

WhatIFF? Issue 5.20

This PDF has been generated by a proof of concept AG2PDF function. It's very basic so far and not even close to finished but here you go!

WhatIFF? For The Creative Amiga User

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Welcome to WhatIFF?

@{IMG "Images/WhatIFFLog.iff"}

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-=# WhatIFF? - Issue 5.20 - June 2026 #- Music:

·A few words from the editor and meet the writers of WhatIFF?
--EDITORS DESK-- -MEET THE WRITERS--
· Where Amigans Speak Freely and Reader Letters!
---SHELL TALK--- -----TALK BACK-----
· Reviews of hardware and software, old and new.
-----REVIEWS-----
· Guides and support for all things Amiga.
-----GUIDES----- -----ARTICLES-----
· Interviews and the latest of Aminet over 4 months.
-TALKING AMIGA-- ---AMINET PULSE---
· Amiga related links and Amiga vendor websites.
-----LINKS----- ---AMIGA VENDORS--- ---AMIGA GROUPS----
· Cover disk contents and contributors.
---COVER DISK---

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From The Editor's Desk

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From The Editor's Desk - by: Timo Paul

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Welcome to issue 5.20 of WhatIFF?, we are two months early than usual due to myself taking a holiday in July/August. So, I will keep this short, we have quite a nice issue this time, not so many reviews, the main one being of the Amigstore.eu mechanical keyboard but there are a lot of articles and guides.

Thank you for having downloaded and read the magazine over 20 issues, we have been going since 2021 and it has been a great ride. Enjoy this issue and take care in the hot weather coming our ways.

Letters From WhatIFF? Readers

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Talk Back: Reader Letters
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Welcome to Talk Back, the section of the magazine where we publish a select few of the letters that we receive. Thank you to everyone who has written in and those who have gone on to write articles for the magazine. We always welcome any written contributions to the magazine. Everyone has a unique perspective and Amiga story to tell. If you wish to write to the magazine or contribute then please contact us at: submissions@whatiff.info

Where Amigans Speak Freely!

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Shell Talk - by: ByteBandit

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Welcome back to Shell Talk, world-builders, tracker-tweakers, and CLI-dwellers! Put down your joysticks, type `ENDCLI` on your distractions, and let's talk about the state of the scene.

Whether you are pushing a blistering Revision 5 68060 to its absolute limits on a specialized accelerator or you are content to watch things tick over at a nice, steady 14 MHz, there is plenty of news dropping into our buffers this month. Grab a brew and let's parse the data.

THEA1200: A Six-Month GOTO Sent to December

Let's address the massive, wedge-shaped elephant in the room first. If you were eagerly waiting for mid-June to unbox Retro Games Ltd's full-scale reimagining of our beloved Amiga 1200, I have some bad news for your calendar. The release has officially been pushed back nearly half a year.

Originally scheduled to land on June 16, **THEA1200** has been officially delayed until December 4, 2026. According to RGL, the setback is a classic double-whammy of the modern era: persistent global chip shortages and spiking plastic production costs. On the software side, they've also admitted the internal emulation OS "isn't yet where it needs to be" to deliver the flawless, plug-and-play Workbench and AGA experience they promised.

The silver lining? RGL confirms the target hardware specs and the price point are completely locked in—no mid-stream cuts or sudden budget markups. Plus, just days ago on June 9, we finally got a real look at a functioning, full-size plastic prototype running *Turrican* and *Defender of the Crown II*. It's a real, physical, computer-shaped device with a fully working keyboard, not just another 3D render. It looks brilliant, but we're just going to have to extend our `WAIT` loops until winter to actually type on it.

AMIGAVISION Overhauls the Virtual Display Pipeline

For those who lean into high-end emulation, MiSTer FPGA setups, or just want their modern CF card data transfers running smoother, the **AmigaVision 2026.04.16 release** dropped like an absolute bomb recently.

The biggest victory here is the execution of a 30-year-old emulation bug-fix. The team has finally implemented flawless, automatic integer-scaled, auto-cropped PAL and NTSC overscan rendering. If you are running 16:9, 16:10, or even sprawling 21:9 Ultrawide displays, the new launcher handles cinematic aspect ratios seamlessly making old demo-scene productions look terrifyingly crisp.

Real hardware users haven't been left out in the cold, either. This latest update packs significantly improved support for high-end Motorola 68040/060 accelerators via `Mu680x0Libs`, optimizes PCMCIA CompactFlash/SD storage handling, and heavily tunes online BBS scripts, effectively doubling PPP serial transfer speeds up to 230,400 bps.

Oh, and if you are ever stuck on a copy-protection screen or a complex control layout, they have packed **2,955 QR codes** into the launcher interface, linking directly to online game manuals you can pull up instantly

on your phone or tablet while playing. Efficient? Extremely.

Quick Clicks from the Underground

- * ****International Amiga Day Celebrated:**** May 31st saw the annual global celebration of over 30 years of Amiga culture. Floppy t-shirts were worn, retro-brighting paste was mixed, and countless A500s and A1200s were booted simultaneously around the globe.
- * ****Return to Blacktooth:**** If you are a fan of isometric 3D puzzling, **Return to Blacktooth: A Head Over Heels Adventure** officially launched last month on the Amiga. Better yet, a dedicated CD32 console version complete with full gamepad mapping is locked and loaded for release.
- * ****Sonic Amiga Tech Demo:**** Keep your eyes on the homebrew scene, a stunning new tech demo of **Sonic the Hedgehog** running natively on Amiga chipsets (offering both 16-color and 32-color options) has been making waves, proving the old hardware still has plenty of secrets to yield when coded with pure genius.

That wraps up this edition of Shell Talk. Keep your chips cool, your power supplies beefy, and your text editors clean.

Until next time...

`1> Execute News\_Loop`

****Ñ ByteBandit****

Welcome to the reviews section!

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-= R E V I E W S =-----

-= Hardware Review: Amigastore.eu Mechanical Keyboard for A1200 =-

Take a look at the Amigastore.eu mechanical keyboard and see if it is worth your hard earned cash to replace the existing keyboard.

-= Software Review: LumiFTP =-

A new FTP client aimed at Workbench 3.2 owners, we find out how it stacks against the other modern clients available.

-= Software Review: ViNCed =-

With AmigaOS 3.2 the Shell gained more features and power, with this in mind is it still worth having a look at ViNCed?

-= Software Review: xSysInfo =-

Sysinfo has been a staple for many Amiga users wanting to show off the power of their Amigas. But, with the evolving Amiga system varieties the original Sysinfo is showing its age, in steps xSysInfo

#Reviews - WhatIFF? Issue 5.20 - June 2026#

Hardware review: Amigastore.eu Mechanical Keyboard for A1200

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Hardware review: Amigastore.eu Mechanical Keyboard for A1200 - by Timo Paul

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Product Name

Mechanical Keyboard for the A1200 (AMIGAstore.eu)

Developed By

Sergiusz

Available From

<https://amigastore.eu/en/994-mechanical-keyboard-amiga-1200.html>

Price

185.50 EUR

Hardware/Software Requirements

A1200

Test Machine

A1200/OS3.2.3/TF1260/PicoWyfy

Keyboard Box

@{IMG "Images/Keyboard1_small.iff"}

Review

The keyboard that comes with the A1200 is not a bad keyboard by any stretch it has a pleasant soft feel, you get a the useful auditory feedback when pressing a key. While it is outdated by modern standards, with laptops getting ever thinner and quieter, the Amiga keyboard is a call from the past where keyboards were chunky and tactile. However, they are getting on and with age the membrane and ribbon connectors are wearing out.

Of recent we have seen an increase in "gaming" keyboards or mechanical ones which have broought back the chunky keys and tactile keyboards or yore. In last few years we have seen some of these keyboards coming to the Amiga.

With my own A1200 keyboard starting to experience some issues with certain keys not responding I decided to take the plunge and replace the entire keyboard with something modern but one that still looks like it belongs in an Amiga. There are several options from various companies, a quick flick through Amiga Future and you will find the TS500 and TS1200 from Sordan, the Mechanical keyboard A1200 from AMIGAstore.eu. Looking online you can find the KA59 mechanical keyboard from Alinea Computer Shop, and hopefully by now the mechanical keyboard from A1200.net. Though, as of writing you can only buy the base keyboard and need to purchase the key caps separately. Of all the keyboards the A1200.net looks closest to the original Amiga 1200, the ones from Sordan and Alinea are close but have several extra keys that make them look decidedly PC, at least in my opinion.

The keyboard from AMIGAstore.eu is a nice compromise between the others, it has a general Amiga layout with only one extra key, a Ctrl on the right side. The Caps Lock key does not have window on top like the other models but lights up underneath when pressed. The keycaps have a nice rounded look to them, and unlike the others the numerical key pad also has the keys legends printed on them. While they are not on the front side like the original keyboard it is nice to have them where as they are included with the other keyboards. Though it should be noted that the A1200.net key caps do come since they are attempting to be a 100% recreation.

So after much comparison and research I decided to go for the AMIGAstore.eu keyboard since it offered a nice mix of the old and new, plus it was the cheapest of all the keyboards.

Ordering from AMIGAstore.eu was painless as usual, and the keyboard arrived promptly, it was sent via DHL though so I had to pay some import fees but that was expected. Previous users had reported some keys coming off during

transport and mine was no exception. However, one of the key switches was stuck and when pushed back in the spring mechanism did not work. AMIGAstore was quick to fix the issue and sent some replacement switches and paid for the repair work of soldering a new one since I was unable to do it myself. It was great customer service from AMIGAstore.eu and I can whole heartedly recommend buying from them.

The keyboard itself is quite a bit heavier than the original keyboard and comes with a longer ribbon. There had been previous reports of the keyboard not fitting flush within the case and the direction keys have miss prints on them. I am happy to report that the keyboard fit in perfectly in my A1200.net case and the arrow keys are orientated/printed correctly now.

In addition the longer ribbon cable is a welcome change as it makes it easier when opening the case allowing the keyboard to sit further away from the Amiga.

So how does it feel and work?

I went with the blue kailh switches since they offer the most tactile and auditory feedback of all the offered options. You can choose from:

- Kailh Brown Switches: audible clickless tactile feedback
- Kailh Red Switches: smooth and continuous action
- Kailh Blue Switches: best for tactile feedback and distinctive click sound

Using the keyboard takes a little getting used to as you have to apply a bit more pressure than with the original keyboard. However, it feels very nice and the tactile and auditory feedback are very enjoyable. If you remember using computers from the 80s with their chunky and loud keyboards this is very much the same. I find the lack of the Caps Lock window not an issue since I use a translucent A1200.net case and the light is easily noticable when activated.

Keyboard Installed

@{IMG "Images/Keyboard2_small.iff"}

After getting used to the keyboard typing has become much faster and more accurate. Since the keyboard layout is very close to the original much of my muscle memory can still be used. Another nice aspect of the keyboard is that it feels much more solid than the old keyboard, there seems to be less flex in the base so when typing I feel that my hands are properly supported.

Caps Lock Closeup

@{IMG "Images/Keyboard3_small.iff"}

I went for the original white and grey keys and it looks gorgeous in my translucent case. Originally I had bought black key caps for my previous A1200 but I am finding the original colour scheme really suits the translucent case well.

Final Thoughts

Prior to purchasing the keyboard I was on the fence if I really wanted to spend this type of money for a new keyboard. After having used the keyboard for several months now I am very glad that I did. In fact, I find that I am typing documents on my Amiga instead of the MacBook when I can. Modern laptop keyboards feel so limp and without character. When I am on the Amiga I can imagine myself in an episode of The A-Team typing on a chunky keyboard hacking into some police station's files.

It is a lot of money to put down and if your keyboard is still servicing you well then there would be no need to upgrade. However, if you do a lot of typing on the Amiga or have an keyboard that is starting to show its age this keyboard is a great choice. Simple tasks such as editing commands in OctaMED or using keyboard shortcuts in Lightwave or Brilliance had a little added flair with the AMIGAstore.eu mechanical keyboard.

