has many shortcomings. One example is the lack of a centralized online help system.

One of the problems leading to this is that there is no standard - or indeed single - convention as to where a user application's document files will be stored: some will be installed in the application's directory or sub-directory and some in the HELP: directory or a localized sub-directory of the HELP assign. While this allows great flexibility on the part of the developer, it makes it difficult to present a global and searchable body of online help for the user.

Many solutions have been developed to solve this problem, but a new one is the GHelp system - which has just been updated with a Deluxe release (util/wb/GHelpDeluxe). GHelp is a suite of programs that maintains a database of online documentation. Its graphical frontend is implemented as a commodity which can be deployed in your WBStartup drawer and be displayed with a user-definable hot-key combination.

The GHelp GUI is both where you can query and where can build the database of help files. It has controls which let you add paths for the system to search for documentation. By default the system just looks in the HELP: directory, but you can add as many addition directories as you want. You can also select the file types that GHelp considers to be documentation. Buttons specify the common types - those ending in '.guide', '.readme' or '.doc' - but you can also add additional patterns to match. When you click 'Generate Index', GHelp will build an index of all the document files in all the directory trees specified and whose filenames match the patterns given.

A sorted list of the all the help files known to GHelp are given in a list view in the GHelp GUI. You can select a file and click 'Open' to view it in the browser of your choice, typically Multiview. Here, you may also search GHelp's database of documentation. Hitting 'Search' will pop up a requester where you can enter a string to search for in a list of files. The list will be narrowed down to only those files containing the search string. This system allows searchs to be applied incrementally. Searching again will apply the query to the files matching the previous query.

"Fundamentally, GHelp is a good idea..."

Fundamentally, GHelp is a good idea. Unfortunately, the implementation is poor. The GHelp GUI features some of the worst user interface design I've seen in some time. It doesn't adapt to system fonts, while the main list of help files doesn't act like a standard Amiga listview; it doesn't even highlight the files that you select.

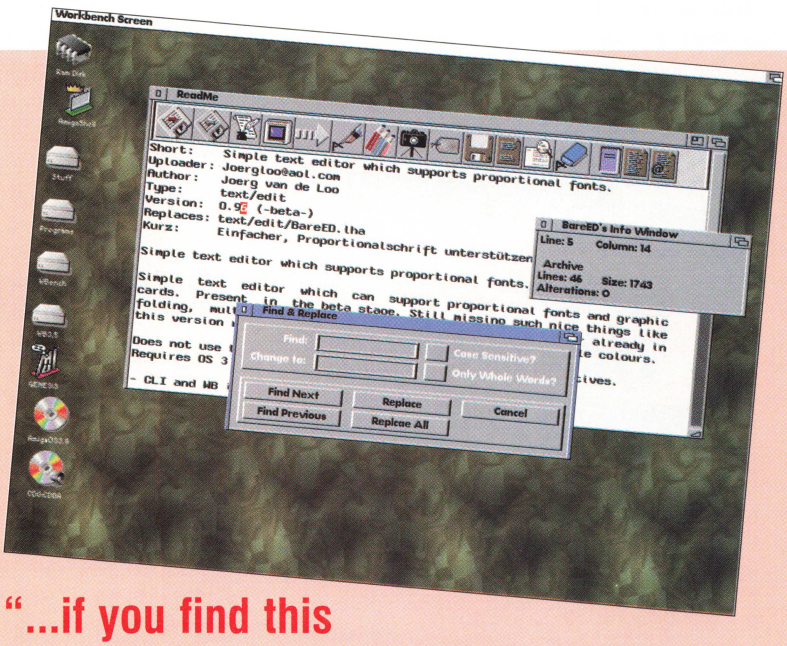
Also, the search function is rather primitive. Ideally, it should allow you to query for multiple keywords rather than a single string, and the support of wildcards would be a useful addition. The author of GHelp has had some good ideas, but for the system to be truly useful, he needs to go back to the drawing board I'm afraid.

Richard Drummond A

Not just another copy

CopyReplace is, not surprisingly, a replacement for the standard AmigaDOS Copy command. It is compatible with the standard version, but supports a range of extra options which makes it much more versatile than the original. In fact, it can not only replace the original 'Copy' command, but can also replace 'MakeLink', 'Delete', 'Rename' and 'MakeDir', as well as providing a 'Move' command.

While this is handy for those on tight disk-space requirements, it is actually a lot less useful than it seems. Overloading 'Copy' in this way is actually quite confusing, especially when some of the uses don't actually copy anything. For example, 'copy file delete' deletes 'file', while 'copy dir makedir' makes a new directory called 'dir'. If you find this semantically challenging, however, you can always make some shell aliases for the various non-copying functions that CopyReplace performs.



"...if you find this semantically challenging..."

Active Media

Read about audio, dream about completely free, totally reliable 'net access and discover how the Internet works with the aid of a few jelly beans.

The Art of Digital Audio

- Hardback, 768pp
- Third Edition (15 Sep 2000).
- Author: John Watkinson
- Published by Focal Press
- ISBN: 0-240-51587-0
- Price: £55.00

This is a book which not only explains how digital audio works but also discusses a range of other topics. After a preliminary chapter, the main book begins with a chapter on analog audio and how the ear works. This section alone will tell you a lot that you don't know.

Chapters follow on digital principles, conversion between analog and digital, compression (including MP3 but not MLP), recording and transmission, how hard disk drives work, optical disks, DAT and many other topics. The final chapter on audio quality is particularly good.

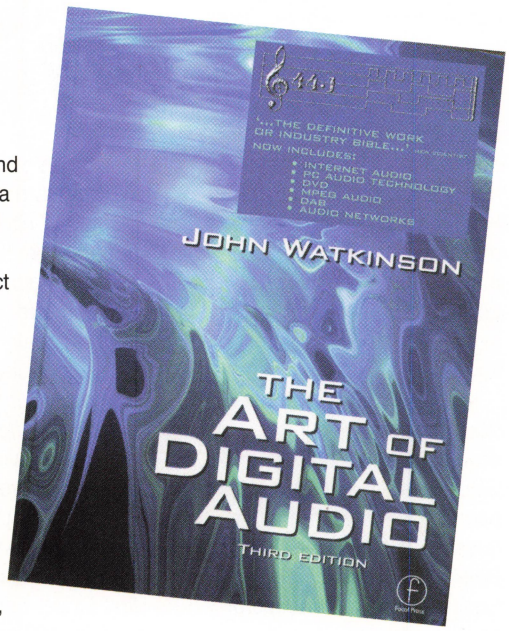
Audio is a big subject, and even a 768 page book like this omits some major topics. There is no mention of Dolby digital soundtracks on films, or MIDI. Even so, there is enough information here to keep you learning for years. Watkinson knows what he is talking about, and he has thought hard about it. This is not just a rehash of information that you can easily find on the Web.

For example, one thing that has a big effect on digital audio quality is the correct use of dither. You will find papers on this topic on various web sites, but Watkinson has written ten pages in this book that go right to the heart of the subject.

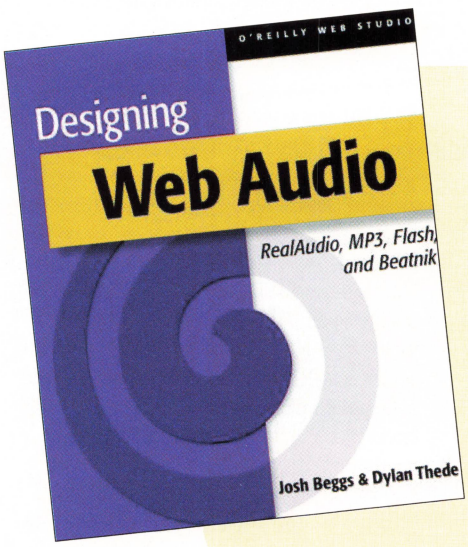
The explanations are clear, with hardly any mathematical formulas, and plenty of graphs and diagrams in the usual plain style favoured by Focal Press. If you can follow the technical articles in *Amiga Active* and have a general knowledge of computers, you will be able to understand everything in this book.

The Art Of Digital Audio is a big, expensive tome, but anyone who is considering writing any audio software, or investing a large amount of money in equipment will find it worth buying. Others should persuade their local library to get it for them.

Don Cox



"This is not just a rehash of information that you can easily find on the Web."



Designing Web Audio

- 400pp
- Authors: Josh Beggs and Dylan Thede
- Published by O'Reilly
- ISBN: 1-565-92353-7
- Price: RRP £24.95, £19.96 from amazon.co.uk

Designing a web site requires far more design knowledge than web knowledge. HTML is simple - even without the various programs that write it for you, but producing a visually pleasing design that works for everyone is much harder. This is doubly true when trying to add an audio element to your web pages.

Designing Web audio looks at all aspects of using audio on the web, from simple background sounds and button clicks to full blown streaming audio. It looks at the technologies available and considers the pros and cons of each. All stages of the creation process are considered, from sampling or otherwise sourcing the initial material, through processing it for web use and final delivery. While it tries to be platform independent, any discussions of software



Moon on a stick?

➤ Web site
➤ www.foxglove.co.uk

It seems to be traditional these days for Internet users to expect "The Moon on a stick". People want more and more services for less and less - if not zero - cost. Well, after all this time, it seems someone was listening, for your wishes have been granted. Foxglove are attempting to provide high quality access with no call charges, even for international users.

Admittedly, the stress in the previous paragraph should be on the word "attempting", and anyone truly expecting this site to contain a downloadable version of the moon on a stick will be disappointed. However, this site is one of the funniest parodies of the current Internet access market and some of its players that we've seen for a long time.

Keep your head down

➤ Web site
➤ www.tinhat.com

This site is by the same author as foxglove.co.uk (left), but is a serious attempt (no, really!) to explain various aspects of Internet operation. This isn't a techie reference for geeks but an attempt to explain fairly complex concepts in a simple way. Using jelly beans to explain how the Internet works may seem like a strange idea, until you actually read the article and end up thinking *"so that's how it all works!"* There is also good advice on subjects such as e-mail security and online banking.



Aminet 43

➤ From: Schatztruhe
➤ Price: DM25 (around £8)
➤ Phone: +49 (0)7741 830411
➤ Web site: www.shatztruhe.de

Containing nearly a whole gigabyte of new material since the last Aminet offering, and including the commercial software Wildfire 5, Aminet 43 is a one-stop shop for the latest freely available Amiga games, demos, pictures and mods.

Hackers at work

➤ Web site
➤ http://grc.com/dos/grcdos.htm

We have mentioned the GRC site before, about eighteen months ago, specifically its Shields Up! service. It provides security advice and services for testing how secure your computer is against Internet based attacks. Ironically, the site itself became the victim of such attacks. http://grc.com/dos/grcdos.htm details how a thirteen year old hacker was able to launch a concentrated "Denial of Service" attack by detecting insecure machines on the Internet and running malicious programs on them to take down the GRC site.

It's a long read, but if you are at all interested in how the Internet can be compromised so easily, it is also a highly educational read.

Neil Bothwick

Among the usual contributions of icon sets, datatypes and miscellaneous utilities are notable inclusions such as the latest versions of Warp3D, TaskiSMS, SnoopDOS and demos of Shogo and fxPaint... all of which you'll already have if you're a regular reader of *Amiga Active* and have been looking on our coverdiscs each month.

If, on the other hand, you haven't been keeping up to date with the latest Aminet offerings, or you've been following our OS3.9 Masterclass and are in need of some extra utilities, icons or backdrops, take a stroll through Aminet 43. A welcome PowerPC section lists the recently uploaded PPC software by directory, where you'll find the latest PPC datatypes, fractal generators, emulators and graphics software - although admittedly, there isn't a great deal of PPC software on offer, as ever. Hopefully this will change when the AmigaOne finally arrives. A

used to create and manipulate content concentrate, predictably, on Windows and Macintosh programs.

If you want to create a site on an Amiga for viewing by Amigas, much of this book will not be relevant. With the notable exception of MPEG, most of the technologies are not available to Amiga users, and MPEG has significant disadvantages for web streaming, as explained here. However, if you want to consider the use of web audio in a broader context, particularly at a professional level, this book may well be worth looking at.

Neil Bothwick

Getting to know Photogenics.

Part 2

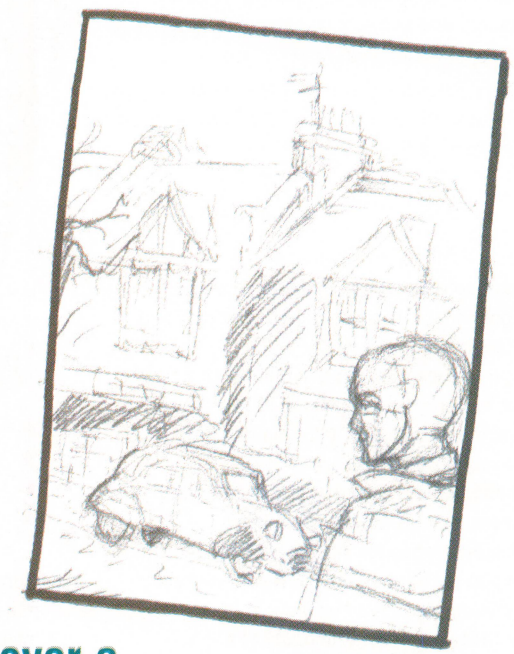
Getting into the foreground: this month's instalment expands on the techniques shown last month and goes a step beyond...

In part one of this tutorial last month, we dealt with a technique for turning a photograph into a pseudo-illustration - in effect tracing the image outlines, but also retaining the colour and texture from the original image. The idea behind this is to allow the integration of photo-realist backdrops for illustrated foregrounds. If you were to paste a drawing straight over a photograph the image would be unconvincing - the foreground would look flat and pasted on, not integrated into the whole.

In this month's instalment we're going to deal with creating the foreground image. Rather than just drawing straight onto the screen, I've utilised a technique which will produce results as similar as possible to the photo manipulation technique described in the first part for an entirely drawn image. You don't really have to have read the first part to get on to this part, and I don't suggest you attempt to recreate this image exactly. This technique is an interesting one to play with, but the primary reason for using it in this tutorial is that it demonstrates a wide range of Photogenics' functionality.

Back to the start

We'll kick things off by stepping back to the very start. The image I'm creating is a simple comic strip panel - a character walking through a street. From the most basic thumbnail doodle, I chose a photograph to use as the backdrop (see last issue). Figure 1 (below) shows how I planned to use the photograph compositionally.



Above: Figure 1

"If you were to paste a drawing straight over a photograph the image would be unconvincing..."

To start off with, prepare your materials. I drew the character with strictly analogue pencil and paper, and scanned the image. You can see from the final penicilled artwork (figure 2, below) that I've included a sketch of the backdrop to ensure the composition is correct. Now remembering that the background image is 731 x 931 pixels, we are going to need the scanned image to be the same size. Forget about anything you've been told about the ideal resolution to scan an image - we need an exact (or as close as possible) pixel count, not a DPI setting. Divide the horizontal resolution you are after (in this case 791) by the horizontal size of the image to get the appropriate scan resolution.



Above: Figure 2

Rather than painting straight over the pencils, we want to reproduce the photographic texture effect of the background artificially. To do this, we'll paint the image using photographic textures. For this, I need a cloth texture for the man's shirt and a leather texture for his jacket. The simplest way to get these is just to scan them. Expect to have to tweak the images you get from the scanner - the raw scans will probably be too dense and require Gamma correction.



Above: Figure 3

How to scan your shirt

When scanning real world textures it is important to remember that you're going to have to find a compromise in terms of scanning resolution. On the one had you should scan the textures at a high enough resolution for the texture to be readable, on the other hand it should be a low enough resolution for the texture not to look oversized. Experiment, and if possible find a material with a finer pattern or weave than you want - using silk for a cloth texture, for example.

"...if possible find a material with a finer pattern or weave than you want..."

In Figures 3 and 4 (below left) you can see the two texture scans I made for the illustration. The blue material is scanned from cotton, the leather texture acquired by scanning a leather jacket. When scanning materials like this, try to make sure they lie flat against the scanner, but do not press them too flat or tight against the glass, as this will produce unnatural looking highlights in the texture and may result in small ripples across the surface of the material with lighter cloth.

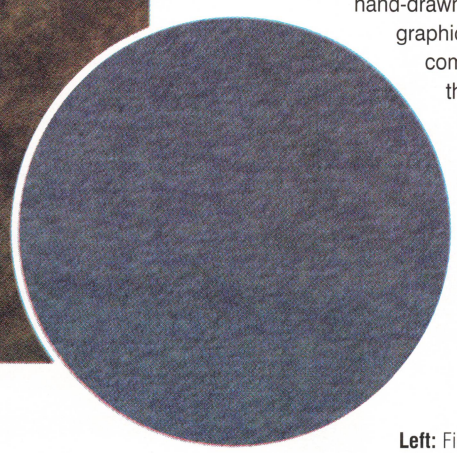
Photogenics' handling of multiple images is the key to being able to texture the pencilled image with the secondary texture graphics. In this part I'll run through the process whereby I used variations on the RubThru mode, and the ways in which this process can provide a variety of different effects, from the most straightforward filling of an area with the texture to blending the textures and reusing the same texture multiple times, overlaying it to create areas of differing density.

Get the groundwork right

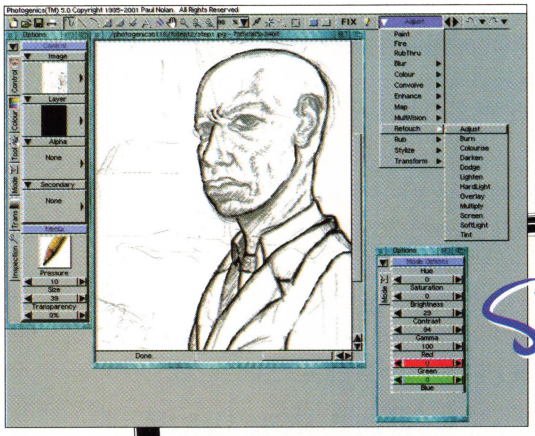
In the next issue we will show you how to marry the foreground and background images together. This is not a simple matter of pasting one image over the other, as you will see next month - the idea here is to ensure that the image truly integrates, and one way we will do that is to add the finishing touches to the character after it has been superimposed on the background, using the same basic methodology as described in part 1.

The textures will be used a little more in part 3 to retain that photographic realism while adding the hand-drawn feel we put into the background graphic. We will also cover the issues of compositing an image, both from the technical standpoint and in terms of ensuring a good visual blend. For this part of the tutorial we will basically be getting the drawing up to stage required to start this process - flat textures ready to take the coloured pencil line style used for the background.

Andrew Korn



Left: Figure 4

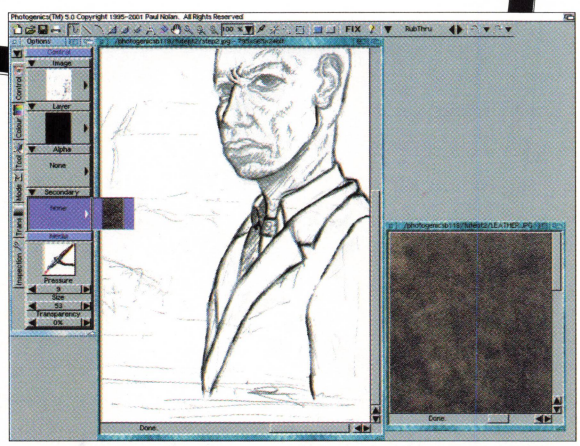


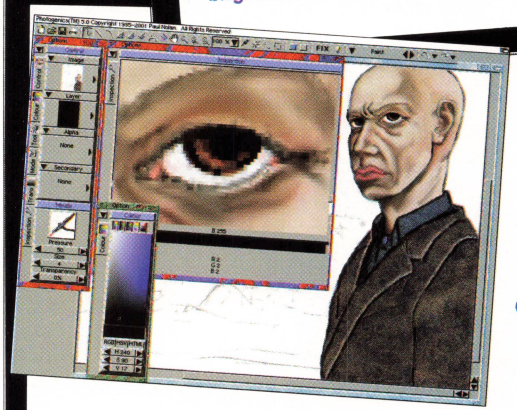
Step 1.

The first step, as with the background last month, is to prepare the sketch for the things we are going to do to it. Again I've outlined the major areas, although in this case it's primarily to define the rough pencil lines. The rest of the image can be cleaned up by painting white over any areas you want to blank, but we want to retain all the detailed pencilling. It should be faint enough that it can be seen under a wash of colour or texture without dominating the image. We achieve this by painting with the Retouch/Adjust mode, raising brightness and lowering contrast to make the lines fainter.

Step 2.

Now we're going to apply a flat leather texture to the jacket. The texture graphic is loaded as a separate image, and then selected as the secondary image from the Control Options panel. This tells Photogenics where it should find the image data for a rub-through. The principle behind this is that where we paint, the secondary image will rub through over the first. We'll use this to fill the various areas with the scanned textures, blocking out the central parts of each area and then building paint up towards the outlines with a smallish brush set to a low pressure, stroked repeatedly up to the edge to make a smooth line.





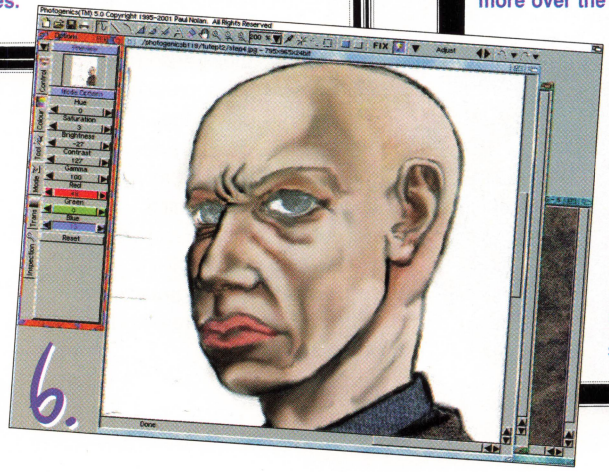
Step 7.

With the basic textures in place, it's time to fill in the blanks. There's still a lot to do with the textures themselves, but that's for next month; at this stage the important thing is to make sure the base colours are all there. I've just painted in the eyes and the button on the shirt collar manually. Eyes are fairly reflective and would normally have a highlight, but I haven't put that in yet as that will be part of the process of blending the images.

I had originally intended to draw the face straight in the colour-pencil style of the background, but at the last minute I decided to employ the same base-texture process here. I scanned my arm, although to be honest a scan of a photograph would produce better results. Here I used RubMultiply, but after filling the area with a single "wash" of texture, I then fixed the image and painted more over the areas I wanted to appear darker.

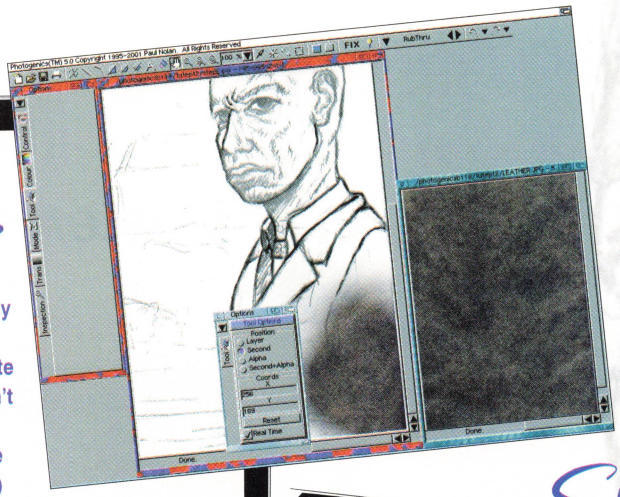
Because RubMultiply combines the colours of the main and secondary images, this effectively "doubles up" the density of the texture for the dark areas, producing a realistic shaded flesh texture. I then used the blend and smear Media to smooth the pencil shading into the colour. This loses a lot of the skin texture in some areas, but we'll be putting that back in later.

I've painted over the lips with Retouch/Adjust mode, adding red and reducing brightness to make them the right sort of pink rather than replacing the skin texture that's already there.



Step 6.





Step 3.

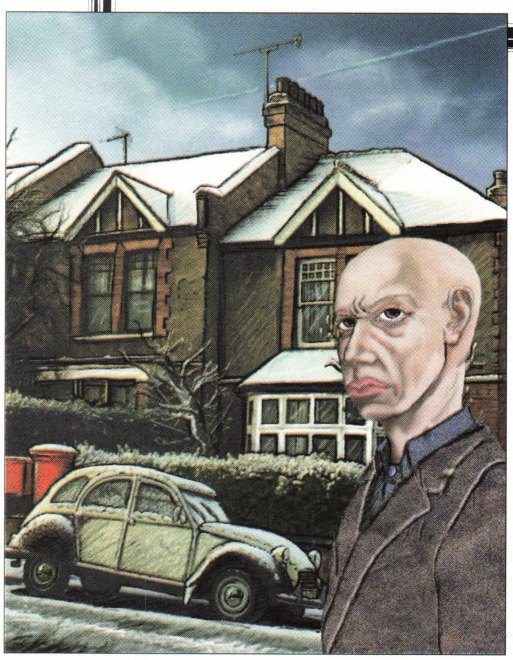
The texture image I have used here was made large enough to comfortably cover the entire region that it will be applied to (the jacket), but it's not quite the same size as the sketch, so it won't necessarily be in the right place. To overcome this, paint one corner of the image (the corner nearest the subject) with Rub-Thru mode selected, and then click on the Drag (hand) icon in the icon toolbar at the top of the screen.