Software review: LumiFTP

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Software review: LumiFTP - by Timo Paul

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Product Name

LumiFTP

Developed By

Matthias Muench

Available From

https://aminet.net/package/comm/tcp/LumiFTP_1.0.258

Price

Free

Hardware/Software Requirements

AmigaOS 3.2/68020+

Test Machine

A1200/OS3.2.3/TF1260/PicoWyfy

Review

LumiFTP is a new FTP, FTPS and SFTP client for our favourite machine and one that is targeted at OS3.2 users. It requires MUI alongside NList.mcc, NListtree.mcc, BetterString.mcc and a 68020 or higher. AmiSSL 5.x is only needed if you are using FTPS/SFTP.

It's main features are:

- * FTP (RFC 959), active and passive (PASV) mode
- * FTPS, explicit (STARTTLS) and implicit (port 990) via AmiSSL, with per-profile certificate verification (default on)
- * SFTP (SSH File Transfer Protocol) via libssh2 and AmiSSL
- * Two-pane file manager (local/remote), sortable columns
- * Drag & drop between local and remote pane, from the Workbench (AppWindow) into the local pane and from the local pane back to the Workbench
- * Recursive upload, download and delete of entire directory trees (local and remote)
- * Transfer queue with per-file progress display
- * Address book for saved server profiles with group structure
- * Profile import/export: FileZilla XML, AmiFTP Prefs, URL list
- * Public-key authentication (RSA, ECDSA, Ed25519) and password
- * Atomic save (.tmp + rename) for downloads - abort mid-transfer leaves the existing target file untouched
- * Resume on up- and download (FTP REST, SFTP seek64), global default Ask / Auto / Never
- * Minimise to AppIcon on the Workbench
- * Full ARExx scripting interface (port LUMIFTP)
- * Automatic update check via signature verification, optionally silent on program start
- * AmigaGuide documentation (incl. ARExx reference)
- * Localisation: English, German

Prior to LumiFTP I have been using RNOXfer, which has proved to be a very robust FTP client. The only criticism I have is that it is a rather large piece of software, as such it takes time to load on a classic Amiga.

Getting Started With LumiFTP

While most FTP clients you can just drag them to your desired location and run them from there, LumiFTP needs to be first installed. I tried to run it without installing and it gurbed my machine. However, when I used the supplied installer it ran without issues.

It is quick to load and has the standard two pane panel that pretty much every FTP client has. There are tabs at the top, File Manager, Address Book, and Queue. Everything is laid out in a logical way and it is easy to find what you need. Definitely using MUI has with the GUI of LumiFTP, however I can't help thinking since it was targeted at OS3.2, ReAction could have been used instead of MUI.

Well, there is not much more to be said about the program, I was able to login into my main FTP sites, however it was unable to login to the WhatIFF? Gemini server. There appears to be an error when using the SSH key. This was not an issue with RNOXfer, so if you in need of SFTP transfers you might want to wait until the next update. I have contacted the author about this issue and I will update any information that I get back from him.

Final Thoughts

A great looking and useful FTP client that has many modern features but still needs some work to be fully useful. However, saying that if you are on the lookout for a modern and easy FTP client LumiFTP will serve you well.

Software review: ViNCeD

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Software review: ViNCeD - by Bytebandit

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Product Name
ViNCeD
Developed By
Thomas Richter
Available From
Aminet
Price
Free
Hardware/Software Requirements
A1200
Test Machine
A1200/OS3.2.2/030

When Hyperion dropped AmigaOS 3.2, it felt like the classic Amiga Shell finally stepped into the modern era. Out of the box, we gained quality-of-life features that used to require a messy web of third-party patches or commodity commodities.

For the casual user, the overhauled native CON: handler became more than enough. But does that mean Thomas Richter's venerable ViNCeD is dead weight on a modern OS 3.2 system? Not by a long shot.

Select a section below to read the full breakdown:

1. Where the Native Shell Caught Up

Before OS 3.2, installing a third-party console replacement like ViNCeD or KingCON was practically mandatory just to retain your sanity during extended CLI sessions. Hyperion recognized this and baked the most common requirements directly into the OS:

- * TAB Autocompletion: Fast path, file, and command completion are now natively handled by the shell.
- * Command History: A dedicated history buffer allows you to recall previous lines without external utilities.
- * Workbench Drag-and-Drop: You can drop file icons directly into an open Shell window to quickly append their absolute paths.
- * Clean Iconification: Supported natively via the /ICONIFY parameter, working hand-in-hand with ConClip.

For launching WHDLoad games, hitting simple assigns, or copying the occasional drawer, the native shell is magnificent.

2. The Power-User Threshold

The moment your workflow shifts from basic file maintenance to serious text manipulation, programming, or deep system debugging, the native shell hits a hard ceiling. This is where ViNCeD takes over.

The Digital Void vs. Total Recall

The native shell still drops text into a digital black hole the moment it scrolls off the top of the window. If you run a long compiler script, execute massive directory listings, or run network diagnostics, your only option is to pipe output to a file.

ViNCeD keeps the entire window history in memory. You can scroll back up effortlessly using the cursor keys or the scrollbar to review compiler warnings or logs that flew past minutes ago.

Dynamic Layouts & Text Handling

ViNCed treats the console like a smart text editor. Highlights include:

- * True Scrollback Selection: Highlight, select, and copy text straight out of the scrollback buffer into the Amiga clipboard.
- * Dynamic Reflow: Resize a native shell window, and long lines truncate or break ugly. ViNCed re-computes line breaks and wraps text cleanly on the fly during an Intuition window resize.
- * Inline Editing: ViNCed features built-in text macro hooks, allowing the console window itself to act as a fast, screen-oriented text editor when called upon.

3. Under the Hood Integration

A common issue with using legacy 16-bit era console patches on modern Amiga setups is system stability. AmigaOS 3.2 introduced significant internal structural changes, especially regarding library initialization and localization.

Fortunately, ViNCed is maintained by Thomas Richter—who happens to be one of the core developers behind AmigaOS 3.2 itself. Because of this, ViNCed is uniquely optimized for the modern OS 3.2 architecture.

Recent iterations (v3.99+) contain specific logic to handle the OS 3.2 Boot Shim safely. Unlike older handlers that slam into memory early and crash the boot cycle, ViNCed intelligently delays loading essential components like `icon.library` and `workbench.library` until the OS 3.2 preferences system is fully stable. This completely eliminates early startup conflicts, guru meditations, or missing locale string bugs that plague abandoned alternatives.

4. The Final Verdict

AmigaOS 3.2 gave us the standard console environment we deserved decades ago, and for that, the development team deserves immense credit.

However, ViNCed is not just a patch to fix an incomplete shell; it is an entirely different class of terminal tool. It elevates the CLI from a mere command launcher into a robust, modern development and administrative workspace.

If you spend your time on the Amiga inside source code, compiling, or hacking away at script heavy operations, ViNCed isn't just "worthwhile" for OS 3.2, it is still absolutely mandatory.

Software review: xSysInfo

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Software review: xSysInfo - Measuring the Unmeasurable - by Bytebandit

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Product Name
xSysInfo
Developed By
Stefan Reinauer
Available From
Aminet
Price
Free
Hardware/Software Requirements
A1200
Test Machine
A1200/OS3.2/PiStorm

For older Amigans, SysInfo wasn't just a utility - it was practically a rite of passage. The moment you installed a new accelerator, added Fast RAM, or swapped a crystal oscillator, SysInfo was the first thing you launched. It told you how fast your machine was, how much memory you had, and most importantly, whether your expensive hardware upgrade was worthy of bragging rights at the next user group meeting.

But here's the problem: classic SysInfo was designed for a world that no longer exists.

Back then, the Amiga ecosystem was relatively predictable. A 68000 behaved like a 68000. A 68030 behaved like a faster 68000. Memory timings were measurable within known architectural limits. Even wildly accelerated systems still fundamentally obeyed Motorola-era assumptions about execution, cache behaviour, and bus access.

Modern Amiga systems don't.

That's where xSysInfo becomes more than a nostalgia project. It's effectively an attempt to redesign Amiga system analysis for an ecosystem that has mutated far beyond Commodore's original engineering model.

One of the biggest differences between classic SysInfo and xSysInfo is philosophical.

Older SysInfo versions were heavily benchmark-centric, but they operated under assumptions that become increasingly unreliable on modern hardware. Many of the original speed tests relied on timing loops, synthetic integer operations, and approximated Dhrystone calculations that made sense in the early 1990s but become misleading once you introduce FPGA accelerators, ARM-based emulation layers, RTG pipelines, or heavily cached hybrid systems.

xSysInfo directly addresses this.

According to the project notes and developer discussions, one of the major redesign goals was benchmark accuracy - specifically replacing older approximation methods with tests derived from actual benchmark source implementations. The Dhrystone routines, for example, are now based on genuine Dhrystone source code rather than simplified legacy calculations.

That sounds minor until you start testing modern accelerators.

Take PiStorm systems.

A PiStorm setup effectively inserts an ARM processor into the Amiga's CPU

socket path, with varying combinations of emulation, translation, memory mapping, and hardware passthrough depending on configuration. The Amiga motherboard still handles chipset duties, DMA, and portions of memory access, but CPU execution may occur on hardware literally thousands of times faster than the original 68000.

Classic SysInfo struggles badly in this environment because it assumes the CPU exists inside the timing characteristics of the motherboard.

It doesn't anymore.

Timing loops become distorted. Integer tests may execute inside translation layers. Cache behaviour becomes almost impossible to compare against original Motorola silicon. Some memory operations bypass traditional bottlenecks entirely, while others remain constrained by legacy chipset arbitration.

The result? Benchmark numbers that can look absurdly inflated, strangely inconsistent, or simply meaningless.

xSysInfo seems far more conscious of this architectural ambiguity.

Rather than merely reporting a "times faster than A3000" figure like older utilities, it increasingly focuses on identifying what hardware is actually present in the system. Modern versions include improved CPU identification, clock reporting, MMU enumeration, cache detection, expansion board handling, SCSI reporting, and enhanced hardware discovery routines.

That matters enormously in today's Amiga landscape because the machine itself has become fragmented into multiple incompatible interpretations of what an "Amiga" even is.

And nowhere is that more obvious than Vampire hardware.

The Apollo cores used in Vampire accelerators are not cycle-accurate Motorola clones. They're modern FPGA reinterpretations inspired by the 68k family while extending it in significant ways. Instruction throughput, cache architecture, internal execution pipelines, and memory behaviour differ substantially from original Motorola CPUs.

This creates bizarre benchmark behaviour.

Some workloads absolutely fly on Vampire systems, especially integer-heavy operations or heavily cached routines. Others expose unexpected bottlenecks because the surrounding Amiga architecture - chipset access, RTG overhead, storage subsystems - no longer scales proportionally with CPU performance.

Older SysInfo versions often misinterpret these systems because they assume all 68k-family processors behave similarly enough to compare directly.

xSysInfo appears designed specifically to avoid that trap.

The utility's hardware reporting is far more comprehensive than traditional SysInfo ever attempted. According to the project README and feature descriptions, xSysInfo now includes detailed reporting for:

- * CPUs and MMUs
- * Cache structures
- * Memory configuration
- * Expansion boards
- * SCSI and storage devices
- * Kickstart and OS information
- * Graphics subsystems
- * Benchmark analysis
- * Windowed RTG operation
- * Localization support
- * Printable and exportable reports

It also introduces something deceptively important: proper RTG-aware GUI handling.

That may sound cosmetic, but classic SysInfo belonged to an era where native Amiga display modes were assumed. Modern users increasingly run Picasso96, CyberGraphX, HDMI framebuffer outputs, or FPGA-native display systems.

That active development is another major difference.

Classic SysInfo always felt slightly opaque - a legendary utility from the golden era. xSysInfo is openly developed, fully open source, and evolving in public. Users can inspect the source, modify benchmark logic, contribute patches, or adapt detection routines for entirely new accelerator hardware.

And honestly, that openness is probably essential now.

Because benchmarking an Amiga in 2026 is no longer about measuring a single coherent architecture. It's about measuring interactions between legacy buses, FPGA cores, ARM translation layers, RTG systems, memory mapping tricks, and thirty years of hardware improvisation from one of computing's most dedicated enthusiast communities.

That's an enormously more difficult problem than benchmarking a stock A500 in 1991.

But xSysInfo feels like one of the first utilities that genuinely understands the scale of that challenge.

It doesn't pretend modern accelerators are just "faster 68030s."

It acknowledges that today's Amiga ecosystem is a strange fusion of preservation, emulation, reinterpretation, and outright hardware experimentation.

And because of that, xSysInfo doesn't merely feel like a replacement for SysInfo.

It feels like the next evolutionary step.

Project homepage:
<https://github.com/reinauer/xSysInfo>

@ENDNODE

Welcome to the guides section!

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-- TUTORIALS / GUIDES -----

-- Amiga 101: Creating a Synctime Script/Program --

A simple tutorial on creating a simple executable script to keep your Amiga's time in sync.

-- Amiga 101: Creating a Print Server with a Pi --

It is getting increasingly difficult to print to modern wifi printers from the Amiga, but not if you have a spare Pi and NetPrinter.

-- Amiga 101: FS-UAE A1200 Hard Drive Detection Fix (Mac) --

If you are new to the Amiga and are using a Mac you might have had trouble setting up an HDF. Learn how in this quick tutorial.

-- Amiga 101: Changing File System on Amiga (Installing PFS) --

You may have heard about Professional File System (PFS) on forums and other users but was not sure how to install it. Find out how inside.

-- Simple Hack: The Kapton Clamp --

Have you ever turned on your Amiga and been greeted with a blank screen or the hard disk light constantly flashing and no boot? Then this little

trick just might be of some help.

= BebbosSH: Bringing Modern SSH2 to the Classic Amigas =

With BebbosSH it is now easier than ever to connect your classic Amiga
via SSH using the Shell. Find out how inside.

#Tutorials/Guides - WhatIFF? Issue 5.20 - June 2026#

Amiga 101: Creating a Synctime Script/Program

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Amiga 101: Creating a Synctime Script/Program - by: Timo Paul

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Back in issue 1.03 in 2022 John Scolieri did a guide on how to set up a network time syncing client via SNTP. This is a great way to keep the time date on your internet connected Amiga, especially if your clockport is in use by another device such as A314-cp/PicoWyfy. Usually your Amiga will keep the time but if you are running software such as IMP3, you will find your Amiga will start to lose time. Usually you will need to open a Shell window and recall the sntp command i.e. sntp pool.ntp.org - however if you rather not use the Shell there is another way and this short guide will help you do that.

Step 1 - Script

First we need to create a simple script in any Amiga text editor, so create a new file and enter in the following:

```
c:sntp pool.ntp.org
```

Save the file in a location of your choice, I saved mine as 'SyncTime' in the Tools directory in Workbench. Next we need to make the file executable, so open a new Shell, get to the location of the file and then type the following:

```
Protect SyncTime +s
```

Step 2 - Icon

Now, we need an icon to associate with the script and launch it, find any icon of your choice and copy it to the location of your script and then rename it to the same name as your script. My script is called SyncTime so I renamed the icon to SyncTime.

As it stands the icon will not do anything, we need to some more things first. Select the icon and then press Left A + I, or select Icon Info from the menu bar. From the menu bar find 'Type' and select 'Project'. After that click on 'Icon' tab and where it says 'Default tool' enter 'C:IconX'.

Finally, go back to the 'File' tab and look at the boxes that have ticks in them, make sure the following are ticked:

- * Read
- * Write
- * Delete
- * Execute
- * Script

In most cases it will be the 'Script' that will not be ticked. Now click on Save and your icon will be ready to launch SNTP and sync your clock without the need for resorting to the Shell. If you are running ToolsMenu then you can drag and drop the icon for easy access from the menu bar to sync time.

Additional: IMP3

IMP3 does offer some time syncing features but the extent of this depends if you have donated. For those who have not donated you can use the following command from the COMMAND tab. Note the number is for the Japan time zone i.e. we are 9 hours ahead of GMT.

```
/timeshift 9
```

If you are donator then you can use the command:

```
/set no_sync_clock no
```

Step 3 - Repeating Sync

If you do not want to resync the time manually there is a way that you can set up a loop over a defined time. I must gives thanks to the guys over at EAB when I came up against wall with this one and put me in the right direction.

At the moment we have a very simple script, calling 'nntp pool.ntp.org' we can turn this into a loop by adding the following script.

```
lab again
```

```
sntp poo.ntp.org
```

```
wait 15 mins
```

```
skip back again
```

This will cause the script to run again every 10 minutes, you want to be careful with how often you access the ntp server as they might block you if you access them too often.

Now, we have the looping script but it will be opening a Shell window each time which is not convenient. That is easily remedied by going back to your icon, get icon info (Right A + I) and then adding the following line in the Tool Types space:

```
WINDOW=NIL:  
DONOTWAIT
```

Adding DONOTWAIT will be important if you plan to run the script from the WBStartup drawer. If you do not add this line a prompt will pop up asking if you still want to wait for the SyncTime each time you start Workbench.

And that finishes this short tutorial on setting up an actionable icon and setting a loop. The script is included with this issue, all you need to do is copy over the included SNTP program to your C: directory and SyncTime to your WBStartup drawer. You can then edit the script by opening it with any text editor.

Amiga 101: Creating a Pi Print Server

=====

Amiga 101: Creating a Pi Print Server - by: Timo Paul

=====

Modern printers and classic Amigas do not always work well together. Many newer printers, especially Wi-Fi laser printers and multifunction devices, no longer support the older printer languages that AmigaOS expects.

Fortunately, a Raspberry Pi can act as a bridge between your Amiga and a modern network printer using CUPS and NetPrinter.

This guide walks through setting up a Raspberry Pi print server for use with classic Amiga systems, based partly on the excellent guide by:

<https://banfi.co.uk/blog/2024/08/install-cups-and-cups-lpd-on-a-raspberrypi-for-amiga-printing/>

This article expands on that setup using a real-world configuration with a Brother DCP-L2600DW laser printer as an example.

Final setup:

Amiga -> NetPrinter -> Raspberry Pi -> CUPS -> Printer

Requirements Checklist

You will need:

- * Raspberry Pi
- * Raspberry Pi OS
- * Network connection (Wi-Fi or Ethernet)
- * Modern printer
- * Classic Amiga with TCP/IP stack
- * NetPrinter
- * SSH access recommended

*Note: In this tutorial I am using the gateway ip address of 192.168.10.1 and have set the Pi to a static IP address of 192.168.10.55. In addition the laser printer has been assigned a static IP address of 192.68.10.40. This needs to be done on the laser printer itself. Please remember to confirm your own router ip address and the corresponding ip addresses for the printer and Pi. With that aside, let's get started ...

Installing CUPS

=====

First update the Pi:

```
sudo apt update
```

```
sudo apt full-upgrade
```

Reboot:

```
sudo reboot
```

Install CUPS and related packages:

```
sudo apt install cups cups-client cups-bsd
```

Install LPD support:

```
sudo apt install cups-bsd
```

Enable the CUPS service:

```
sudo systemctl enable cups
```

Start the service:

```
sudo systemctl start cups
```

Add the Pi user to the printer administration group:

```
sudo usermod -aG lpadmin pi
```

Add the user to the lp group:

```
sudo usermod -aG lp pi
```

Reboot:

```
sudo reboot
```

Configuring CUPS

=====

Edit the CUPS configuration file:

```
sudo nano /etc/cups/cupsd.conf
```

Find:

Listen localhost:631

Change it to:

Port 631

Now locate the following sections and allow local network access.

Change:

```
<Location />
  Order allow,deny
</Location>
```

To:

```
<Location />
  Allow @LOCAL
</Location>
```

Change:

```
<Location /admin>
Order allow,deny </Location>
```

To:

```
<Location /admin>
Allow @LOCAL </Location>
```

Change:

```
<Location /admin/conf>
AuthType Default
Require user @SYSTEM
Order allow,deny </Location>
```

To:

```
<Location /admin/conf>
AuthType Default
Require user @SYSTEM
Allow @LOCAL </Location>
```

Restart CUPS:

```
sudo systemctl restart cups
```

Open your browser and visit:

```
http://192.168.10.55:631
```

You should now see the CUPS administration page.

Adding The Printer

```
=====
```

In CUPS:

1. Administration
2. Add Printer
3. Select the detected printer
4. Install the correct driver

In this setup the Brother printer appeared as:

```
socket://192.168.10.40:9100
```

This means the printer itself already supports RAW/AppSocket/JetDirect printing.

After installation:

- * Print a test page
- * Verify CUPS works before continuing

Check active printers:

```
lpstat -p
```

Example:

```
printer AmigaPrinter is idle
```

Port 9100 Support

```
=====
```

Classic Amiga NetPrinter software expects RAW socket printing over port 9100.

CUPS alone does not normally expose this.

Install p910nd:

```
sudo apt install p910nd
```

Enable the service:

```
sudo systemctl enable p910nd
```

Start the service:

```
sudo systemctl start p910nd
```

Verify port 9100 is active:

```
ss -tln | grep 9100
```

Correct output:

```
LISTEN 0 4096 *:9100 *:*
```

Without this step, NetPrinter will fail with:

Could not connect to socket

Installing And Configuring NetPrinter

=====

Configure NetPrinter on the Amiga with:

Host: 192.168.10.55

Port: 9100

Once p910nd is running, NetPrinter should connect successfully.

Recommended Amiga printer drivers:

- * HP LaserJet
- * PostScript
- * Generic text

Avoid:

- * Epson bitmap drivers
- * Unsupported graphics printer drivers

HP LaserJet / PCL generally works best with modern Brother laser printers.

Important Settings:

Remember to set the driver under Printer Preferences to 'PostScript', then with PostScript Printer Settings make sure 'Driver Mode' is set to 'PostScript' and not 'Pass Through'. If 'Pass Through' is set, you will get scrambled text and lose some of the formatting.

Setting A Permanent Static IP

=====

This is one of the most important parts of the setup.

If the Pi changes IP address after rebooting, NetPrinter on the Amiga will stop working.

Older Raspberry Pi tutorials often use:

```
/etc/dhcpd.conf
```

However, modern Raspberry Pi OS releases increasingly use NetworkManager instead.

Check current connections:

```
nmcli connection show
```

Example:

```
netplan-wlan0-Workbench
```

Configure a permanent static IP:

```
sudo nmcli con mod "netplan-wlan0-Workbench"  
ipv4.addresses 192.168.10.55/24
```

```
sudo nmcli con mod "netplan-wlan0-Workbench"
```

```
ipv4.gateway 192.168.10.1
```

```
sudo nmcli con mod "netplan-wlan0-Workbench"  
ipv4.dns 192.168.10.1
```

```
sudo nmcli con mod "netplan-wlan0-Workbench"  
ipv4.method manual
```

Reboot:

```
sudo reboot
```

Verify:

```
hostname -I
```

Expected result:

```
192.168.10.55
```

Troubleshooting

```
=====  
"Could not connect to socket"
```

Usually means:

- * Wrong IP address
- * Port 9100 inactive
- * p910nd not running

Check:

```
ss -tln | grep 9100
```

Check current IP:

```
hostname -I
```

CUPS uses:

Port 631

NetPrinter uses:

Port 9100

These are different services and both are needed.

Final Thoughts

```
=====
```

Using a Raspberry Pi as a print bridge is an excellent solution for unsupported modern printers on classic Amiga systems.

Once configured, the setup behaves much like a dedicated 1990s network print server:

Amiga -> Network -> Printer

The same server can also support:

- * MorphOS
- * AROS
- * Classic Macintosh systems
- * Atari ST computers
- * DOS and Windows 9x PCs

For retro computing enthusiasts, this is one of the most practical ways to

integrate modern printing into a vintage setup while keeping the classic workflow intact.

FS-UAE A1200 HD Fix

=====

Amiga 101: FS-UAE A1200 Hard Drive Detection Fix (Mac) - by: Timo Paul

=====

Problem

After creating and formatting a hard drive in FS-UAE, the AmigaOS installer fails, reporting it cannot find the hard drive.

Cause

FS-UAE does not use `scsi.device` for hard drives. Instead, it uses:
`uaehf.device`

If tools still reference `scsi.device`, the drive will not be found.