From the Tool Options panel, we can select which image we want to drag - click on the "Second" gadget and check "Real Time". Now click anywhere in the image and drag until the texture appears in the painted corner. Line up the texture to the corners of the main image. The texture is now registered to the image and if we need to reuse it later we can ensure that the texture is properly lined up and doesn't overlap.

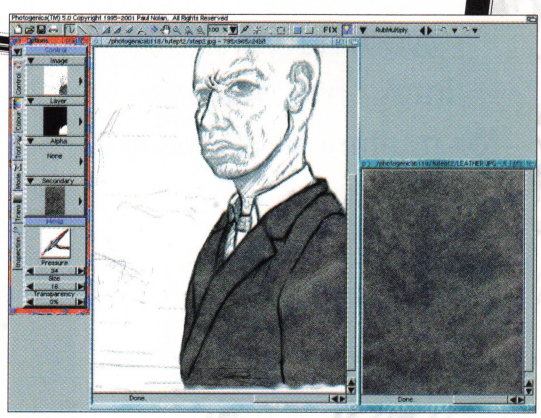
Step 4.

Copying the contents of one image into another is fairly straightforward with the RubThru option, but it's not quite what we need, as it will replace the pixels in the image with pixels from the secondary image, which means we lose all the pencil lines.

After clearing the paint layer used for the alignment guide, I painted in the jacket area carefully and selected RubMultiply. This mode combines the pixel data from the two images rather than just replacing one with another, so the white areas of the sketch are entirely replaced, while dark areas show through. Select the Experimentation Mode (light bulb) icon and paint carefully over the appropriate part of the image layer. It's worth experimenting with all the different RubThru modes, as some of them can produce valuable effects.



Here's the character pasted straight into the backdrop image. The texture and lighting of the two images doesn't match yet, which stops the foreground and background blending together - but we'll deal with that in the next part.





Step 5.

The mode I finally chose was RubEmboss, which is similar to a standard emboss function but uses the secondary image rather than a mid-tone. The effect is to create a dark and a light line where the underlying pencil outlines were, producing a pseudo 3D effect.

I altered the angle of the emboss to match the angles of the lines, and played with the Mode Option sliders until it gave me the effect I liked. After fixing the image I then selected standard RubThru mode to paint texture directly over the highlights which formed where the dark lines represent only shadow and there should be no highlights.

The shirt was a much simpler proposition, a straight fill-in with RubMultiply, using a small brush and building up multiple strokes of low pressure to avoid running outside the outlines.

OS3.9 Masterclass part 4



Extra! Extra! Read all about it! Turn your Workbench into a haven for multimedia.

Time to add some extras to your Workbench this month, in the conclusion to our OS3.9 Masterclass. We've provided all of last month's related files on this month's coverdisc - e-mailers, web browsers and system tools - along with a collection of other bits and pieces such as audio players, movie players and datatypes which we'll be talking about over the following five pages. So what are we waiting for? Well, now you mention it, nothing! Let's get stuck in.

Listen up!

Something you'll want to do with your Amiga at some stage is to listen to music - be it MODs from Aminet, MP3s from elsewhere on the web or your own CDs. The Amiga can handle all of these tasks with ease, if you have the required hardware. Listening to CDs isn't a problem so long as you haven't forgotten to plug a CD-ROM drive into whatever level of Amiga you own, but MP3s require more processing power to decode, so a fast '030 is a minimum requirement - unless you invest in a custom built piece of hardware to take the load off your Amiga, like the MASPlayer (see AA17, page 31). PowerPC hardware is, of course, great for playing MP3s. Roll on the AmigaOne.

"PowerPC hardware is, of course, great for playing MP3s."



Above: Amplifier, the totally skinnable OS3.9 audio player.

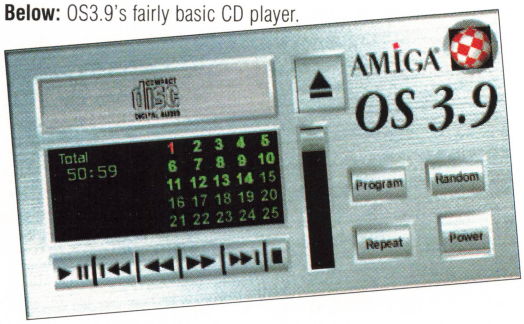
OS3.9's built-in audio utility, AMPlifier, is a good MP3 player that is also capable of playing a few other audio formats, including AIFF and WAV. It supports both hardware-based MP3 decoding (if you have the required hardware such as a Melody soundcard) and software decoding via mpega.library, a 68k version of which comes as part of OS3.9. We've included the PowerUp and WarpOS versions of mpega.library on this month's CD, for those of you who have PPC processors. Just copy the new library over the old one in your LIBS: assign and re-start AMPlifier to enable PPC decoding of your MP3s. Featuring playlist support, drag-and-drop functionality and an ARexx port, not to mention being totally skinnable with WinAMP skins to achieve that custom look to suit your mood/Workbench, AMPlifier is

TOP TIPS

Request permission...

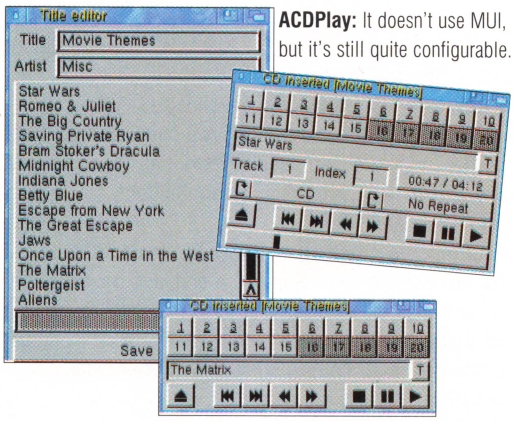
...to look good? Permission granted! Install ReqAttack to turn your Amiga's default requesters into something altogether more pleasing to look at. Fonts, backgrounds, pictures and even animations can be used to give different types of requesters a complete facelift.

Below: OS3.9's fairly basic CD player.



a welcome addition to the set of utilities that come with the Amiga OS. But what if your audio needs extend to CDs and MODs?

OS3.9 comes with a fairly basic CD player, PlayCD. Its interface is skinnable, but it only comes with one skin, which looks quite nice but is a bit fiddly to use. It's hard to say how much of this is down to the skin's imagery, because there is no information on creating or converting alternative skins. Tracks can be played from start to finish, at random or in a pre-programmed sequence. There's no option to use CDID files, which some CD players use to load a tracklist in order to show

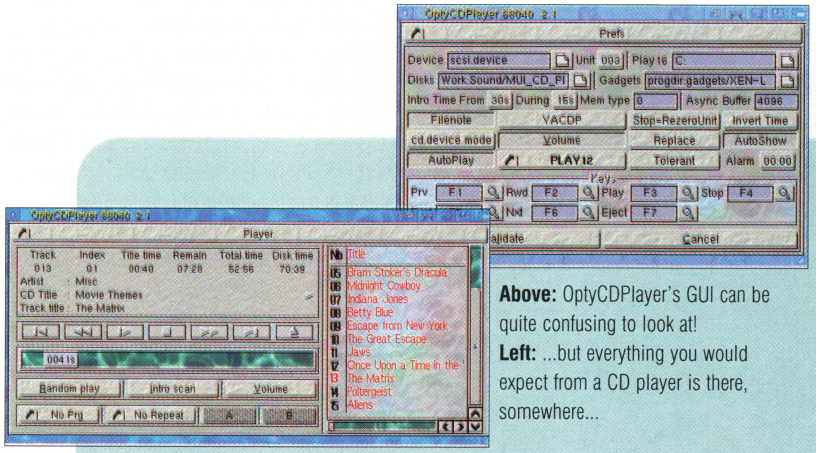


ACDPlay: It doesn't use MUI, but it's still quite configurable.

tracks by name rather than number. There is a comprehensive collection of CDIDs in the Resources drawer of the AACD.

Also on our CD this month (in AACD/Magazine/OS3.9) you'll find a handful of alternative CD players: ACDPlay, MUI CD Player, OptyCDPlayer and YACDP (Yet Another...), the latter being a rather ugly, font insensitive (read: it uses Topaz) SCSI CD player. Thinking about it, we're sorry we put it on our coverdisc: it lowers the tone somewhat, doesn't it? Still, what of the other three CD players? Well, if you don't like MUI, you're limited to ACDPlay which, unlike YACDP, is font sensitive, quite configurable and actually rather neat. Configured via tooltypes, ACDPlay is simple to use and fits the bill if all you require is a no-frills, small and functional CD player.

Then we come to the MUI alternatives. OptyCDPlayer comes in three flavours for different 68k CPUs - 68020, '040 and '060 - and uses one window for all its functions: Player, Titles, Programs, Sampler and Prefs, selectable from a popup list as required. The GUI's layout - although configurable visually thanks to MUI - isn't the easiest to use, with functions like volume control 'hiding behind' a button which then opens another window with



Above: OptyCDPlayer's GUI can be quite confusing to look at!
Left: ...but everything you would expect from a CD player is there, somewhere...

"OptyCDPlayer comes in three flavours..."

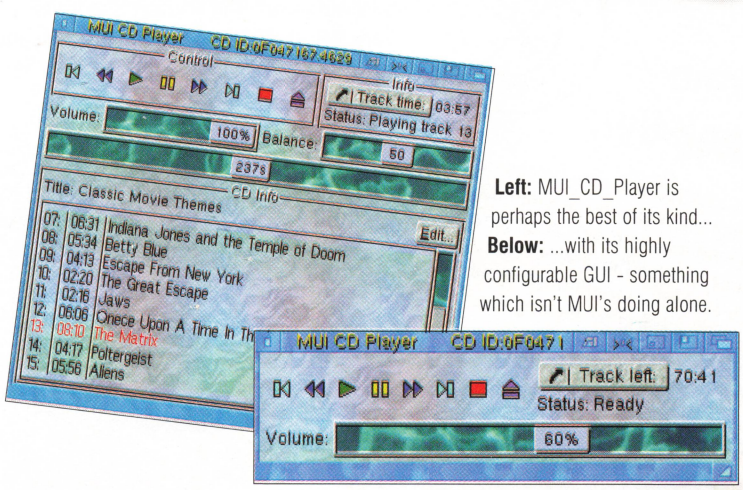
fiddly volume "knobs" to twiddle. Furthermore, the position slider which moves from left to right as you play a track doesn't let you skip to a certain part of the track by clicking and dragging as you would expect.

Suffering from no such problems is MUI_CD_Player, which comes in two parts - a player and a CD manager offering import/export of various CDID files (describing what's on a CD) and search functionality for those with huge CD collections and a poor memory. A separate script to configure your CD-ROM drive will have you up and running in seconds, its MUI interface is intelligent enough (like OptyCDPlayer's) to include a panel with track information if you enlarge it or limit itself to fewer sections when reduced in size, and you can enable/disable all of the individual parts manually as well as snapshotting the window's position. A range of button sets is included (or you can design your own) and volume, balance, track time and status information are all sensibly placed by default, which all adds up to a CD player which, despite looking nice, you really don't need to look at... if you see what we mean.



Escape from Del

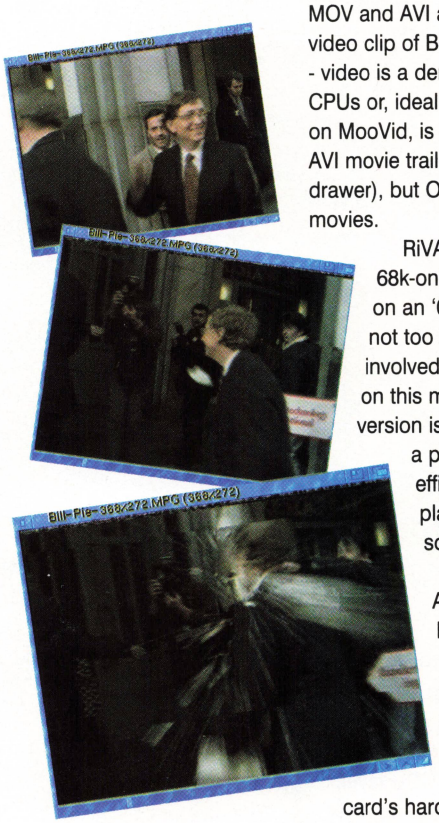
Windows all over your screen? Deleting files a chore? Install PowerWB, put "run >NIL: PowerWB NOGADGETS" in your user-startup and breathe a sigh of relief. Close active windows simply by pressing the 'Escape' key and delete files by hitting 'Del' (then 'Return' to confirm). No need to click close gadgets or select the 'Icons > Delete' menu option ever again.



Left: MUI_CD_Player is perhaps the best of its kind...
Below: ...with its highly configurable GUI - something which isn't MUI's doing alone.

Video star

Something you *will* want to look at is video - MPEG, MOV and AVI animations or movie trailers - or just a video clip of Bill Gates making friends with a custard pie - video is a demanding medium requiring the fastest 68k CPUs or, ideally, PPC to be worthwhile. ACTION, based on MooVid, is OS3.9's AVI/MOV/QT video player (some AVI movie trailers are on the OS3.9 CD in the Videos drawer), but OS3.9 is incapable of playing MPEG movies.



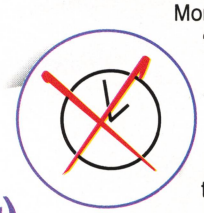
Above: Bill Gates meets a new friend. Always a favourite, and you can watch it again and again thanks to Frogger (yes, it's all on our coverdisc...)

RiVA (see our CD) is an MPEG video player for 68k-only Amigas. It runs at an impressive speed on an '060, but can be flakey on some set-ups - not too surprising considering the amount of work involved in MPEG decoding. If the demo version on this month's coverdisc works for you, the full version is definitely worth considering. There's also a possibility of a PPC version. If this is half as efficient as the 68K one, it will be an excellent player, provided the stability issues are sorted out.

Maybe there's something about our A4000 and MPEG movies, but Frogger can be a little unstable too. Frogger has versions for all processors from 68030 to PowerPC. The PPC version plays with minimal frame skipping, provided you don't try to zoom the image. It has a VLAYER mode that will use a graphics card's hardware to render the movie directly onto the video output instead of a normal window. However, this is when Frogger becomes unstable, and it may be the similar feature in RiVA that is behind its tendency to hang too. Only the PicassoIV, CyberVisionPPC and BlizzardVisionPPC graphics cards support this display mode. Frogger is available for a variety of systems including '030, '040, '060, MorphOS, PowerUp, WarpOS, LinuxPPC and Linux x86 - quite a comprehensive selection, we think you'll agree.

Warped System?

If you've got a PPC-equipped A1200 and have installed a handful of audio and video players that run under MorphOS, chances are you'll be annoyed by the 'Terminate yes/no' requester that pops up every time you boot OS3.9 as WarpOS tries to initialise itself. The solution is to install Frank Wille's BPPCFix to your C: assign and put "C:BPPCFix install reboot >NIL:" as the the first line of your startup-sequence.



Your system will reboot an extra time when you start from cold, but the Terminate requester will no longer halt your Workbench in mid-startup. Installing BPPCfix won't, on the other hand, prevent you from using all PowerUp software - because yet again, someone in the Amiga community (Frank Wille) has come up with a workaround in the form of PPClibEmu, which emulates PowerUp calls under WarpOS. Andreas Kleinert's picture datatypes, for example, used to be provided in both PowerUp and WarpOS flavours, but are now only available for PowerUp - you can run them under WarpOS thanks to PPClibEmu.

This BPPCFix solution, however, brings with it another problem: that of more reboots when you first fire up your system. Originally, reboots weren't a problem for the Amiga - in fact, Amigas have always been known for booting much faster than other systems. This is because AmigaOS was originally designed to boot from floppy disk (at a time when hard drives were but a dream), so putting a lot of the necessary code into the Amiga's ROM was necessary to cut down boot times. Now that ROMs are getting old and hard drives are standard components, however, loading from ROM is having the opposite effect and slowing down boot times. When a program alters a resource already loaded from ROM, the only way to make the new resource available is to reboot to clear out the old version. For example, when SetPatch updates scsi.device, the old scsi.device is already in memory. How else would you have loaded SetPatch? One extra reboot on cold booting is a minor annoyance, but other programs also need to reboot for their changes to take effect, like OxyPatcher, ShapeShifter's PrepareEmul and BlizKick.

Four reboots is getting a bit silly, but there are a couple of ways to avoid them. The first is to never switch off your Amiga, so all reboots are warm boots. This also gives you an excuse to join the Amiga RC team (see this month's Online section). A somewhat more practical approach is BlizKick.

The Phase 5 / DCE accelerator cards map the Kickstart ROM to the card's fast 32 bit memory on start-up. BlizKick does a similar thing, but loads the Kickstart from a file instead of the ROM. This means you can apply the patches to the disk version of the ROM and load that, requiring only one reboot to load all patches. The patches available include fixes to some bugs in the 3.1 ROMs, the changes needed to run ShapeShifter or Fusion, BPPCFix and a noclick option to quieten your floppy drive. You can also extract the relevant changes from the "AmigaOS ROM Update" file and apply them all at the same time. Then you add one command to the top of startup-sequence to make all the changes in one go, with a single reboot.

It's beyond the scope of this article to cover the whole process in detail, however. We suggest that you read the documentation carefully, then read it again. It is possible to break your startup-sequence with BlizKick, so make a backup copy first. If things go wrong, boot with no startup-sequence and copy your old version back.

Clocking off (quietly)

Got WBClock running with its seconds hand enabled? Want to run SnoopDOS at the same time to check on another program? Disable those WBClock tasks that keep interfering with your SnoopDOS reports by clicking the "Functions" button and putting "~(WBClock)" in the 'Match name' text box. WBClock will no longer interfere with your snooping.



Right: OS3.9's default movie player, ACTION in, er, action...


...Brace for Impact...
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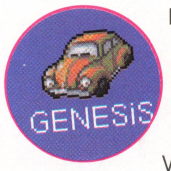
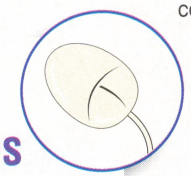
Colourful AppIcons



Iconify a MUI application and chances are you'll get an ugly rectangular MagicWB-style icon on your Workbench screen. This icon is copied from MUI:Icons/def_MUI.info - just copy a different, colourful icon over this one and you won't mind iconifying your MUI applications anymore.

Hot Commodities



3.9 has added many new features to the AmigaOS, but there is a still a place for multi-function commodities like MCP or MultiCX. A hotkey can open a shell with a keyboard shortcut (if you haven't assigned one with ToolsDaemon). Their window cycling options will move windows to the front or back without searching for the depth gadget. MCP also has a screen menu option: pressing the right mouse button over the screen depth gadget gives you a menu of all open screens.

Serve it up



When setting up new e-mail software, disable the option to delete mails from the server so you won't lose any mail if things go wrong. Make sure you turn it back on afterwards, or your mailbox will fill up with old mails and get slower and slower, eventually stopping altogether.

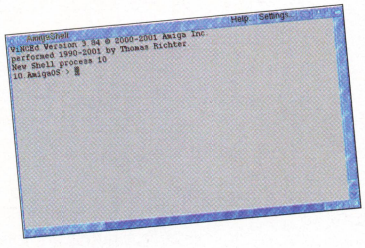
CON-VNC Me!

Finally, why not spruce up that shell? The Command Line Interface (CLI) has always given Amiga users unrivalled, easy access to the innards of their systems when compared to Windows and MacOS, but just because it's functional doesn't mean it can't be a little prettier than the default black-on-grey set-up. Granted, you can do wonders to the CLI's appearance by choosing a different system font in Workbench's Font Preferences, and by giving window borders a lift with Birdie or VisualPrefs as discussed last month - but that's not good enough in our book!

The CLI never used to be configurable. Pre-OS3.5 releases of the AmigaOS used a limited output console (CON:) which many people replaced with KingCON, at the time the best Amiga console replacement, which added such delights as drag-and-drop functionality and tab-completion of filenames, doubtless prolonging the life of many a keyboard.

Now, with OS3.9, Thomas Richter's ViNCEd is a core part of the Amiga OS, and about time too. ViNCEd gives you access to a powerful console with all the features of KingCON and more besides, including both horizontal and vertical scrollbars, configurable history and review buffers, macros, buttons and ANSI colouring.

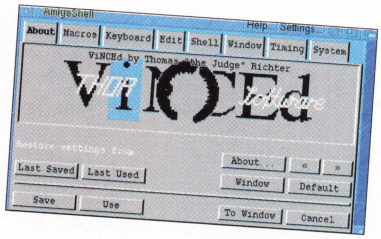
The first thing to note is that VNC isn't the default shell provided in the AmiDock when you install OS3.9 - that's still the ordinary console. Open the Sys:System drawer and take a peek inside. There you'll find a Shell_VNC icon. Double-clicking this (or dragging and dropping it onto your AmiDock and single-clicking the icon from there) will launch ViNCEd. Single-clicking the icon in Sys:System and calling up the Icon Information window ('Icons > Information' menu option or RAmiga-I) will allow you to configure the tooltype options which specify where the window should open on your Workbench screen, how big it should be, what it should be called and the various options for the console itself (see ViNCEd's guide).



At first sight, ViNCEd doesn't look that different from the normal console, apart from the text that pops up at the top of the window. The only visual difference is in the window's top border, where 'Help...' and 'Settings...' buttons reside to give you access to the Amigaguide documentation for ViNCEd and SetVNC, the preferences GUI, respectively.

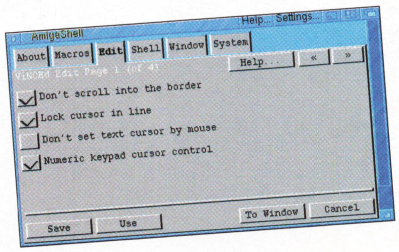
We'll take a quick look at some of ViNCEd's settings now - but before you do anything, back up the old prefs file by typing:

```
Copy ENVARC:ViNCEd.prefs
ENVARC:ViNCEd.prefs.ORIGINAL
```



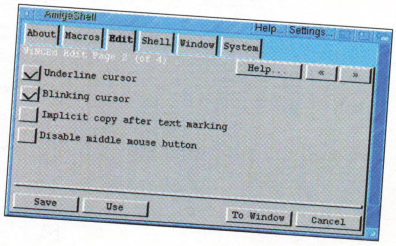
Now you're ready to configure your console. Hit the 'Settings...' button and you'll be whisked off to the SetVNC GUI. Across the top of this window, you'll notice there are several tabs: "About", "Macros", "Edit", "Shell", "Window" and "System". Click on the "Macros" tab. This is where you define keyboard shortcuts to be used within ViNCEd. Notice that the Amiga-3 entry is "List\r" (with quotes).

Try this out now - click the "Cancel" button, bottom right of the window, to go back to the shell. Hold down the Right Amiga key and press 3. The list command is executed. The "\r" part of the macro definition "List\r" indicates a carriage return, simulating the pressing of the return key, so 'list' is executed automatically.



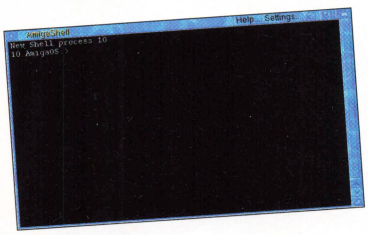
Go back to the Settings window. We're going to change a couple of options to make the shell easier to use. First of all, if you're used to using KingCON, you'll miss the ability to position the cursor in the shell window by pointing and clicking with the mouse - handy for moving quickly to the middle of a long command you might have mistyped. To enable this functionality in ViNCEd, go to the Edit tab and un-tick the "Don't set text cursor by mouse" option. To test this, click the "To Window" button at the bottom of the prefs window to return to the shell. Clicking with your mouse now allows you to position the cursor anywhere you like.

Go back to the Edit tab of the Settings window, and use the ">>" button (top right) to get to page 2 of 4. If you don't like the solid block style of cursor, change it to an underline one here. You can also make the cursor



blink by ticking the "Blinking Cursor" option. "Implicit copy after text marking" means that if you click and drag in the console window to highlight a block of text, it will be copied to the Amiga's clipboard as soon as you release the mouse button. If you'd rather hit RAmiga-C to manually copy a marked block to the clipboard, un-tick this option.

Now let's give our shell some colour - something not possible with the normal console or KingCON. Move onto page 3 of the Edit tab with the ">>" button. This is where we can set up ANSI colouring. The "ANSI colors by default" option is un-ticked. Tick it. Un-tick "Inverse ANSI coloring". Go back to the "About" tab and click 'Save'. Close your shell window and re-open it.



We now have a white-on-black shell. Nice. But we can do more. Open your favourite text editor and load the file Sys:s/shell-startup. This is a script which is run when you open a shell. It is used to define the shell's prompt (the text that appears before the cursor) and set up any aliases you may require. At the moment, it looks pretty empty, but we're going to add some aliases, change the prompt and have some extra text appear when we open a shell window to greet us.