Solution

1. Fix Installer Icon

- * Select the installer icon in Workbench
- * Open menu: Workbench -> Icons -> Information
- * Find the tooltype:
 `scsi.device`
- * Change it to:
 `uaehf.device`
- * Save changes

2. Fix HDToolBox

- * Locate HDToolBox (usually in Tools)
- * Select icon and open:
 Workbench -> Icons -> Information
- * Change:
 `scsi.device`
 to:
 `uaehf.device`
- * Save and restart HDToolBox

Why This Works

FS-UAE exposes virtual drives via `uaehf.device`. AmigaOS tools must use the correct device name to detect them.

Checklist

- * Drive created and formatted
- * Installer cannot see drive
- * Tooltypes set to `scsi.device`
- * Changed to `uaehf.device`
- * Installer now works

Notes

On real Amiga hardware, `scsi.device` is often correct. In FS-UAE, always use `uaehf.device` for virtual hard drives.

Summary

If your installer cannot find the hard drive, update tooltypes to:
`uaehf.device`
in both the installer and HDToolBox.

Changing File System (PFS)

=====

Amiga 101: Changing File System on Amiga (Installing PFS) - by: Bytebandit

=====

Introduction

The default Amiga Fast File System (FFS) works, but modern file systems like PFS (Professional File System) offer better speed, reliability and support for larger drives.

This guide shows how to install PFS and use it on a hard drive.

Requirements

- * PFS archive (e.g. pfs3)
- * Workbench system installed
- * HDToolBox available
- * Backup of important data (recommended!)

Important

Changing file system usually requires reformatting. Existing data may be lost. *Backup first!*

Step 1: Copy File System to L:

- * Extract the PFS archive
- * Locate the file (e.g. pfs3_aio)
- * Copy it to:
L:

This makes the file system available to the OS.

Step 2: Add File System in HDToolBox

- * Open HDToolBox
- * Select your hard drive
- * Click "Change Drive Type" (if needed)
- * Click "Partition Drive"
- * Click "Add/Update File System"

Now:

- * Choose "Add New File System"
- * Enter DosType (example for PFS3):
0x50465303
- * Set file system path:
L:pfs3_aio

Save changes.

Step 3: Set Partition to Use PFS

- * Select your partition
- * Click "Advanced Options"
- * Change file system to the new PFS entry
- * Ensure correct DosType is shown

Optional:

- * Enable long filenames
- * Adjust block size if needed

Save partition layout.

Step 4: Format the Partition

- * Reboot if required
- * In Workbench, select the new partition
- * Choose "Format Disk"
- * Ensure correct file system is shown (PFS)

Format the drive.

Step 5: Test

- * Copy files to the disk
- * Check speed and stability

If everything works, installation is complete.

Why Use PFS?

- * Faster than FFS
- * Better handling of large disks
- * Improved reliability
- * Supports long filenames

Checklist

- * PFS copied to L:
- * File system added in HDToolBox
- * Partition updated
- * Disk formatted
- * System working

Notes

Some older Kickstart/Workbench versions may require patches or updated scsi.device for large drives.

Summary

To use PFS, copy it to L:, add it in HDToolBox, assign it to a partition, and format. Once done, your Amiga will use the new file system.

Simple Hack: The Kapton Clamp

=====

Simple Hack: The Kapton Clamp - by: Timo Paul

=====

Over the last two years I have noticed an annoying symptom with my Amiga. Each time turnin it on from a cold start, it would turn on but the hard disk light would not flash and the screen would remain black. After several tries I could get the Amiga to boot, but it would freeze at random times during simple tasks such as just sitting on Workbench playing a MOD.

To say this was frustrating, is an understatement. I went to the various forums for help, and got various answers from a weak powersupply, to a problem with my TF1260 CPU or aging CAPS. Since my A1200 had been recapped in 2023 and the PSU a recent purchase it seemed unlikely.

Then one day when I had the case open, just out of curiosity I touched the kickstart ROM and noticed it seemed a bit lose. I took out the LOW chip and it slid out very easily. It appeared it had moved over time and lost its tight connection. After bending the pins slightly out again to create more tension I pushed in the kickstart rom and it hit home with a nice crunch.

Powering on the Amiga again and I had no issues with booting from a cold start and it was much more stable, however after about a week the problems returned. Opening up the case again and I confirmed the rom had moved up again and was not tight in the socket.

It appears I the Amiga was victim of Chip Creep.

What is Chip Creep?

Over decades of use, the internal temperature of your A1200 rises and falls. This thermal cycling causes components to expand and contract. Because the Kickstart ROMs are held in place by friction, this microscopic movement can slowly "walk" the chips out of their sockets. Eventually, a pin loses contact, the CPU loses its instructions, and your Amiga gurus.

Symptoms to Check

- * Video: Total black screen (no "Insert Workbench" disk).
- * LEDs: Power light is on, but the Hard Drive/IDE light is "stuck" in the ON position with no disk activity.
- * Instability: Random software failures or "GURU" alerts that seem to happen more often when the machine is warm.

One option would be to replace the sockets but that seemed a bit drastic plus I am not comfortable with a soldering iron and tend to do more damage than repair when I use one. I needed a way to clamp down the chips that would not damage the motherboard and would stay. You could use, normal sticky tape, or electrical tape though these all have issues when used in a high temperature environment like the cramped space of an A1200 with lots of additional expansions such as mine: TF1260, Indivision AGA Mk3 and PicoWyfy. The solution ... a Kapton tape clamp.

What you need

- * Plastic pry tool (or a small flat-head screwdriver).
- * 99.9% Isopropyl Alcohol.
- * Kapton Tape (Polyimide tape) - 10mm or 12mm width is ideal.
- * Clear file folder or something similar

The Step-by-Step Fix

1. Clean and reseal"

First, we need to ensure a clean electrical connection.

- a) Power down and open your A1200.
- b) Gently pry the two Kickstart ROM chips (U6A and U6B) out of their sockets.
- c) Wipe the pins down with Isopropyl Alcohol to remove decades of oxidation.
- d) The Tension Trick: Before re-inserting, lay the chip on its side on a flat table and apply very slight pressure to bend the row of pins outward by a fraction of a millimeter. This increases the friction against the socket walls.

2. The "Clunk" Moment

Align the chips (ensure the notch on the chip matches the notch on the socket!) and press down firmly with your thumb. You should feel---and sometimes hear---a distinct clunk. This is the sound of the pins seating properly into the leaf springs.

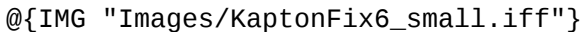
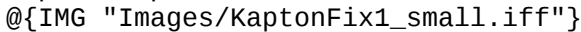
3. The Kapton Clamp

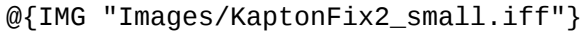
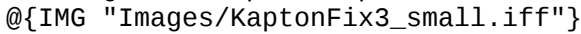
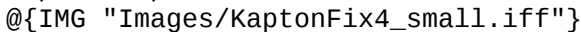
Now we have cleaned up the chips and made sure the kickstart is seated properly again, we want a way to reduce the chance or "chip creep" occurring again.

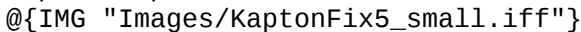
Using standard electrical tape is a disaster inside an Amiga; it stretches with heat and leaves a gooey residue. Don't even think about using standard sticky tape! Kapton tape is the professional choice because it is heat-resistant and doesn't stretch. Remember, Kapton tape was used by NASA during the Apollo missions to insulate electronics, so you and your Amiga are in good company.

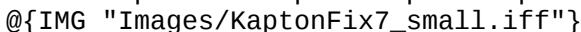
The Process

- a) Cut a piece of the plastic folder that is double the length of the ROM sockets. Make sure it is the exact width of the tape, if you cut wider it will not fit under the ROM sockets.

Cut Plastic Tab

 Kapton Tape with Plastic Tab

- b) Attach the Kapton tape to the cut plastic folder piece and feed it under the ROM socket. I recommend starting from the right side as you have more space to manuvre. When the tape appears on the left you need a flat object to push up the plastic tab and tape so you can grab it.

Feeding Kapton Tape with Plastic Tab

 Feeding More Kapton Tape with Plastic Tab

 Kapton Tape with Plastic Tab Removed

- c) Place the strip over the top of the ROM chip. Pull it taut and anchor it firmly to the side of the sockets or on top.

Kapton Tape Attached to ROM

- d) Repeat for the other ROM socket.

Both Chips with Kapton Tape Clamps


The Result

With the "Kapton Clamp" in place, your ROMs are physically locked down. Even from typing on the keyboard or heat from an accelerator card, the chips should be still locked down. I have been running my A1200 with this fix for several months now and I have not seen a return of any of the prior symptoms. Hopefully if you are experiencing similar issues this simple fix can get your Amiga back on the road to stability again.

Happy Hacking!

BebboSSH: Bringing Modern SSH2 to the Classic Amigas

```
=====
BebboSSH: Bringing Modern SSH2 to the Classic Amigas - by: Timo Paul
=====
```

Welcome to this WhatIFF? tutorial! Today we are looking at BebbosSH, an excellent suite that brings modern SSH2 and SFTP capabilities to our beloved classic hardware.

Choose a topic below to get started:

1. Introduction & Requirements

BebboSSH (available on Aminet as `comm/net/bebbossh.lha`) is a portable SSH2 implementation. Unlike older legacy clients, it supports modern cryptographic algorithms (curve25519, aes128-gcm, etc.). This means you can finally connect to modern Linux boxes securely without having to downgrade their security settings.

Hardware Requirements:

- * An Amiga with a working TCP/IP stack (Roadshow, Miami, Genesis, etc.)
- * CPU: A stock 68000 will work, but establishing connections involves heavy math. Generating keys on an unaccelerated A500/A1200 can take over a minute! An accelerator like a TF1260, a 68030+, or a PiStorm is highly recommended for a snappy experience.

2. Installation

First, unpack the `bebbossh.lha` archive to a temporary directory.

Step A: The Crypto Library

You must install the correct library for your CPU into your LIBS: drawer.

- * 68000: Copy `libcryptossh.library` directly to LIBS:
- * 68020/030/040 (or PiStorm/Vampire): Rename `libcryptossh.library020` to `libcryptossh.library` and copy it to LIBS:
- * 68060: Rename `libcryptossh.library060` to `libcryptossh.library` and copy it to LIBS:

Step B: The Executables

Copy the following command files to your C: directory (or anywhere else in your system path):

`bebbossh`, `bebbosshd`, `bebboscp`, and `bebbosshkeygen`.

3. Connecting OUT (The Client)

To connect to a modern UNIX machine from your Amiga console:

1. Open an Amiga Shell and type: `bebbossh user@hostname`

Crucial Terminal Fix:

Modern systems default to UTF-8 encoding and expect modern xterm responses. This will cause scrambled, unreadable text on the Amiga.

1. Find the 'xterm-amiga' file included in the BebbosSH archive.
2. Transfer this file to your target remote Linux machine.
3. On Linux (as root/sudo), copy the file to: `/usr/share/terminfo/x/`
4. Prevent UTF-8 breakage by adding this to your remote Linux user's `~/.bash_profile` or `~/.bashrc`:

```
if [ "$TERM" == "xterm-amiga" ]; then
    export LANG=C
fi
```

Log out and back in. Your Amiga console will now render perfectly!

4. Connecting IN (The Server)

Want to access the Amiga command line or transfer files via SFTP from your modern PC? You need to set up the daemon!

1. Open a shell and create the config dir:
Makedir ENVARC:ssh
2. Copy the configuration template from the unpacked archive:
Copy template/sshd_config ENVARC:ssh/
3. Generate your Amiga's identity key:
bebbosshkeygen -f ENVARC:ssh/ssh_host_ed25519_key
4. Set up your user and password:
Type: Ed ENVARC:ssh/passwd
Add a single line with your username and password separated by a space (e.g., amigafan mysecretpassword).
Note: It is saved as plain text initially, but BebbosSH will automatically hash it the very first time you log in.
5. Start the server by typing 'bebbosshd' in your shell (you can also add this line to your S:User-Startup).