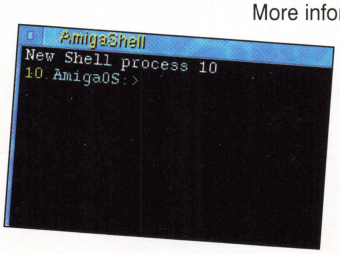
Comments (parts of the script that aren't executed) begin with a semicolon character (;). Comment out the "Prompt "%N.%S> " line and type in a new one above it:

```
Prompt "*E[33m%N*E[32m.*E[36m%S*E[32m> *E[37m"
```

Looks complicated doesn't it? That's because we've put in a number of 'escape codes' to create a multicoloured prompt. Apart from these escape codes - which are of the form *E[xxm where xx is a two-digit number representing which ANSI colour pen to use - this prompt is exactly the same as the old one. Look:

```
Prompt "*E[33m%N*E[32m.*E[36m%S*E[32m> *E[37m"
```

Save your modified shell-startup file, then close and re-open the shell window. Your prompt now uses yellow (escape code 33m) for the process number (%N), cyan (36m) for the path (%S) and green (32m) for the "." and ">" characters. The prompt command ends with the escape code 37m so that white is used for everything that appears - including what you type - after the prompt.



More information on ANSI colouring can be found in the ViNCEd guide (opened by pressing the help button in a ViNCEd shell window) under the 'Programmer's Guide > ANSI colors' section.

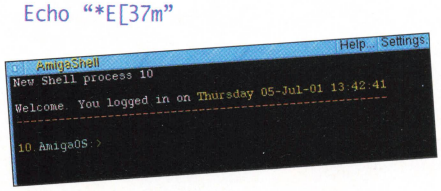
Close your slightly more colourful shell and open s:shell-startup back up in your favourite text editor. Add the following lines under the existing two Alias commands already present:

```
Alias SSU "ged s:shell-startup"
Alias SUS "ged s:startup-sequence"
Alias USU "ged s:user-startup"
```

We're using 'ged', the quick-starter for GoldEd which is in our command path - substitute the path and name of your text editor as required.

Upon saving this file and re-opening a shell, entering the command "usu" will load your user-startup file into your text editor, whilst the "ssu" alias will let you edit your shell-startup file - much simpler than typing "ged s:shell-startup", even with tab completion. Type "ssu" and hit return now to go back to our shell-startup script one last time - there's one more thing we can do to make our shell look even smarter. Put the following lines at the bottom of the shell-startup script:

```
Echo " "
Echo "*E[37mWelcome. *E[37mYou
logged in on *E[33m" NOLINE
Date
Echo "*E[31m----------"
Echo "*E[37m"
```



It could be argued that this is the ultimate in cheesy shells, true, but we didn't say you had to do it! You can configure a lot of other things about ViNCEd - read the Amigaguide help to familiarise yourself with the wealth of options open to you - but one final point to note is that if you don't seem to be able to access all the pages of every tab in the SetVNC GUI, it's because you're using the "Easy Setup" option. From the main window, use the ">>" button at the bottom right to move to page 2 of the About tab and un-tick "Easy Setup". You now have access to all of ViNCEd's options, not just the basic ones. Remember, when you're experimenting with your operating system in any way, be sensible about it: only change one thing at a time and back things up before you alter them.

That concludes our OS3.9 Masterclass - for now! Don't forget, if you create a Workbench that you're proud of, we'd like to see it. Send a screenshot to us at the usual address. If you encounter problems, write to the Guru (page 58) and if you'd like to see us cover anything in more depth via an individual Masterclass in a future issue, please let us know.

MUI Magic

Load the general MUI prefs (MUI:MUI), go to the Windows page and you'll see a row of four gadgets at the bottom of the top left section. Click the left one (an arrow pointing down to a rectangle) and save your settings. Now every MUI window will have a popup menu which allows you to load the settings editor, snapshot or iconify the window.

Echo, echo, echo...

set echo on

If you run into problems with your startup-sequence, put "set echo on" as the first line. This will echo each command to the startup shell before executing it, so you can see where things go wrong. When you've sorted your problem, don't remove the line but comment it out by placing a semi-colon at the start so it's there to enable the next time you need it.

To the point

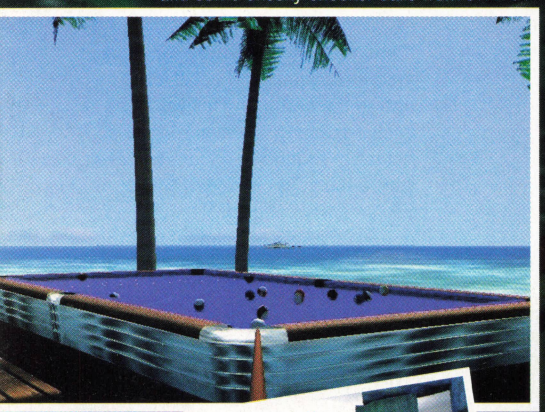
All those extra utilities that start up at boot time messing with your pointer colours? No problem. Create the following simple one-line script with a project icon (default tool "IconX") and a low priority (say -120), both of which are set from the 'Icon > Information' window:

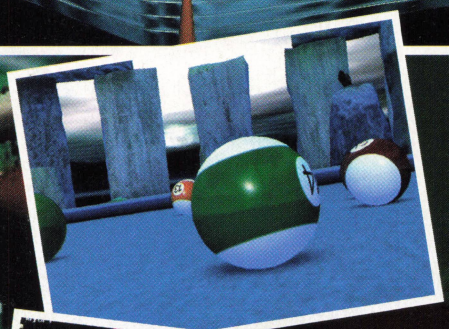
```
Pointer FROM
sys:prefs/presets/
pointers/Hires-
blackwhite.pre USE
```

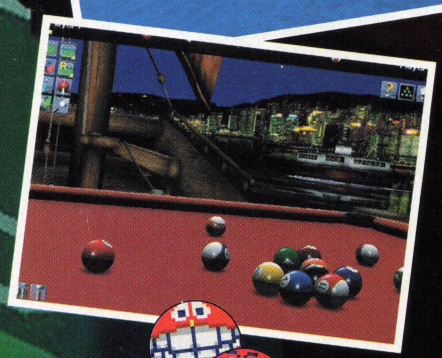
Place in WBstartup. As your system finishes booting, your pointer's colours are restored.

Commercial Break

From punched cards and paper tape to Playstation 2 and X-Box, via the Atari and Amiga - Archer Maclean has been there, done that... and had some pretty weird dreams along the way.







Below: Screenshots from Cueball World... and some cheeky snooker balls from JWWS1

Archer Maclean's electronic life began in 1975 when he became fascinated with the idea of building his own microprocessor system. *"It sounded like a cool idea,"* he tells *Amiga Active* after dashing back from Exeter at five o'clock one morning, *"even though I had no idea what I was actually going to do with it!"*

Lack of money dictated that Archer's ambitions were put on hold until 1977, so for a couple of years his yearning was satisfied by the formation of an amateur computer club with three friends at school. After visiting the local council's computer department once a week and learning to program using punched cards and paper tape - with results being sent back to school in the post - Archer's dream of constructing his own computer was realised.

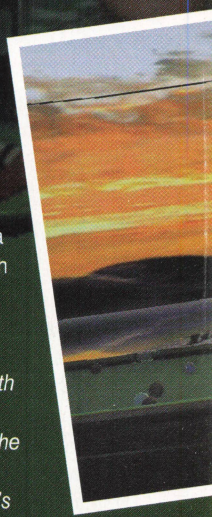
"In 1977, I finally got around to building that first system, and learnt primitive machine code. By 1979 I was writing space invaders without too much trouble and using the computer to control hardware gadgets. I then started working after school for a local electronics company and ended up writing their entire stock control and payroll systems in BASIC. Around about that time I also bought one of the very first Atari 800 8-bit computers and became utterly engrossed.

"It's worth pointing out that the Atari 800 was light years ahead of everything else at the time - even though Atari failed to publicise this - and also that the Amiga and the Atari share very, very similar hardware designs, right down to the names of the chips and control registers. Jay Miner, who designed the Amiga, also designed the Atari 800 back in 1977 - which explains a lot."

"...the Amiga and Atari share very, very similar hardware designs..."

Archer was introduced to the Amiga in 1985 when he saw a demo squeezing *"billions of colours"* out of an A1000's screen. Despite being hooked early on, he would have to wait a little while before getting his teeth into the new system.

"I didn't start working on the Amiga until I was doing IK+ in 1987. As was always the case with my early games, it wasn't long before I started getting down to the metal and controlling the entire machine in assembly code - that's when I get happy with coding. Unfortunately this can't happen today. Thanks, Microsoft."



Drop Kick

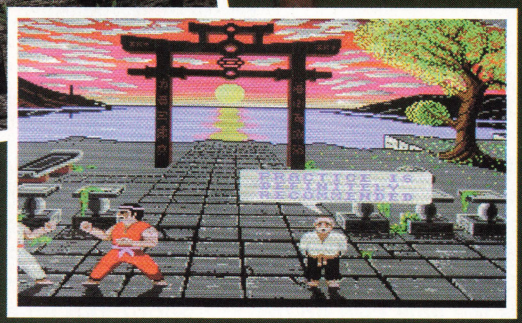
Archer's first commercial game, Dropzone, was released for the Atari 800 back in 1983. This was followed by International Karate +, released for the Commodore 64, Atari and Amiga in 1987. It was here that Archer's sense of humour manifested itself: anyone who's aware of IK+ will probably recall that pressing 'T' made the characters' trousers fall down, mid-fight, whether they ever played the game or not.

"I always like to add some humour to my games because it keeps people interested and stops them from thinking they have seen everything the game has to offer. IK+ had over 50 cheat keys besides the 'T' for trousers. 'TITL' reset the game to the attract title sequence, 'FAST' fast forwarded the music to your favourite bit (well, it was 11 minutes long), and various swear words would be acknowledged in a slightly unusual way. There are many nice touches like this in our forthcoming game Cueball World."

Archer is perhaps most renowned in 8-bit circles for the very first incarnation of Cueball, Jimmy White's Whirlwind Snooker. His sense of humour extended into JWWS with balls that pulled faces and 'flies' that settled on your screen when you took longer than Terry

"...whilst showing it off at a trade show, a certain Jeremy Beadle came strolling by..."





Above: One of the backdrops to Cueball World, inspired by none other than International Karate + (**right**).

Griffiths to decide on your next shot. But after martial arts and space-based outings, where did the inspiration for a snooker simulation come from?

"Around 1982 I was a total evangelist for Atari - I would spend days showing amazing demos that I had written to all my friends and telling them just how powerful these new home computers were. Then I saw this amazing game called 'Encounter' which was using every hardware trick the Atari was capable of. Oddly enough, the game was written by a certain Paul Woakes, who is currently working with Awesome on Cueball World for the PS2!

Anyway, one night I had this very vivid dream as if I was a camera on the end of a bit of string waving around above a snooker table. I thought long and hard about how on earth I was going to do it on the Atari's 8-bit 6502-based hardware and decided it couldn't be done well enough, so I shelved it. Then, in 1986 I was playing around with a screen grabber on the Atari ST and sure enough the first thing I grabbed was a picture from a snooker match on TV, which made me think about doing it again. I had to finish IK+ first, but there was no stopping me once I had worked out the basics.

"Originally the game was called simply '147 Snooker'. But Virgin felt that it would fare better with an endorsement. So one day whilst showing it off at a trade show, a certain Jeremy Beadle came strolling by and said, 'you know what, you need someone like Jimmy White on that game' and promptly gave us a telephone number for Jimmy's then agent!

"Jimmy has since become a good friend of mine and I can honestly say he is even more exciting off the table. He was up here the other day, and we took some photos of him larking about in the office looking like he was telling some of our senior programmers how to improve their code! These pics are on our website [www.awesome.uk.com]."



Above: 1983's DropZone.

Archer's games development company, Awesome, formed in March 1997, plan to release Jimmy White's Cueball World for the PC, Playstation 2 and X-Box starting later this year (with the X-Box version on the console's launch). With eight fully animated locations including a Mt. Fuji setting in homage to the backdrop to IK+, inspiration for the game came from such varied sources as Michael Jackson's Thriller video (with comedy zombie hands representing your opponent) and Awesome artist Dan McCaul's cycling tour of the Far East. *"He only works for a living now as he is banned from revisiting several of the countries in question,"* Archer informed us.

So what of Archer's other plans? Could anything be done to tempt developers like Awesome into writing for the AmigaDE?

"I've still got fond memories of the Amiga and it would be wonderful to see it return to world dominance. I do hear from time to time about how the new owners are making great plans for the future, but I haven't seen anything solid yet. If they have a mere 500 million to spare maybe they should come up with an Amiga console to challenge the PlayStation 2 and X-Box and allow players to have a keyboard so they can learn to program it - there are few ways into the games employment market these days.

"I firmly believe that any new system is only as good as the software that appears on it. Plenty of technically able systems have failed in the past because they have lacked killer games. Amiga should ensure they sign up developers who can provide the best games and dynamic visual material that really grabs the eye. You won't win many friends just by telling people how good it could be."



Above: From Jimmy White's Whirlwind Snooker and Archer Maclean's Pool to Cueball World... the green baize has come a long way since the 20th Century!

Your chance to pester the Editor! Write to: Amiga Active Magazine, 14 Victoria Road, Bournemouth BH1 4RR. Or, if

InterActive

Words of wisdom from our thankful, idle, bikini-wearing, worried, disappointed and paranoid readers.



Above: "In the blue corner..."

The PDA question

Hi Guys,

As I've taken a week's holiday (and had too much sun), I thought I'd reply to your latest Rants & Raves: do I want a Zaurus?

Short answer: no.

More lengthy explanation: Like Neil & Andrew, I own a Psion - a Series 7. It's not even a year old, and I have no intention of replacing it. I prefer the keyboard and style of Psions (as clamshells), to the Palm/Zaurus type PDAs (even if they may be "better"). The Psion OS is also rather good.

What I would like is to run a version of AmigaDE on it. I've read somewhere that there's been a boingball animation seen on the S7, but little else (any more info?) Had I been PDA-less, the Zaurus would've been a strong contender in the purchase stakes, but perhaps Amiga Inc are going to give me another option....

Oh - I liked the Groovy Software feature (and style) from AA21, and your OS3.9 tute has been very inspiring - thanks!

Michael Fraser, Leeds

Stay Sharp

Dear Amiga Active,

Having read Jason Compton's opinion in 'Rants and Raves', what can I say but "Hear, hear". I too have a Psion Series 5mx - why? Because it was the only PDA on the market that felt like an Amiga in my hand, in fact it is the third Psion I have owned.

I was very disappointed that Amiga Inc. didn't get it together with Psion, primarily because if ever there was a platform outside of the Amiga that would have complimented the Amiga in the way that it multitasks, the Psion is/was it.

It would be nice to think that someone somewhere could get together with Psion to produce or port PSiWin for use on the Amiga. Having said all that at least Amiga have gone with a well respected manufacturer in the form of Sharp Electronics, not what one might call well known, but like Epson I have a great deal of faith in the products they produce mainly through past experience. I recently bought a Sharp VCR little knowing until I got it up and running that I could use the same remote handset for my eight+ year old Sharp TV - now that's' what I call consideration.

Brilliant Mag by the way, although I didn't like the July Editorial because it appears to be sending out warning bells about the future demise of Amiga Active! Tell me not to worry, tell me that you'll be around for a long time to come, the Amiga community needs you, they just need their backsides kicking now and again to make them realise it!

Ah! I feel better now for getting that off my hairy chest.

Stuart Mallion

54 Interactive	58 Guru	60 Online	62 Next Month	64 Back Page
Feedback on the last issue and thoughts about Amiga's future.	Problems solved and advice dished out to the owners of broken stuff.	Turn your Amiga into a personal secretary. Take a message, Miss Jones...	The ants are taking over. No, really. One of them's pointing a gun at us now.	Whatever happened to the Greatest Space Game In The World?

Back Section Contents

Stuart and Michael - not to mention many other readers - should be watching for further announcements in the PDA field. Tao already have Elate running on Epoc, the Psion OS, and have struck a deal with Psion's enterprise division that will see Elate offering multimedia and Java services to Psion's business oriented devices. We are all crossing our fingers that Psion's consumer division will see the advantages of providing AmigaDE with their future PDA releases and follow suit.

As for last month's editorial, the intent was not to imply that the magazine would close, but to remind people that the magazine, like the market, will change - and we are, finally, on the cusp of that change. Don't get me wrong, we won't be abandoning the classic Amiga while there is still an audience for it, but we felt it was necessary to remind people what the banner on the top of the cover means. *Amiga Active* is about *"the future of Amiga computing,"* and as the market changes, so will we.

How many reboots?

Dear AA,

Without digging out the relevant issue of your excellent mag (idleness it's called...) I seem to remember a mention of (coming soon) how to set up 3.9 so it doesn't reboot several times but I can't find the details. Has this been forgotten, or have I missed it?

Geoff Milnes, Huddersfield Amiga User Group

You haven't missed it unless you've torn a few pages out of this very issue Geoff - turn to this month's instalment of the OS3.9 Masterclass for the answers you seek.

Nice bloke writes...

Dear AA,

My sincere congratulations for attaining the level of success that you have, in such difficult circumstances. Producing your well-done and responsive magazine amid all the stress and strain of Amigadom is a great benefit to the hundreds of thousands of hopeful loyalists. Then to sponsor a show! It is a great, confidence-inspiring stroke! More power to you. I trust that you band of rugged survivors that send out your best to us have secured your pre-eminence for the foreseeable future in the Amiga communication field.

Three cheers!

Don Miller

"...a great, confidence-inspiring stroke!"

It's nice to know our efforts are much appreciated. Now all we need is for those hundreds of thousands of hopeful loyalists to stop just hoping and start buying the magazine. Then we can trade in our weekends in Skegness (we take our laptops ans work remotely, mind you...) for fortnights in the Bahamas.



Above: "...sponsored by *Amiga Active*!" See you there!

I want a real Amiga!

Dear Editor,

I thought that Amigas had stopped production completely, and a couple of years ago, I got into Amiga emulation.

Recently I was looking for a magazine and I spied yours. I had a quick flick through and I instantly realised that I wanted an Amiga, a proper Amiga that can have PPC boards and lots of other cool stuff, all of which can't be emulated.

So this brings me to my question: What is a good system if I'm interested in buying a new Amiga? I still have my A500, but I want a system which is upgradeable but affordable, preferably with PPC - but I'm not sure which components are vital, and which I can live without. I also would prefer a tower, as opposed to a keyboard.

Kevin Winfield-Pantoja

The obvious answer would be an A1200 with a tower case, which will accept PCI and PPC ▶



More sex please!

Dear AA,

Right, I've never ever written to any sort of magazine before, but I feel that I just have to suggest this one thing to you that might, just might, improve sales. Ok, it's the oldest trick in the proverbial book but I think it has to be done - even Amiga Format had to take these drastic measures eventually.

Guessed yet? Well in case you ain't: YOU HAVE TO GET DEGRADING PICTURES OF SEMI-NAKED WOMEN SEDUCTIVILY [sic -Ed] HOLDING PIECES OF EQUIPMENT THEY LOOK LIKE THEY ACTUALLY KNOW SOMETHING ABOUT.

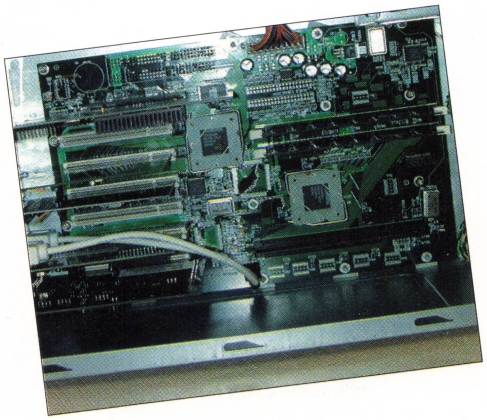
I know, I know - you probably don't wanna have to resort to these measures, but quite frankly (and I'm being serious here) unless you do something about the front covers, you're not going to stand out enough against the competition.

Even if you don't agree with me just try it for one issue and see if sales are any better, what have you got to lose? I mean think about it, how many people does a bright green cartoon dinosaur holding a circuit board appeal to?

P.S If you can't find any nice looking females, I look quite good in a bikini.

Anthony Mckeough

Next we'll be asked to publish page 3 Amigas. Send us a Polaroid and we'll tell you whether we think you have a career as a swimsuit model awaiting you.



cards - but at present probably your best bet would be to wait a couple of months and get yourself an AmigaOne. This is a PowerPC-based ATX form factor motherboard, which fits into a tower case and piggybacks onto an A1200 motherboard. They will be available from a number of companies who will spec their own systems, and without a doubt there will be ready to go systems available with the A1200 motherboard pre-installed. We'll be taking a look at all the options when they become available, so I suggest you hang on for our reviews in the very near future.

"So now I have to e-mail you from my 7MHz Amiga 2000..."

7MHz Internet

Hello AA,

What a day it's been for me! I turned my Amiga 1200 on today only to find that the hard drive had bitten the dust! It just kept clicking constantly. So now I have to e-mail you from my 7MHz Amiga 2000 while I wait for my new hard drive to arrive! It's quite a laugh really. I tried downloading some Internet pages a minute ago and even on Aminet it was quite slow! But I can't complain I suppose.

Oh well, just thought I'd share that with you guys. Keep up the great work!

Robbie Almond

Oh dear... a 7MHz CPU isn't the ideal processor for browsing the web. Stick to e-mail until that new hard drive arrives! There's a silver lining to every cloud, however - perhaps the death of your hard drive just as we are running a tutorial on fine-tuning OS3.9 into the perfect Workbench is a sign?

"...if Amiga wanted that sort of an exclusive they would have to pay for it..."

Give us a StrongARM!

Dear Amiga Active,

Thanks for a great magazine. Just a couple of things: If the StrongARM CPU is up to it, how about asking Sharp to build an Amiga laptop with 12" TFT screen, keyboard, trackball, 4GB HD, 144FD, and PCMCIA CD/RW-CD/DVD or DataPlay CD? Be nice if they could sell at £500 or less - the cheapest 650MHz laptops these days seem to cost around £900 - which puts them way too expensive for a casual PC buyer.

Also it occurred to me that the best bit on your CD is the 'Demos' (there really should be a better name for these). The Amiga is the best machine for synchronous audio/visual entertainment. I was really disappointed when I found out that music CDs don't have any video on them. So here's an idea, pop pickers: a contract with (say) Virgin Records to distribute in a format such that on an Amiga you get sound and video, and on an x86 sound only. Like U2's Microsoft XP advert (the free CD with the Sunday Times) but with the tables turned. How's that for a 'killer app' for the laptop Amiga (see above)?

Also please keep Amiga games CD and HD runnable, and could we standardise on 800x600 screen resolution (windoze programs seem to insist on putting buttons off the edge of the screen)?

John D. Gray

Well, StrongARM would be a powerful enough processor for such a device, and it would have some real advantages over x86 in the laptop arena due to its low power consumption - which would mean longer battery life. Whether it would be possible to make such a thing much cheaper than an x86 laptop, however, is another question - we can always hope. There is a company producing a laptop based on a lower-end Palm processor for RiscOS users, but the small market means a high price.

The CD idea is a nice one in principle, but would be very hard to arrange. Where would the benefit be to Virgin to limit their audience? They would be better off aiming it at as many users as possible - if Amiga wanted that sort of an exclusive they would have to pay for it, and there are higher priorities for their marketing budget.

Paranoia

Aha, a response in fine print to my query on the fine print below the small print. I'm being watched now, am I? Well that explains the itchy feeling at the back of my neck. I'd better watch my P's & Q's & Amiga now.

Keith Ryan

We deny everything.

Where now?

Hi AA,

I believe that the Amiga is the best, but I'm not sure where Amiga is going for the future. What does the future have in store for Amiga computers and how will it impact/affect the ordinary user?

George N. Bilios

In short, Amiga are revamping the OS for PowerPC, and introducing a whole new Operating Environment, the Amiga Digital Environment (or AmigaDE, as opposed to AmigaOS) based on intent from Reading, UK-based Tao Group. The AmigaDE will be made available to a wide range of digital devices including PDAs and set-top boxes, as well as running under the Amiga OS, to allow all these devices to run the same software.

The next version of the Amiga OS is due in a couple of months but won't include the AmigaDE; the version after that, due for the new year, will have the DE included. A year or so after that, the two will become fully integrated into one Operating Environment.

The full story is long and ever-changing. Read our news coverage every month to be sure you know what's going on.