You can now use standard SSH (like PuTTY or macOS Terminal) or SFTP (like WinSCP) to securely connect directly to your Amiga!

Articles

=====

-= A R T I C L E S =-----

-= Anime and the Amiga =-

When you think of Anime, the Amiga does not feature due to its low profile in Japan, but did you know the Amiga played a significant role in bringing Anime to the West?

-= Amiga Accelerators 2026 the great comparison =-

New to the Amiga or a returnee and not sure about which accelerator to go for? Then have a look inside.

-= Peter K - Icon Library and AmigaOS 3.2 =-

What are the benefits and non-benefits of running Peter K's Icon Library with OS3.2?

-= Teaching ESL to Neurodivergent children via Brilliance =-

Find out how using a real Amiga and Brilliance is helping children who are neurodivergent learn ESL (English as a second language).

#Articles - WhatIFF? Issue 5.20 - June 2026#

Anime and the Amiga

=====

The Amiga's Secret Role in the Anime Revolution - by: Timo Paul

=====

When we look back at the glorious golden era of the Commodore Amiga, we typically celebrate its triumphs in demoscene coding, its European gaming dominance, or its pioneering desktop video prowess. Yet, tucked away in the margins of 16-bit history lies an incredible cultural cross-pollination. In the late 1980s and early 1990s, the Amiga served as the subterranean hardware engine that powered the Western anime revolution, establishing a bridge between Japanese animation studios and English-speaking fandom long before broadband internet, digital distribution, or commercial streaming networks existed.

Growing up the UK in the 80s and 90s, I remember being introduced to Anime through Akira and being completely blown away. Here was an animated film made not for kids but teens and adults. When watching other Anime from distributors such as Manga Video, I often was struck by how some of the title effect and subtitles looked very Amiga'ish. So, now over 30 years later I decided to take a dive into the world of Anime and the Amiga.

To understand this intersection, one must recall the absolute scarcity of Japanese animation in the West during this era. Aside from highly corporate, heavily localized adaptations like Robotech or Voltron, authentic, unedited Japanese content was virtually non-existent. For an emerging underground community of hardcore collectors, international trading networks formed, relying entirely on physical VHS tapes and costly imported NTSC LaserDiscs. But a massive barrier remained: the language gap. The solution didn't come from professional television networks, but from passionate hackers and hobbyists armed with standard-model Amiga 500s, 1200s, and unique, community-coded utilities.

The Genlock Advantage & The NTSC Overlap

The secret weapon of early fan-translation groups, popularly known as "fansubbers", was the Amiga's unique, elegant video architecture. Unlike standard IBM PCs or Apple Macintoshes of the era, which operated on isolated computer graphics standards, the Amiga was natively engineered with television-adjacent video timings in mind.

Fortuitously, Japan and North America shared the same NTSC television standard. This meant that imported Japanese LaserDiscs could be read, synchronized, and manipulated natively by Western Amiga units without encountering regional frame-rate conversions or sync mismatch issues. For those of us in the UK, we were not so lucky and often had to buy multi region VHS players that could handle NTSC and PAL.

By attaching a relatively inexpensive hardware peripheral called a Genlock to the Amiga's video slot, fansub groups could seamlessly sync the Amiga's internal graphics clock with an external video signal. A team would feed a Japanese master LaserDisc signal into the Genlock, which stripped out the analog video's blanking intervals and overlaid the Amiga's custom graphic display directly on top of the moving image. This real-time composition bypassed the thousands of dollars normally required for professional television broadcast titling hardware.

TECHNICAL TOOLKIT: THE JACOSUB PROTOCOL

At the centre of this digital-analog pipeline was JACOSub, an iconic freeware program coded specifically for the Amiga. JACOSub allowed typesetters to write text files, time dialogue accurately down to individual video frames, and render smoothed anti-aliased custom fonts. Though it

should be noted this was only available from version 1.6 in 1991.

Because the Amiga's copper and blitter chips handled text processing seamlessly, these subtitles were rendered onto moving video dynamically on the fly without bogging down the CPU.

The Battle Against Generation Loss & The Postal Underground

Operating a fansub script wasn't simply a matter of digital computation; it was an active battle against analog physical degradation, known as "generation loss." Every time an analog video signal was copied from a master tape to a consumer deck, the clarity of the image dropped sharply. To prevent text characters from blurring into illegible smears, pioneering groups like Arctic Animation and the Video Japan Animation Society abandoned consumer VHS setups. Instead, they upgraded to massive, daisy-chained S-VHS (Super-VHS) decks and high-grade cobalt media, ensuring that the crisp edges of the Amiga's anti-aliased text survived the transfer process.

Since commercial distribution of unlicensed material was strictly taboo, a non-profit alternative known as "The Postal Underground" flourished via early Usenet groups and IRC networks. Fans would send a distribution group a SASE (Self-Addressed Stamped Envelope) stuffed with high-quality blank VHS tapes. The distro group would connect their Amiga-Genlock setup, record the translated masters across massive banks of VCRs, and mail them back to the user, strictly stamped with the unwritten otaku manifesto: "Not for Sale or Rent - Produced by Fans for Fans." This grassroots structure effectively introduced Western subcultures to foundational classics like Bubblegum Crisis, Ranma 1/2, and Mobile Suit Gundam. Bubblegum Cridis and Ranma 1/2 being two of favourites, I highly suggest checking them out if you have not already.

The Demoscene's 16-Bit Cel-Art Obsession

Simultaneously, the global Amiga demoscene was undergoing its own artistic evolution, deeply inspired by the high-contrast, cyberpunk animations spilling out of Tokyo. The hand-drawn cel style of late-80s OVAs like Megazone 23 and Akira translated beautifully into the Amiga's restrictive 32-color or 64-color Extra Half-Brite (EHB) palettes. Scene graphic designers discovered that flat-shaded anime art frames were far easier to cleanly replicate within indexed palette boundaries than grainy, continuous-tone real-world photography.

Using copies of Deluxe Paint IV, tracking musicians, programmers, and artists painstakingly drew anime heroines and intricate mecha pixel-by-pixel. These graphics were packaged alongside custom copper-lists (allowing background palette shifts per horizontal scanline) and manual dithering patterns, forming full-screen slideshows hidden inside cracktros, custom floppy bootsectors, and digital disk magazines. Floppy disks circulating through postal networks frequently pulled double-duty, loading cutting-edge assembly code side-by-side with localized text files tracking the plots of Japanese imports.

Video Toaster & Domestic Japanese Exploits

While domestic computers like the NEC PC-9801 and Sharp X68000 controlled the commercial market inside Japan, the Amiga still secured a highly coveted foothold in Tokyo's independent production circles. Experimental animators and avant-garde directors realized that an imported Amiga paired with NewTek's Video Toaster and LightWave 3D yielded a fully realized desktop digital effects setup at a fraction of the cost of corporate Silicon Graphics UNIX workstations. This setup became a staple for independent 3D modeling and experimental video editing pipelines in late-90s indie circles.

In fact Hedetaka Tenjin, renowned Mecha artist and Macross illustrator got his start in 3D animation via an Amiga 2000 equipped with a Video Toaster while studying in university in 1994.

Major television stations such as NHK, and Fuji Television maintained Amiga workstations in their editing suite. Character designers would often use DPaint and Brilliance to draft concepts before they were translated to traditional animation cels.

The biggest and probably best known use of the Amiga in Japan for video production is for the show Ugougo Luga, a children's/variety show that featured live action children hosts interacting with a completely virtual set filled with surreal, retro CGI cartoon characters. The entire production was powered by Amigas with Video Toasters and heavy usage of LightWave 3D. Thanks to the Amiga, the production team could crank out an episode every day, something completely impossible with standard broadcast hardware at the time.

Where the Amiga really came in was with a recurring 30 second animated short called Mikan Senhjin. It featured a crudely drawn mikan orange with stick figure limbs who arrived from space to "invade" Earth. All of the sequences were animated directly on the Amiga using early 2D paint software, most Brilliance or DPaint. Mikan Senjin became an overnight cult and it was in a large part thanks to the Amiga's video capabilities. Right, so that was the Amiga's influence in Japan in a nutshell, as limited as it may be. Back to Anime and the Amiga ...

RARE HARDWARE PORTS: Japanese Amiga Games

Sadly there were not many Amiga games made for Amiga that were anime based, aside from Dojin software, or as we know it, PD/Indie/Homebrew.

Where as, Western developers heavily integrated these design principles into commercial Amiga software. Team17's critically acclaimed shooter Project-X displayed crisp mecha designs and space-opera aesthetics lifted directly from classic manga layouts. Titles like Walker and Eric Chahi's groundbreaking Another World mirrored a fluid, frame-by-frame vector cinematic pacing that echoed the avant-garde structural style of Japanese animation houses.

An Enduring Legacy

As the mid-1990s heralded the transition to 32-bit consoles and generic multimedia PCs, the era of the hardware Genlock and analog tape loops inevitably drew to a close. However, the structural foundation laid down by the Amiga community proved unshakeable. The vibrant subculture cultivated on Commodore's custom chipsets proved to entertainment executives that an insatiable, highly dedicated audience for Japanese animation existed in the West.

The next time you pull up an AmigaGuide file, explore an old demoscene archive, or stream modern anime series in pristine high definition, remember the bedroom studios, the S-VHS cables, and the custom scripts. For a historic, brilliant moment in time, the Amiga wasn't just an iconic computer it was the global cultural catalyst that carried the art of Japanese animation to the world.

Amiga Accelerators 2026 Comparison

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Amiga Accelerators 2026 the great comparison - by: Heiko Janicke

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<https://www.retroprojects.de>

7.09 MHz no longer enough? Three ways to beam your Amiga into the modern age: Vampire (FPGA magic), PiStorm (Raspberry Pi as CPU) and TerribleFire (real 68k silicon power). Here is the showdown.

Why an Accelerator?

An original Amiga is cultural heritage, but also a bottleneck. The 68000 in the A500 runs at 7.09 MHz, WHDLoad games stutter, AmigaOS 3.2 crawls. An accelerator swaps the CPU for a faster variant, often brings Fast RAM, CF/IDE storage and sometimes even RTG graphics with HDMI. Three approaches dominate 2026.

Select a technology to explore:

Vampire (Apollo V4 Standalone)

FPGA-based "Reborn Amiga" from the Apollo team. The Apollo 68080 core is a standalone 68k-compatible processor with 64-bit AMMX unit, super-scalar pipeline and SAGA chipset (SuperAGA) incl. Maggie 3D unit, 32-bit RTG and digital video output.

Current models:

- * V4+ Standalone: 92 / 100 MHz 68080, 512 MB / 1 GB DDR3, 12 MB Chip RAM, 128 GB CF with ApolloOS, 3x USB, 2x DB9, Ethernet, microSD, digital A/V up to 1920x1080. Aluminium case 12 x 3 cm, 2 W, fanless.
- * V2 family (V500/V600/V1200): officially EOL on 23 October 2025
FPGA fully utilised, no new cores, no fixes. For new buyers in 2026 no longer recommended.
- * V4 Zorro / card for A500/A600/A1200: announced, delivery times unclear.

Performance: ~160 MIPS / 80 MFLOPS factor of ~230 compared to 68000 @ 7 MHz. Roughly PowerPC 750 @ 800 MHz with AMMX.

Price: V4+ Standalone base ~535 Euro gross (shop.apollo-computer.com). Fully equipped up to 700-800 Euro.

Pros

Unique 68080 features (AMMX, Maggie 3D)
SAGA with native RTG
Digital video output
Fanless, stable cores

Cons

Standalone = no original Amiga (OCS/ECS/AGA only emulated)
Closed-source FPGA cores
Long delivery times
V2 line EOL (trust issue)

PiStorm / PiStorm32-Lite

Open-source project (captain-amygdala/GitHub). A Raspberry Pi replaces the 68k socket and emulates the CPU via software. Emu68 (bare-metal JIT, Michal Schulz) is today the standard software stack.