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AMIGACTIVE MAGAZINE

WoA SouthEast

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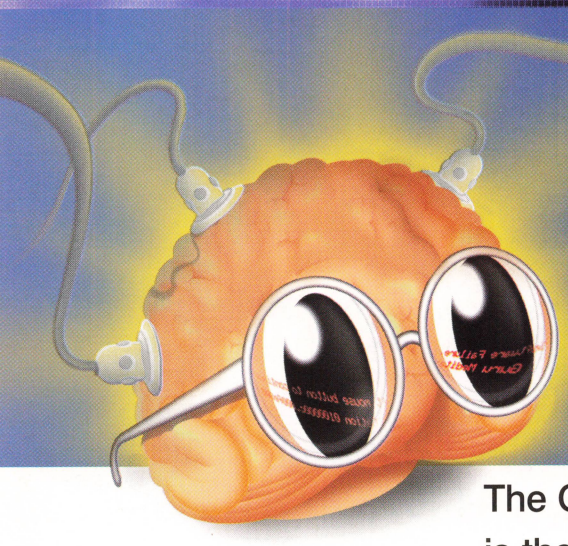
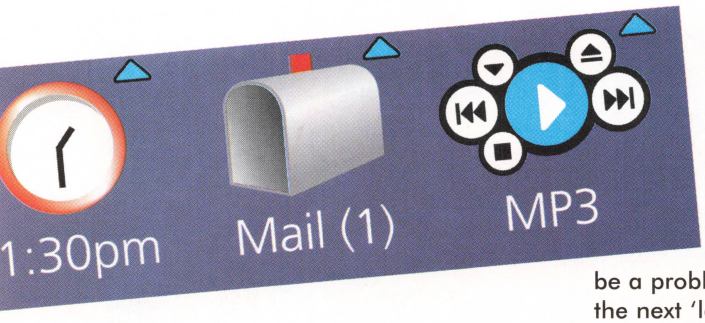


ASK THE GURU

The Guru's Amiga works perfectly. He doesn't need help, so is therefore able to assist others in need of some assistance.



52, 20, 64, 500, 2000... hut, hut!

Hi Guru!

In issue 21 I read about an A600 user who wanted to upgrade. However, my situation is even worse. I'm 52 years of age and been there since the VIC20, then C64, then A500 and finally A2000. I still have that machine with 68030 and Kickstart 3.1. I have no CD-ROM drive but now I have two broken disc drives as well. I am tired of waiting, and being the laughing stock of the small community in which I live.

In my job I have everything: a huge PC and ADSL Internet access, and I must admit that I am seriously considering leaving the Amiga platform. On the other hand, having an Amiga has become part of my lifestyle, so why not have both platforms?

Now, what to do with my out of date A2000? Repair and fit with CD-ROM, graphics card and so on? Should I wait for AmigaOne? Buy a tower and A1200 motherboard now and expand? Buy a pre-built tower (EZTower4) that meet the requirements for AmigaOne expansion? Really - I am confused here!

Nikolaj Knudsen
nk.logdiv@hmak.dk

Yes, apologies for the incomplete answer to AA21's query along similar lines - hopefully we'll be able to clear things up this month in answer to your question.

As with all things electronic, upgrading can be a problem. If you decide to wait for the next 'latest' thing to come along you would never spend any money. The sensible approach is to buy the best you can afford at the time. You obviously need to think about what you want the hardware for: do you need 24-bit graphics, 16-bit sound, fast serial and parallel etc.? The AmigaOne should be a nice system when it finally appears, but the software is going to take a fair while to mature so it won't replace everything in one go.

If you are thinking of upgrading your A2000 or looking to buy a towered machine, the second hand market will reap many more bargains. One of the best places to get used Amiga gear is www.amibench.org (see the Amibench Desktop Directory on our coverdisc) where reasonably well upgraded machines are advertised regularly and would make more sense in the short term. Failing that, watch for the review of the AmigaOne in *Amiga Active*...

"Failing that, watch for the review of the AmigaOne..."

The best things boot for those...

Dear Guru,

When I first boot up my Amiga, it just waits for 30 seconds with the HD & Power LED lit but does nothing. It then displays the purple insert disk screen. If I then perform a reboot with Ctrl-LAmiga-RAmiga, it waits another 30 seconds with the HD & Power LED lit, before finally booting the HD. After everything has loaded I can access the CD & HD fully, but cannot get the CD to auto-boot from cold.

My System set up is an Amiga A1200 (Kickstart 3.0) (Board version 1.4.1.B), a 36x CD-ROM, an 810MB HD, a 4-way EIDE splitter with the latest version of the software and an 68030/40MHz accelerator with 40MHz FPU + 24MB of Fast RAM.

I have tried every permutation of CD / HD / Accelerator / FPU / RAM / EIDE splitter, but no combination solves the problem.

I hope you can help me with this.

Many Thanks

Gary Hunt
printroom@richardsbutler.com

This should be a relatively easy one to get around. Most old hard drives have rather slow access times, and as such can take too long to initialise. The Amiga IDE port will only wait for so long before giving up and reporting no drives on the bus. From a cold boot there is not a lot that can be done to work around this, but it can be cured on the reboot.

Have a close look at the IDE cable going into the drive and you should see that one side of the cable is marked with a red stripe. This indicates pin 1 of the port, which is the reset line. Each time this line is cycled the drive will reinitialise itself, which

can lead to the problem you are experiencing. Cut the wire with the red stripe on it (after turning your Amiga off and taking great care not to touch the other wires, of course), and you should find that reboots are a lot quicker. When booting from cold the drive will still take time to get up to speed, but a subsequent reboot will be much faster as the drive doesn't spin down then back up again. Just don't blame us if you get twitchy with your wire clippers and snip through half the ribbon cable!

When is a disk not a disk?



Hello,

Is it possible to access ADF files on a normal Amiga, in my case an A1200 and Blizzard '030, and is it practical to do so? Since the advent of the UAE emulator, these files seem to be appearing all over the shop and it's a pain using floppy disks.

Andrew Petley
andrew@petley.demon.co.uk

"...these files seem to be appearing all over the shop..."

Luckily for you, there are plenty of utilities for this very purpose. The ADF format is very close to the old DMS system, and contains all the data to recreate the original disk within the archive. Have a look on this month's coverdisc where you'lll find a nice selection of ADF related utilities.

It's been a hard, night long...



Dear Guru,

I own a humble A3500T with Cyberstorm MkIII '060/50, Picasso II Gfx card, Seagate 8.4GB SCSI H/Disk, Yamaha CD Writer, Pioneer 4X CD-ROM, OS3.5 and CyberGraphX 4.

I have been running this configuration for some time now with no problems, until I installed Nightlong. I had just upgraded from Picasso96 to CGX 4 and all seemed fine. I then installed Nightlong (which didn't have an install icon, just a script with a cryptic name that I discovered and had to manually execute using the standard WB installer). Half way through the installation the graphics became very corrupt. I waited for disk activity to finish and re-booted my beloved Miggy. My machine appeared to kick in the '060 and reset as usual, then (prior to the startup-sequence being executed) a blank screen appeared with a requester stating *"DF0: Program failed error #80000004"*.

I suspected the CIA chips and replaced them, but to no avail. I tried booting from a floppy with all accessories and hard drives removed - same message.

Please rain down words of wisdom that will cure my problem, oh great one!

Thanks lots,

Darren Smith
dazzas.pcs@virgin.net

"When booting from cold the drive will still take time to get up to speed..."

Many Nightlong users have complained about problems with the earlier pressings of the CD, but the latest version (1.1- see ClickBOOM's web site) should cure these worries.

As for your graphics problems, I would suggest that you check that the '060 libraries haven't been replaced with older or incorrect ones. There could also be a problem with the new ROM image put in place by OS3.5.

If the machine resets from cold, Setpatch is installing the image, so perhaps changing the line to 'Setpatch SKIPROMUPDATES' in your startup-sequence may give more favourable results, although it is strange the way you say you had no problems until Nightlong was installed. I'd check those '060 and'040 libraries.

The Guru A



Left: Most people have problems with the other sort of boots...



Lovely Guru will sort out the silicon



Sloppy software? Bug the Guru!



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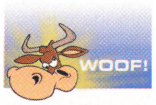

Say WHAT? You must be bonkers!

FEELING BLUE?
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If you have any technical problems, tips you'd like to pass on, or requests for in-depth coverage of a particular problem, please send them to:

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Take a Message Miss Jones...

Employ your own receptionist who'll crack blocks rather than file her nails when she isn't busy.

Last month, we looked at ways to send and receive faxes and voicemails over the Internet. While this is fine for occasional use, your own dedicated fax machine can be more useful. If you use a standard dial-up connection to the Internet, you already have a fax machine - your modem. If you've upgraded your Internet connection to ISDN, ADSL or Cable Modem, you can drag that modem out from the bottom of the wardrobe, dust it off and put it to good use. The only other thing you'll need is a copy of STFax.

Setting this software package up for fax purposes is easy. Once installed, you only need to tell it the serial port your modem is connected to in the modem section of the preferences. Tick the "Class 1" button for now - you can try with this off (Class 2) once everything else is working. Put your fax number into the fax section of the preferences. STFax doesn't need to know your number, but now it can put the number at the top of each fax it sends. You will also need to set the font and margins in the fax section. These settings are used when STFax creates a fax from a text file.

To check your settings, click on the "New Fax" button in the main window, go to the "Attachments" tab, click "New text" and either type a few lines or import an existing text file into the editor. After saving and exiting the editor, you will see a line in the Attachments list for the new page you have just created. Double-click this to see it rendered as a fax. If you are not happy with it, close the window and go back to the Preferences section to make changes. To test it fully, send yourself a fax, either to a normal fax machine, a friend's fax/modem or a YAC number (see last issue's Active Online).

This works with a text file you have on disk, but what about sending letters produced in a Word Processor, or existing documents? The former case is handled by STFax's printer driver. Select "Printer Driver" from the Prefs menu and you can print a letter in Wordworth and have it sent directly to STFax. If you use TurboPrint, set up a new configuration with the type set to Workbench and using the STFaxPrt driver. I use an Opus button to enable fax printing with two commands:

```
TurboPrint:turboprefs -q -p1
-cSTFaxPrt
rx "address 'STFAX.1'
'PRTDRIVER ON'"

rx "address 'STFAX.1'
'PRTDRIVER OFF'"
TurboPrint:turboprefs -q -p1
cHP_LaserJet5series
```

The first command activates the fax as my print driver, the second switches back to my normal one.

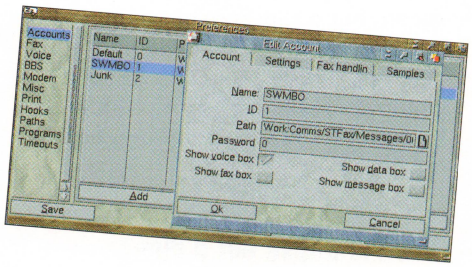
To send an existing document, you will have to scan it and import the scan into STFax. Save the scan as a 2-colour image. An A4 page should be 1728 x 2000 - scanning at 200 dpi will give about the right size. If you have ScanQuix, you can click the scan button in the New Fax window to have ScanQuix scan the page and import it. Some people find the image is inverted when they do this. The cure is to add a tooltype of "SCANQUIXINVERT" to the STFax icon.

Receiving needs no set-up. STFax can tell whether an incoming call is fax or voice and handle it accordingly. When you answer the phone and hear fax tones, press the "Receive" button, wait for STFax to answer and hang up. If auto-answer is turned on you need do nothing.

Leave your name and number after the tone

Setting up voicemail can be as straightforward or as complex as you like,

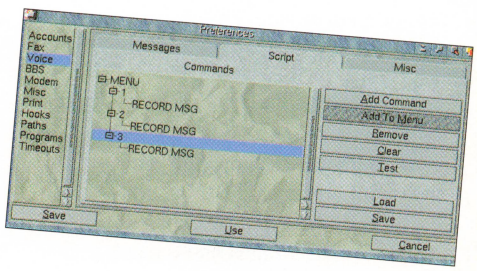
"STFax can tell whether an incoming call is fax or voice and handle it accordingly."



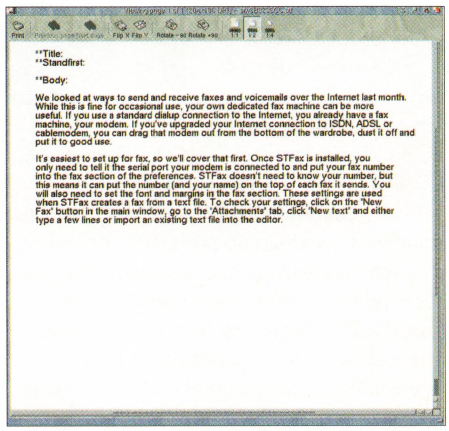
Above: Set up an account for each voicemail recipient. Give them a password if they want to listen to messages remotely.



Above: You can record your own greeting or use any wave file as a message.



Above: A straightforward menu system with three options. For a cup of coffee, press 1 now...



Above: Double-click a new fax to see how your settings look.

depending on how much you want to do with it. The simplest set-up is as a standard answering machine. STFax uses an internal scripting system for voicemail. This gives more flexibility, but does mean there are a few steps for even a basic set-up. The first thing to do is record your greeting message. Go into the Voice section of the Prefs, select the "Messages" tab and press "Add".

You can record using the telephone handset, a microphone connected to the modem, or use an existing wave file. The first needs no extra hardware but gives the lowest quality; using the modem's microphone input is better. Importing a file means you can record using a sound sampler or use pre-recorded messages. There is also an option to save out your recorded message as a wave file.

"You can now listen to your messages from anywhere..."

You may want to do this to boost the volume using something like AmiSOX before re-importing it. Then click on the "Script" tab, press "Add command" and select "Record message" from the list. Click on the popup gadget (top right of the window that's just opened), select the message you recorded and leave all the checkboxes empty. Click "OK" to close this window and then "Save" in the column of buttons on the right of the Script window. Finally, click the main Prefs "Save" button.

Now grab your mobile or ask someone to phone you, after enabling auto-answer in the Misc section of the Prefs. You should hear the greeting and be able to leave a message.

A more complex example

There are many possibilities with the advanced scripting that STFax offers, such as "Press 1 to leave a message for me, 2 to leave a message for 'er indoors or press 3 if you're trying to sell me something". Record such a message and another message along the lines of "please leave your message now". You will need a separate mailbox for each person's messages which you should create in the Accounts section of the Prefs. Now go the script window, clear the previous script, press "Add command" and select "Menu". Use the options message you recorded. Now select the menu item and press "Add to Menu" to add a command. Give this an ID of 1, press "OK", select it and press "Add command" again.

Select "Record message" and pick the "please leave a message" recording. Tick the "Voice box" box, select the first account and click "OK". Repeat the process for each voice box, setting the ID to the number you want the caller to press. When you've finished, save the script, save the preferences and switch STFax to auto-answer. Now a caller gets three options, allowing them to choose whom to leave a message for.

There are other actions you can add to a script. Go back into the script you've just created and add another item to the menu with ID 0. Select the new item, press "Add Command" and pick "Remote Access". Leave the settings at their defaults for now and press "OK". Save the script and go into the Accounts section. Select your default mailbox and type a number into the Password box. Save the settings. You can now listen to your messages from anywhere by dialling your number, pressing 0 during the initial message and giving your password at the prompt.

More automation

So far, we have only used STFax's own voicemail scripting, but it also has an ARexx port which allows us to do much more. STFax can call scripts when it receives a voice message, fax or when the phone rings. I have a habit of forgetting to switch auto-answer on when I go out - this script enables me to do it remotely:

```
options results¶
port = address()¶
address command¶

if getclip('STFaxRingTime') = ''
then callsetclip
('STFaxRingTime',0)¶

if time(s) -
getclip ('STFaxRingTime') > 5
then call
setclip ('STFaxRingCount',0)¶
call setclip('STFaxRingCount',
getclip ('STFaxRingCount') + 1)¶
call setclip ('STFaxRingTime',
time(s))¶
```

The script specified in the Ring hook is run every time the phone rings, as opposed to once per call. As the script is run multiple times while the phone is ringing, this part uses an ARexx clip to keep track of the number of rings.

```
select¶
 when getclip('STFaxRing
 Count') = 1 then do¶
  address(port)¶
  'SHOW'¶
```

This uniconifies STFax on the first ring, so I can see who is calling via caller ID.

```
  if show('P','AMIGAAMP'
  ) = 1 then do¶
   address'AMIGAAMP'¶
   'STATUS'¶
   if result = 'PLAY' then
   'PAUSE'¶
   address command¶
   end¶
```

This pauses AmigaAMP, so I don't have to turn off any music I'm playing before answering the phone.

```
  when getclip('STFaxRing
  Count') = 15 then do¶
   address(port)¶
   'AUTOANSWER ON'¶
   end¶
  otherwise nop¶
  end¶
```

After fifteen rings, the script sets STFax to auto-answer. If I want to enable auto-answer remotely, all I have to do its phone from my mobile and hang up after fifteen rings.

Neil Bothwick A

Cracking on

To use your Amiga as a fax and answering machine, you need to leave it switched on all the time, so you may as well help the Amiga RC team while your Amiga is doing nothing else. See http://distributed.amiga.org for more details.

Voice, Fax and Internet... on the same modem

If you want STFax and your TCP stack to share the modem, you'll need to install owndevunit.library. Copy it from this month's AACD to your LIBS: drawer and make sure the "Shared" option in the modem section of STFax's prefs is turned off. Genesis users should go into the Modem section of Genesis prefs, double-click the modem to edit it, select the "Device" tab and tick "Use OwnDevUnit". Miami and MiamiDx should detect owndevunit.library automatically. Now your Internet and phone functions should co-exist happily on the same modem.

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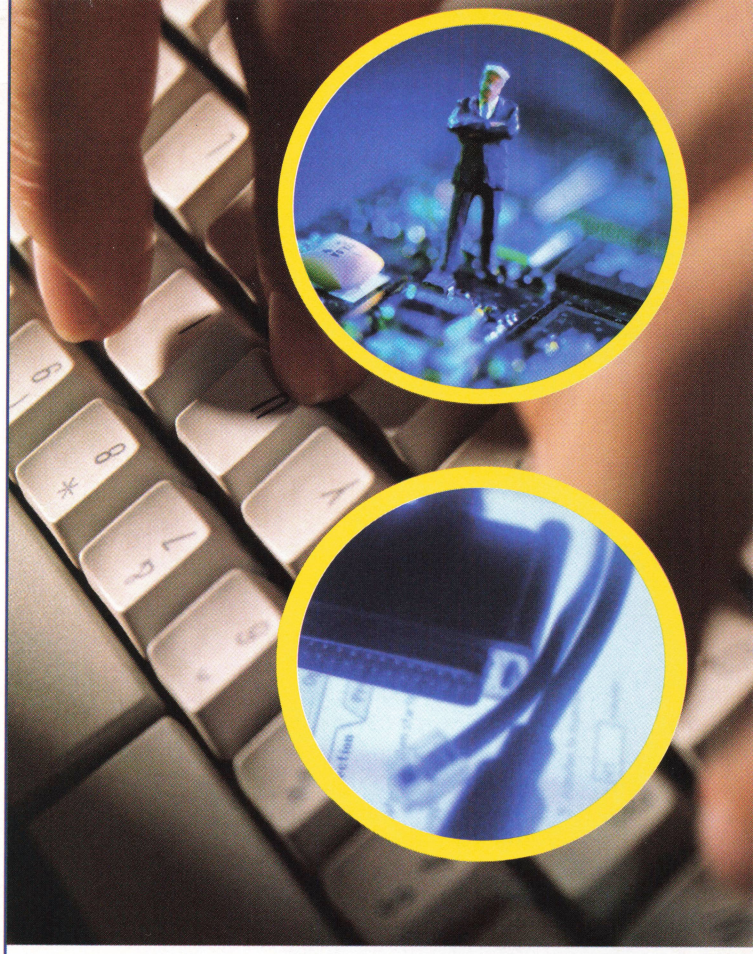

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Of Time and Starforge



Whatever happened to those guys with the World's Most Ambitious Space Game?

A few years ago Chris Page had the notion of creating the ultimate space game for the Amiga. It would be full of pretty 3D graphics for sure, but the real selling point was that it would have a rich and dynamically changing background universe. The idea attracted plenty of attention and plenty of offers of help. Before long The World Foundry was formed and the game went into a long development period.

Unfortunately, things did not all go smoothly. A dispute about the direction of the company developed and Chris left, taking Explorer (and their other game in development, Maim and Mangle) with him. He also found a new primary target for the game: Linux. Chris and Explorer2260 slipped out of the news pages and discussion groups. So where is he now and will the game ever come out?

Amiga Active: What's your new company, Starforge, all about?

Chris Page: Starforge Software, to give it its full name, is just a name for the group of people who have continued working on Explorer2260, Maim and Mangle and some associated projects.

AA: How's progress on Explorer2260 going? Has the move to Linux made much difference in terms of development?

CP: I've found Linux development to be considerably easier: much of the ground work I had to do on the Amiga in terms of multimedia libraries and the like is already done, and tools and documentation are easily available.

There is also a huge amount of freely available code to learn from and a friendly and helpful developer community. Overall, the Linux version is at the same stage as the Amiga version was a year or so ago, but in places - particularly the main 3D engine - it is ahead of the current Amiga version.

AA: Do you feel Linux has a future as a gaming platform, particularly in the light of the collapse of the Indrema console?

CP: Yes, but it will be a long time - years probably - before Windows publishers start to take it seriously. Linux still has some way to go before it becomes a general home desktop OS and, until it does, game publishers will be unlikely to invest much in Linux developments. On the other hand, Linux has a large, established user base, all of whom like to have fun as much as the next person.

AA: Do you intend to port Explorer2260 to other platforms after the Linux version is completed?

CP: I don't intend to port it to any other platform. Amiga development is on the back burner for the moment, but I haven't stopped it. My code is as portable as I can make it so I can bring the Amiga version up to date when I get the chance. I may look into a QNX version eventually, but I am completely opposed to a Windows version.

> "Frustration, anger and tiredness..."

AA: What was it that finally made you decide to move away from the Amiga as a primary target for your software?

CP: Frustration, anger and tiredness. I got to the point where I was spending more time dealing with politics, trying to work out where I was going and picking up the pieces from the latest announcement than I was spending on developing the games themselves.

AA: How would you like to see Amiga do things differently?

CP: Sticking to one plan for more than a year would be a start! Seriously, I realise that any real business has to periodically revise its plans and direction, but even the most hardened supporter gets worn down by change after change. This is no fault of the current owners, but those of us who have supported Amiga since the Commodore days have seen plans waved as the Saviour Of The Amiga only to get another six months down the line. It's the "cry wolf" situation - you simply don't believe it any more.

But that aside, there isn't really anything I would have them do differently. I have no serious objections to the direction they have taken, only the time it has taken to get there. If Amiga had decided to do a PPC version of the OS 18 months ago I may have been happier.

AA: What would you need to see happening before you were tempted back into the Amiga fold?

CP: The simple answer: new desktop users. Not current Amiga owners buying new machines, but genuine new users. I have no doubt that the DE has a lot of scope in the handheld/DC market, but trying to get something like Explorer2260 to run in that sort of environment would be problematical at best, if not virtually impossible. OS4 and OS5 need to be marketed to attract new users and desktop Amigas need to be sold in high-street shops so people can just walk in and buy one off the shelf.

Who's Next?

If you'd like to know what happened to someone from the Amiga's past, write in and let us know. We'll do our best to track them down and fill you in on the details in a future issue. E-mail the Back Page section at backpage@amigactive.com or write to the usual address (see page 54), marking your envelopes 'BackPage'.

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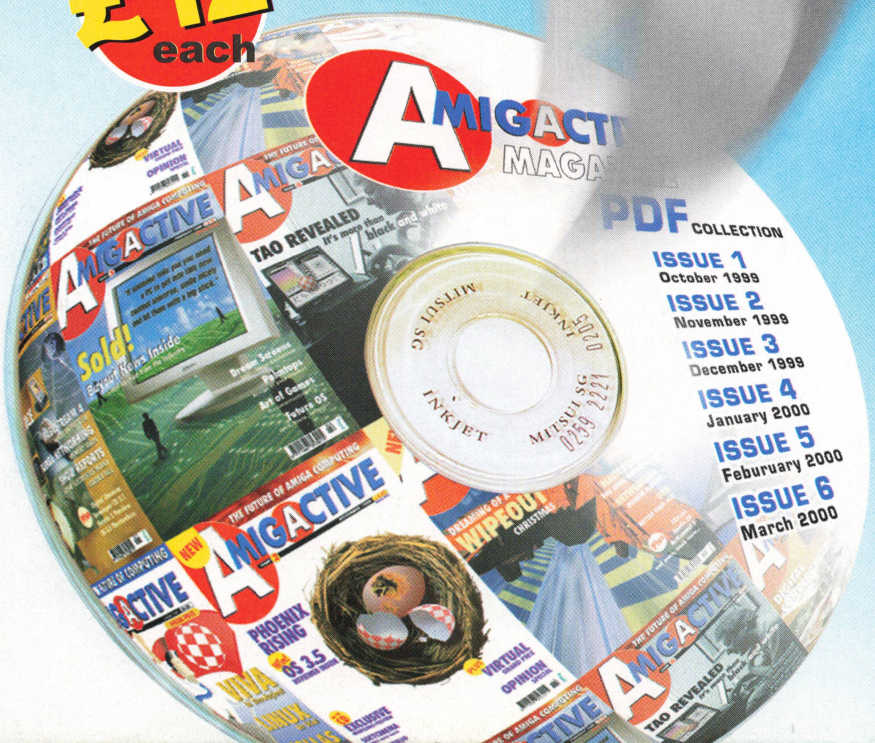

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