Variants 2026:

- * PiStorm (DIP/16): A500/A500+/A1000/A2000/CDTV
- * PiStorm 600 / PiStorm16: A600 with CM4 support
- * PiStorm32-Lite: A1200 (150-pin expansion port)

Performance: Pi 4 / CM4 @ 1.8 GHz delivers ~2,050 MIPS with Emu68 v1.1 faster than any real 68060. 256-512 MB emulated Fast RAM, 2 GB limit (AmigaOS).

Price: PiStorm board only ~58 Euro, complete package with Pi 3A+ ~120-190 Euro. PiStorm32-Lite ~85-90 Euro board, complete ~130-170 Euro.

Buy: AMIGAstore, AmigaKit, RetroPassion, Ultimate MiSTer all with assembly completed.

Pros

Unbeatable price-performance ratio
Open source, huge community
RTG via HDMI directly on the Pi
Original chipset remains active
Continuous Emu68 updates

Cons

No "real" AMMX
Two OSes in parallel (Linux + AmigaOS) = more sources of error Pi availability fluctuates
No "official" manufacturer warranty

TerribleFire (Stephen Leary)

Completely open-source hardware (KiCad + firmware on GitHub). Classic approach: real Motorola 68030 / 68060 CPUs on own PCB. No FPGA magic, no Pi.

Current cards:

- * TF534: A500/A500+/A2000, 68030 @ 33-50 MHz, 68882 FPU, 4 MB Zorro II RAM, 2.5" IDE, plug and play. ~145 Euro assembled.
- * TF1232: A1200 trapdoor, 68030 @ 50 MHz, 64 / 128 MB, IDE. ~190 Euro.
- * TF1260: A1200, 68060/68LC060 @ 50-100 MHz, 128 MB, IDE. ~250-350 Euro depending on 68LC060 vs full 68060.

Performance: 68030 @ 50 = 8-12 MIPS, 68060 @ 100 = ~110 MIPS. Less than Vampire/PiStorm but native CPU with maximum software compatibility.
Buy: AMIGAstore, RetroPassion, AmiBay, occasionally Tindie.

Pros

Real CPU = max. compatibility
No emulation overhead
Open-source hardware
Robust and simple

Cons

No RTG/HDMI
No 3D
68060 rare and expensive
Slower than Vampire/PiStorm

----- Comparison Matrix

Criterion	Vampire V4+	PiStorm32-Lite	TF1260
CPU equivalent	68080 @ 100MHz (FPGA)	~2000 MIPS (Emu68 JIT)	68060 @ 100MHz (real)
RAM	512MB / 1GB DDR3	up to 2GB (Pi)	128MB Fast RAM
Storage	128GB CF+microSD	microSD (Pi)	2.5" IDE
HDMI / Digital	yes, up to 1080p	yes (Pi HDMI)	no
RTG	SAGA 32-bit	via Emu68	no
Price	535-800 Euro	85-170 Euro	250-350 Euro

Target Amiga	Standalone	A500-A2000-A1200	A500/A1200/
Installation	none	plug and play	A2000
Future viability	core updates	Emu68 ongoing	p&p to solder
			stable, finished

Buying Advice by Scenario

"A500 I just want to tinker"

PiStorm (DIP) + Pi 3A+. Under 120 Euro complete. Kickstart 3.2 + WHDLoad + HDMI RTG = almost everything runs. Price-performance winner.

"A1200 all games perfect with HDMI"

PiStorm32-Lite with Pi 4B or CM4. Real AGA remains, ~2,000 MIPS, HDMI RTG. Or Vampire V4 Standalone for "Reborn Amiga" without original chipset.

"Tight budget, DIY works"

PiStorm DIY (GitHub, PCB at JLCPCB, Pi 3A+) - ~50-70 Euro. Or TF534 DIY if you can solder.

"Best bang for buck 2026"

Quite clearly: PiStorm / PiStorm32-Lite. No other accelerator delivers so many MIPS per euro, plus open source, active development, huge dealer base.

"Maximum software compatibility"

TF1260 for A1200, TF534 for A500. Real 68k no emulation quirks with timing-critical demos.

"Just buy, no tinkering, and impress"

Vampire V4+ Standalone. Ready-made system in CDTV black case, 2 W fanless, ApolloOS from factory. Premium experience.

Important 2026: The Vampire V2 line (V500/V600/V1200) has been officially end-of-life since October 2025. No new cores, no more fixes. Anyone buying V2 gets an end-of-life model. For new buyers: V4 line or other solution.

Living document: This article is updated as new accelerators ship and prices shift. The current version with the latest benchmarks lives at <https://www.retroprojects.de>.

Sources

* Apollo V4+ Standalone specs

<https://www.apollo-computer.com/v4standalone.php>

* PiStorm project (GitHub)

<https://github.com/captain-amygdala/pistorm>

* PiStorm32-Lite Wiki

<https://wiki.amiga.org/index.php/Pistorm32-Lite>

* TerribleFire on GitHub

<https://github.com/terriblefire>

* Emu68 v1.1 benchmarks (2,050 MIPS)

<https://amitopia.com/pistorm-emu68-1-1-reaches-2050-mips/>

* Vampire V2 EOL announcement (Oct 2025)

<https://www.amiga-news.de/en/news/AN-2025-10-00122-EN.html>

Teaching ESL to Neurodivergent children via Brilliance

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Teaching ESL to Neurodivergent children via Brilliance - by: Timo Paul

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In issue 8 I talked about how the Amiga was a uniquely suited to LD learners and how helped them learn better and more intuitively. Since that article I have often been finding opportune moments to include Amiga use with my students. One particular area became a surprise hit, Brilliance with SEN ESL learners. In general I teach expat SEN learners but there are some who are native Japanese with learning difficulties and wish to learn English. The Japanese system often fails them with rigid and outdated teaching methodologies. In this case I am often referred to by various agencies in Japan that help SEN learners.

There one student of mine who has ADHD, is on the autism spectrum and has possibly dyslexia. But, more than dyslexia she finds it hard to concentrate and communicate in large groups. When she is given instructions they often fall on deaf ears. While I was researching methodologies I came upon the idea of using Brilliance for English lessons.

Why Brilliance?

Firstly, I wanted an environment where the student will have the least amount of distractions from digital devices, such as the iPad or laptop. These can easily connect to the internet and YouTube is just a click away and the student is gone into oblivion.

Secondly, Brilliance has a very intuitive menu system, the tools are at the bottom of the screen, so for one who is short their view will be more centred on the lower part of the screen. DPaint with its menu on the right and drop down menus are not good for focus. In addition, the tool menus can be stacked in Brilliance making it much easier to see what you need and helps by having a visual representation of everything. With the simple press of the spacebar everything disappears and you have a blank sheet which again is great way to help with focus.

Why ESL and Brilliance?

Brilliance is a great way to use a teaching tool in that it provides and interactive environment and one where the learner needs to listen to the teacher and then use the tools to create whatever they want. Starting even from the basic, "Click on the left mouse button and draw a circle" eventually moving into using specific tools such as 'Smear'. "Now, let's use the smear tool to blend the colours!". The learner has everything already in front of them, they have the visual cues from the toolbar, there is the kinaesthetic element of moving the mouse, click the buttons and using the keyboard shortcuts. It was incredible to see how quickly my student picked up the process of creating an image in Brilliance, and in particular getting used to the shortcuts.

ESL Student using Brilliance
@{\IMG "Images/eslbrilliance_small.iff"}

Final Thoughts

The Amiga offers a sanctuary in today's constantly connected world, with the internet only a swipe away. While there are those who say social media and the internet is not an issue and others say it is. As an educator all I can say is that over the last 20 years I have seen my students gradually lose their concentration and focus making for tougher and more stressful lessons. More over, they seem to have lost some of their curiosity, which is very sad.

Hopefully they will remember these sessions with the Amiga and perhaps in the future it will ignite some interest or even passion for the Amiga and what it stands for.

iconlibos3.2

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PeterK's icon.library on AmigaOS 3.2 - by: Bytebandit
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For many years, PeterK's icon.library was seen as an essential upgrade for classic Amiga systems. It improved performance, added modern icon support, and gave Workbench a more polished feel.

With the release of AmigaOS 3.2, things have changed. The OS now includes a much improved icon.library of its own, raising an important question:

...
... Is PeterK's icon.library still worth using?
...

This article looks at where it helps, where it does not, and who should consider using it.

Background

Before AmigaOS 3.2, users of older systems (3.0 to 3.1.4) often relied on PeterK's icon.library for several improvements:

- * Faster icon rendering
- * Support for NewIcons, GlowIcons, and PNG icons
- * Reduced Workbench slowdowns

On many systems, especially those using RTG or colourful icon sets, the improvement was obvious.

AmigaOS 3.2 introduced its own updated icon.library with:

- * Better internal optimisation
- * Improved redraw handling
- * Expanded API support

This means the default experience is already much improved.

Pros

PeterK's icon.library still offers some advantages on OS 3.2.

1. Broader icon format support

It handles a wide range of formats, including:

- * PNG icons
- * DualPNG icon sets
- * AmigaOS 4 style icons

This makes it useful if you want to use more modern icon packs.

2. True-colour and RTG systems

On systems with RTG or high-colour screens, it can provide:

- * Faster rendering of complex icons
- * Smoother scrolling and redraws
- * Lower CPU usage with large icon sets

3. Power user flexibility

Advanced users may benefit from:

- * More control over icon behaviour
- * Compatibility with older customised setups

Cons

There are also important downsides on AmigaOS 3.2.

1. Reduced performance gains

The built-in icon.library is already efficient. In many cases, the speed difference is small or not noticeable.

2. Compatibility issues

Older versions of PeterK's library do not work properly with OS 3.2. You need newer builds, and setup is no longer simple.

3. Limited benefit in low-colour modes

On AGA systems using 16 or 32 colours:

- * Modern icons are dithered down
- * Visual improvements are minimal

4. Possible stability trade-offs

Replacing a core system library may introduce:

- * Minor glitches
- * Unexpected behaviour

The stock library is fully tested with OS 3.2.

Where It Makes Sense

PeterK's icon.library is still useful if you:

- * Use RTG graphics
- * Run high or true-colour Workbench screens
- * Prefer modern icon sets (PNG, OS4 style)
- * Enjoy tweaking your system

In these cases, it can improve both visuals and responsiveness.

Where It Doesn't

You may not benefit much if you:

- * Use AGA in 16 or 32 colours
- * Stick with standard GlowIcons
- * Prefer a simple and stable OS setup

Here, the built-in icon.library is usually the better choice.

Verdict

PeterK's icon.library is no longer essential on AmigaOS 3.2, but it is not obsolete.

It is best seen as a specialised tool:

- * Useful on RTG and true-colour systems
- * Less relevant on classic AGA setups

For many users, AmigaOS 3.2 already provides a strong and well-balanced Workbench experience without needing replacement libraries.

AminetPulse

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AminetPulse

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Another quarter has passed, and Aminet continues to demonstrate that the Amiga scene remains remarkably active. From modern programming tools and networking software to fresh game ports and productivity applications, the archive has seen an impressive range of uploads during April, May and the beginning of June 2026.

Here are some of the releases that caught my attention.

NodeAmiga 0.14.0
Category: dev/lang

Perhaps the most surprising upload of the period is NodeAmiga, a Node.js-inspired JavaScript runtime for classic Amiga systems. JavaScript has become one of the world's dominant programming languages, and seeing a modern runtime environment arrive on the Amiga is both unexpected and exciting.

Projects like this help bridge the gap between retro and contemporary development practices, giving programmers another avenue for experimenting on classic hardware.

MicroPython 1.27.0
Category: dev/lang

Python remains one of the most popular programming languages in the world, so a current MicroPython interpreter for Amiga 68k systems is a welcome addition. While MicroPython is a streamlined implementation, it opens interesting possibilities for scripting, automation and educational programming on Amiga systems.

The continued improvement of modern language support on Amiga platforms is one of the most encouraging trends visible on Aminet today.

AmiWolf RTG 2.05 & AmiSpear RTG 2.05
Category: game/shoot

Few games defined the PC gaming revolution quite like Wolfenstein 3D and Spear of Destiny. These updated RTG versions bring both titles to modern Amiga setups with improved graphics support and performance.

Ports like these showcase just how capable enhanced Amiga systems have become while also giving users easy access to gaming history's most influential first-person shooters.

Sevgi Engine 0.190
Category: dev/c

Game development tools are always worth watching, and Sevgi Engine is one of the more intriguing uploads of the quarter. As an open-source game engine for Amiga developers, it provides another option for creators looking to build native Amiga software.

The health of any platform depends on development tools, and projects like Sevgi Engine help ensure new software can continue to be created for years to come.

AveHOST, AveHTTPD, AveNTP, AvePING and AveWHOIS
Category: comm/tcp

A whole suite of lightweight networking utilities appeared on Aminet during this period. Individually these programs may seem modest, but together they represent a useful toolkit for network-aware Amiga systems.

Particularly interesting is AveHTTPD, a lightweight web server that demonstrates once again how even classic machines can participate in modern network environments.

ZodiTV 1.1

Category: util/misc

Streaming media is not something most people associate with the Amiga, which makes ZodiTV especially interesting. Designed to play IPTV streams on sufficiently powerful Amiga hardware, it is another example of developers pushing the platform into areas that would have seemed impossible decades ago.

Whether used practically or simply as a technical curiosity, it is certainly one of the more unusual uploads this quarter.

Ticklish 1.1

Category: util/misc

Productivity software remains alive and well on Aminet. Ticklish is a modern to-do list manager available across multiple Amiga-related platforms.

The software demonstrates an increasingly common trend in today's Amiga ecosystem: applications that span classic Amiga systems, AmigaOS 4, MorphOS, AROS and even non-Amiga operating systems.

whdfetch 0.9b

Category: util/misc

WHDLoad users should take note of whdfetch. This utility aims to simplify the process of downloading and updating WHDLoad packs, potentially saving enthusiasts considerable time maintaining large collections.

Anything that reduces administrative overhead and lets users spend more time enjoying software is worth celebrating.

JSON-Library 1.0

Category: dev/blitz

JSON has become one of the standard formats for exchanging data in modern computing. The arrival of a dedicated JSON library for Blitz developers may not grab headlines, but it provides important infrastructure for future applications.

Small developer tools often become the foundations upon which larger projects are built.

Kaboomania Demo 1.3

Category: game/demo

The latest demo version of Kaboomania offers a glimpse at a colourful arcade-style title that feels very much at home on the Amiga. Demos are important because they allow users to sample projects while providing valuable feedback to developers.

It's always encouraging to see new original game development continuing in 2026.

Final Thoughts

Looking back over the past few months, a clear pattern emerges. While games and entertainment remain an important part of Aminet, development tools and modern connectivity solutions are becoming increasingly prominent.

JavaScript runtimes, Python interpreters, JSON libraries, networking tools and IPTV clients might not have been the software categories people expected to define the Amiga scene in 2026, but they demonstrate a community that continues to innovate rather than merely preserve.

As always, Aminet remains the best place to discover what Amiga developers are creating right now, and if this quarter is any indication, the second half of 2026 should be just as interesting.

Welcome to voices of the people behind Amiga hardware and software.

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-= T A L K I N G * A M I G A =-----

-= Dimitris Panokostas: Modern Lightwave Plugins =-

We love Lightwave at WhatIFF? and when we heard about new plugins being made for our favourite software we just had to talk to man behind them.

-= Brian Hambley: Cake Rush =-

Cake Rush proved to be a massive hit in our last issue with many games being played over the spring break. So, it seemed logical to talk to the developer.

-= Aegis: Lightwave 30th Anniversary =-

With not one but two Lightwave updates, this time the 30th anniversary edition, we talk to the man behind this fantastic update.

-= Bart ter Haar: Bomberplanes =-

Bomberplanes a game lost to time over three decades ago resurfaces, we talk to developer behind his very delayed release.

-= Heiko Janicke: AMIGO AI =-

AI is everywhere and now thanks to Heiko Janicke we have one targeted at Amiga users, read on to find out more about Amigo AI.

#Talking Amiga - WhatIFF? Issue 5.20 - June 2026#

Dimitris Panokostas: Modern Lightwave Plugins Interview

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Interview: Dimitris Panokostas - Modern Lightwave Plugins
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1. Hello Midwan, thank you for agreeing to this interview. To begin with can you tell us about yourself?

Thank you for reaching out! I am Dimitris, a software developer and Amiga fan from back in the day. I got my first Amiga relatively late, around 1991 (an A500). I remember reading the magazines back then, feeling very excited about the capabilities of this computer compared to anything else out there. It was mind blowing! I got an A4000 a few years after that, which I still have with me and develop on. It has been expanded over the years with anything I could get my hands on, trying to keep it capable and easy to work with. Even though today my work is mostly done on modern machines (Windows, Linux, macOS), the Amiga has a special place in my heart forever.

2. You've recently released a series of new plugins for Lightwave, what made you decide to develop Lightwave plugins now in 2026?

I was over at a friend's house for a few days during Easter holiday, and I proposed we do a little Amiga hackathon. We kept saying we should do something for the Amiga one day, but never did. Until now. He's a Lightwave master, so it was only natural that we ended up working on something around that. The obvious choice was to do something that would help his workflow, so we started there. And it kind of snowballed afterwards... :)

3. Most classic LightWave plugins were written decades ago using SAS/C or DICE. What motivated you to create a bridge for GCC 6.5.0 and Docker?

Like I said, I work with modern machines these days. It was far easier to set up a cross-compiler with everything we needed on my laptop which I had with me, instead of trying to set up the environment on a real Amiga. Just using the best tools for the job, as developers usually do.

4. LightWave's SDK is notoriously tied to older C standards and specific 68k calling conventions. How difficult was it to patch the original SDK headers (like plug.h) to support modern GCC XCALL attributes?

Not difficult at all, if you use a modern LLM to do the dirty work for you. Then you can focus on what you actually wanted to create.

5. You've implemented GitHub Actions for automatic builds. How does it feel to see a 1990s 3D software plugin being automatically compiled and "shipped" via a 2026 cloud workflow?

Feels natural to me, as I've been doing that for years. And it also feels good, to finally be able to do something that runs on the real machine, instead of emulators (I am also the author of Amiberry).

6. Your first release is ObjSwap, an object replacement plugin. What was the inspiration for this? Is it aimed at helping with sto 9 8tion style animation or perhaps optimizing complex scenes?

It was created by specific instructions from Muadib, who was the one who needed it. Like I said, it was done over a hackathon during a visit to his place. He wanted to be able to change objects in a scene based on the frame number, and he even had a specific scene in mind: a countdown with digits, where each digit would change to the next one as it rotated, at specific frames. So it went from 9 to 8, to 7, to 6 and so on. The plugin made it very easy to accomplish that afterwards.

7. The plugin derived frame numbers from filename suffixes. What were the challenges in making this performant enough so that Layout doesn't "choke" when scanning directories during a render?

The plugin scans the directory for any matches when activated, so it already knows which ones it will handle, before the render even begins. A single directory scan is enough, so it doesn't have to do anything special after that. Just pick the different file names based on the current frame. Then if we run out of frames, there is logic there to reset to the last known object.

8. By providing a pre-built SDK library (server.a) and startup code, you've made it much easier for others to start coding. Do you hope this will lead to a "renaissance" of new LightWave tools for the Amiga?

I'm not hoping for much, but I'd love to see more happening for sure! This was just the easiest way to get things going for me, so it felt natural that I would share it for others as well.

9. Does this toolchain support all variants of LightWave 5.x, or are there specific versions (like the 30th Anniversary Edition Aegis is working on) that it's best suited for?

All Lightwave 5.x versions work with this, we used the latest SDK we could find when building them, so it doesn't do anything more special than what the SDK allows.

10. You recently added a PNG loader/saver to Aegis's project. How closely are you two working together to modernize the LightWave ecosystem?

I was surprised that there wasn't a PNG loader/saver already, when he suggested it! We got that done quite quickly, and it was one of those things that have a low effort/big impact when in place. We are collaborating on a Discord server he set up, where other people have joined also. I helped with the plugins, but other people are working with testing and helping out in other areas as well.

11. Beyond ObjSwap, are there other "dream plugins" or missing features in LightWave 5.x that you are looking to tackle? (e.g., modern image formats, better integration with RTG, etc.)

Oh, you mean you didn't see the Fresnel, PBR and others? Those were designed in collaboration with Hold And Modify, who suggested we try out modern techniques and see how far we can push the envelope. We didn't manage to implement everything we wanted, due to limitations from Lightwave and the SDK itself (e.g. Ambient Occlusion does not properly do raytracing, because I couldn't get RayCast info from Lightwave). But what we did manage to get in place is still pretty impressive, considering the age of the software! There are some sample pictures of before and after, to demonstrate, I recommend you check them out.

12. You've released this under GPLv3. Why was it important to you to make the source code and the build environment open rather than just releasing the binaries on Aminet?

IMHO, Open Source is the way to go, especially on platforms that are rather niche these days. Without open source, there is no hope that someone in the future can pick up and improve upon this. And I'd love for others to feel that the effort required to get started doing something is now a bit lower than before. After all, we won't be around forever, but our work will remain (and someone might find it interesting enough in the future to do something with it). If only we had access to the sources of Lightwave...

13. Why LightWave? With all the 3D tools available today, what is it about the Amiga version of LightWave that still captures the imagination of developers like yourself?

It was the one that I found easier to work with, mostly due to the interface. Back when I first tried it, I had no idea about how these things even work. With Lightwave, I managed to create some scenes myself, learning as I go, and I felt I could get from the imagination step to reality easier. Sure, I'm not advocating we should be using Lightwave 5.x on the Amiga today for professional work, but it's a nostalgic trip down memory lane for me.

14. What has the feedback been like from the EAB or Discord communities since you pushed these first commits to GitHub?

It has been very enthusiastic, and I'd like to thank everyone for the kind words and donations! They keep the inspiration and motivation going!

15. Thank you for your answers, finally do you have a future projects beyond Lightwave plugins?

Not at the moment, we've covered everything we thought of originally, then a few more on top. We run into the limits of what Lightwave allowed and provided, and still found some ways around that. For now, I don't have something in the pipeline regarding this. But who knows, something new might come up and we'll add it. It all depends on the feedback and of course, what is available to us from the SDK and Lightwave itself.

Interview

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Interview: Brian Hambley - Cake Rush
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1. Hello Brian, thank you for agreeing to this interview. To start with, can you tell us about yourself and your history with the Amiga?

My name is Brian, and I currently live in Northampton in the UK. I work as a software developer by day and code games by night. I grew up during the height of the arcade era and the "home computer age" (I'm that old!) and got into the Amiga through natural progression from the C64 and, previously, the Dragon 32. I initially got an A500 then moved on to the A1200; those were probably the best years during that time. I got into coding games after getting my A500 and learning 68000 assembler.

2. In the comments, you mentioned you deliberately avoided making this a traditional "prepare the meal" game. What inspired you to take a more arcade-elimination approach instead of the usual Overcooked style?

From the outset, I wanted multiplayer chaos. Initially, it was literally just throwing stuff at each other, but I had to make it more of a game, so I eventually came up with the kitchen and "delivering to customers" theme while still throwing stuff at each other. I felt that having to serve to an order would take away from the frantic and chaotic element; I wanted to keep it quick and simple. I didn't want players to forget the recipe or get it wrong and get frustrated, so I went with just delivering a cake-stacking multiple layers if you want to for bonuses. It was a four-player game at heart, so I added the elimination aspect to keep it exciting. I wanted people to play lots of rounds, so I kept them short.

3. Was Cake Rush conceived specifically for the 2025 AmiGameJam, or was this a concept you'd been sitting on for a while?

Yes, Cake Rush was conceived and written specifically for AmiGameJam. I was working on something else at the time when I heard about the jam, so I thought: "What the heck, there's plenty of time, I'll give it a go." I was actually working on two games at the same time at one point!

4. The game description hints at something "not entirely human" waiting at the end of the shift. Without giving too much away, what was the inspiration for adding that touch of mystery/horror to a colorful baking game?

It just evolved like that. It started as a frantic multiplayer game, but I realized that apart from throwing stuff at your friends, there wasn't really a game there, certainly not a single-player one. So I introduced the elimination and the robots, then "last one standing" became the winner. While designing characters, I had one left over: this manager/boss guy. I didn't think he would be a good player character because I wanted everyone to be equal. Over time, I worked him into the game. He handles the eliminations and comes out to shout at the worst player. When I finished, I thought about the final player and came up with the boss fight. Then, another "driving home from work" thought (I get a lot of those) was to make him part robot. It revealed the whole plot, and everything made sense. There is no indication of this anywhere beforehand, which is deliberate; I wanted the story to develop naturally.

5. What made you decide to target the AGA chipset specifically for this project? Did it allow you to do things with the visuals or the number of players that wouldn't have been possible on an A500?

In all honesty, in a world where the A1200 exists, why not develop for it?

I guess it is how it was back when I was coding on the real thing. I think I could have made an OCS version, I'm not doing anything special here, it's still 32 colors, but I didn't want to restrict myself with memory, bitplanes, or lack of speed. If I had, I would have ended up doing a dual version anyway. I don't believe in making just OCS; you should do an AGA-enhanced version in my opinion. I'm cheating, I guess! Although, in my defense, I don't "over-target" either; I won't up the requirements to an A4000 just to get more speed out of it.

6. Local multiplayer for four people is a classic Amiga strength but can be a nightmare to code. What were the biggest hurdles in getting four-player support running smoothly on original hardware?

Well, Scorpion Engine handles all that for me, so it was easy to code in that respect. Two buttons for four players was troublesome, so I made Cake Rush single-button control. I only considered four players using the 4-player adapter and joysticks, which is perhaps bad of me. I don't currently have any original hardware, so I might be putting all my faith in Scorpion Engine, which has been pretty faultless so far. I'm a lot more aware now of original hardware considerations, so I'll be looking at that going forward. I may end up getting an A1200 someday if I can find somewhere to put it!

7. The scoring system rewards players for stacking cakes for bigger bonuses. How did you balance the "risk vs. reward" of carrying a tall stack versus making quick, single deliveries?

I always consider risk and reward right from the initial design. I came up with the stacking mechanic early on and used the classic arcade scoring: 200, 400, 800. This led to the 1600 birthday cake bonus as a random element. I don't want players just doing one thing, like always waiting for a 3-stack, so it's good to give them something to think about. The ovens are spaced around the kitchen to make them run for it, and the random intervals mean you never know where a cake will be. Cupcakes spawn more often so there is always ammo available and a risk of getting knocked. After playtesting, the timing and oven placement felt right. I also added tips; customers tip less the longer they wait, so good players keep track of that.

8. You collaborated with Skyrunner for the music. How did that partnership come about, and what kind of "vibe" were you aiming for to match the frantic gameplay?

Skyrunner approached me via itch.io about another project. I agreed to let him do something for that and asked if he was up for the GameJam project. He was keen and did a job beyond any expectation. I let him take the lead on the music side. I've no ear for music at all, I can't tell the difference between an F# and B-flat! He does techno and electro stuff. He did an initial title track and I liked it straight away. The title track sets an upbeat mood, and the in-game track has just the right amount of urgency.

9. Users have already started asking about expanded keyboard support for 4-player setups without adapters. How has the community feedback since the February release influenced your plans for future updates?

The feedback has been mostly about how people enjoy it and very few "can you..." or "it should have..." comments. I'll take that positively as it being already perfect! Just kidding. It's good to get support as it inspires devs to improve features. I never considered non-adapter 4-player support as I was testing on emulation, but I'm aware of it now and will look into implementing it in the future.

There were features I dropped, like a non-elimination mode, which may make it into an update or a sequel.

10. What was your development environment like for Cake Rush? Are you a "code on the metal" purist, or do you utilize modern cross-development tools?

I used Scorpion Engine for Cake Rush and that is likely to stay. I'm afraid (cover your eyes!) I'm not much of a purist anymore. Scorpion is a PC application. I can develop directly from there without needing to set up hardware or emulation constantly; this suits me best at the moment.

11. You've mentioned potential updates with selectable characters and more additions. Do you see Cake Rush as a completed project, or is there a "Director's Cut" or a sequel in the back of your mind?

I launched it for the jam "completed," and I was pleased to achieve that. Usually, I move on once a game is finished. However, there is a plan to merge the "Amiga Mom" edition into one version and add selectable characters. Hardwired (Retro Nanny), who did Glow Point, has asked to be a character, so that will likely happen. I'm thinking of other features to include to make it worthwhile. It may even become Cake Rush 2. We'll see!

12. Given the Amiga community's love for physical media, have there been any talks about a big-box release or a floppy disk run for collectors?

No, I haven't thought about it particularly. I don't really know where to start, but I may look into it. I would love boxed versions of my stuff, even if it was just to put on my own shelf!

13. Throwing cupcakes at opponents is a highlight of the game. In your own playtesting, who is the "meanest" player, the developer or the friends and family who helped test it?

It's always the developer! It was a test run with my son and daughter that inspired the cake-fight bonus stage. I thought then that the game just needed "something," and the cake-fight was born. Given the nature of the game, I had to make CPU opponents. These, ironically, did most of the testing for me! It was good to develop their logic, and they became fairly good testers.

14. Thank you for your answers and for Cake Rush. Before we finish, do you have any new projects on the horizon that you can talk about?

I'm thinking up games all the time. I've got about three in the pipeline, four if you include "Barry Manilow," but there's no way I'd be allowed to release that one! I have to throw ideas away; there's something wrong with me, I think!

"Couch Potatoes" is something I've mentioned on Discord, another 4-player arena mayhem game. I'll be working on that as a break from my main project. Currently, I'm working on a yet-untitled "zombie shooty thing." This is my main focus at the moment. I'm really excited about it; it's going to be unique, at least on the Amiga platform.

There's one other game in my mind for the next GameJam, but I can't say much except that it's going to be quite funny with lots of sight gags.

Aegis: Lightwave 30th Anniversary Interview

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Interview: Aegis - Lightwave 30th Anniversary
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1. Hello Aegis, thank you for agreeing to this interview. To begin with can you tell us about yourself?

I imagine I'm like many of your readers - a Gen-X'er that began a life-long love affair with the Amiga when I first saw Deluxe Paint and Jim Sachs' incredible artwork in Defender of the Crown on a friend's A1000. I stuck it out with the Amiga probably longer than many - into the early 2000's at least, but when my A4000 finally refused to turn on one day I had to begrudgingly give in and buy my first PC.

So that was it for a long time - I sold off my Amiga stuff and did the Windows thing for a bit. I always kept tabs on what was going on with the Amiga though, and picked up copies of Amiga Forever and dabbled with WinUAE for running games and demos.

Now though, I have a little more time on my hands and having been inspired by people like Rob Smith, Steve Jones, Reassembler and many others, I find myself looking to make my own little contribution to the community that's kept the Amiga flame burning so brightly for the past 40 years - and since I know a bit about LightWave, why not start there?

2. What specifically triggered the idea for a "30th Anniversary Edition"? Was there a particular moment or a specific "broken" archive that made you realise a definitive version was needed?

I'd already put together what I considered to be a definitive LightWave 5 install some time ago, but since it was just a more tightly curated version of some of the other archives out there, there didn't seem to be much need to release yet another LW lha.

The actual idea for the 30th Anniversary Edition was born from the desire to make these scenes - the actual art included with the software - more accessible and presented in the best possible fashion for anyone that takes the time to explore them.

3. You mentioned spending many hours wrangling LightWave scene files in your career. Can you tell us a bit about your professional background with LightWave? Did you start on the Amiga back in the day?

I'd heard about LightWave long before I got the chance to actually use it since a) I live in the UK and b) it's ties to the Toaster meant it was this mythical, unicorn piece of software. I was familiar with what it could do through shows like seaQuest DSV and the Babylon 5 pilot and through various articles in Amiga magazines, although I had to wait until 1994 and the stand-alone release of 3.5 to actually own it.

I dabbled with 3D Studio during my time at Argonaut Software, but my first professional 3D work was for Digital Integration (though most of my work for them was pixel art) - after that I went to work for AMGFX as a 3D animator - they were the UK distributors for LightWave at the time so, if you called for support you'd get put through to the studio and end up talking to an actual artist - I took quite a few support calls :)

Post AMG, I did a lot of freelancing before I ended up at the Indestructible Production Company working for Ron Thornton (which was a real career highlight for me). After that I leant more into TD and production roles and the amount of art I did shrank considerably.

4. Your goal was to allow a user to "load a scene and hit F9 to render." Why do you feel it's important to make these 30-year-old assets accessible to newcomers today?

Because these scenes are more than just their rendered pixels - each one represents dozens, perhaps even thousands of choices made by the artist - some creative, many due to the constraints they were working under - time, and of course the extremely limited hardware that was available to them.

An artist's work always gains more meaning when we understand the constraints they were working with *Syd Mead's* Light Cycles for Tron are brilliant abstract design that just become even more ingenious when you realise he was forced to construct them from simple primitives and could only add or subtract to the overall shape. Remarkable, iconic work that looks the way it does specifically because of the limitations of the medium.

5. You chose to use the Video Toaster 4.3 Install CD as the primary source. What were the challenges in "cleaning up" the various versions (R, F, and V revisions) to create this unified installer?

The biggest boon and bane of the Toaster CD is that it has pretty much everything on it - that thing has LightWave 3.5, 4.0 and 5.0 on it - with all (so far as I can tell) of their supporting files (except LWSN.FP 5.00v). If you know precisely what you're looking for, it's a goldmine - if you don't then it looks like NewTek just took every build of every Toaster-related thing they had and threw it on that CD - there's Arexx scripts there that will swap back and forth between LightWave versions depending on what the user wants to run - you've got to admire the commitment to letting Toaster users use their hardware their way.

It also offered a really solid starting point - the LightWave and Modeler FP5 binaries were the latest known ones (R and F respectively) which likely meant everything else on there was as up to date as I could hope for. NewTek offered updated Hiipsave and Hiipload plug-ins on its FTP site (which can still be found on Archive.org) and the Toaster CD already has these - it gives you the confidence that everything you're assembling is as contemporary as it can be.

Unfortunately, because I'm like that, I still had to check all the MD5s of everything anyway but it was nice to have my suspicions confirmed :D

6. You noted that the ScreamerNet version (5.00v) on your ADF wasn't on the standard VT 4.3 CD. How did you track down these rarer, more stable binaries?

That's really down to the diligence of Amiga users like Emufan and Maudib and the many others who've been consistently preserving everything LightWave-related they've come across - if there was anything on the CD I didn't have (or wasn't sure if it was the most recent version) it didn't take too much digging on FTP sites to find the archives they'd put together.

Incidentally, it's not just the binaries either - the Skinnerbody.LWO object that's part of the Offworld and Blade scenes is actually corrupted on the VT CD, so using those archives I was able to track down an intact version and patch the Toaster version at install into a working LightWave object.

7. You've spent a lot of time updating classic scenes (like the famous Blade runner scene) for modern aspect ratios and memory settings. What was the most difficult scene to "fix" without losing its original soul?

Well, I hate to tell you this, but I'm batch-processing the bejeezus out of them. Ok, before your readers go grabbing their pitchforks, some context. The LightWave Scene file (or .LWS) that contains all the object lists, animation data, render settings etc. has always been a plain-text file, and with that comes an incredible amount of flexibility to make huge changes to a single scene or a whole bunch of them.

So, at install time, all of the scenes are copied from the Toaster CD to RAM: (they're not very big) - then, if you've chosen to install "classic" scenes they simply get copied to your hard disk untouched and exactly as they were in 1996. If, however you've chosen the "enhanced" scenes, a bunch of scripts are run to make certain changes to the files.

What changes? Well, the simplest is that the scenes are allocated the minimum amount of RAM necessary to render in a single pass (or segment as LightWave calls it). Near enough all of the scenes have quite a low amount of segment memory which causes them to render in multiple strips. It's not too appealing to watch, and it actually takes longer to render. The rendered output's identical though, irrespective of the segment memory.

More interesting (and consequential) is the two other major changes when the scripts are processing the scenes they set all of them to a 1:1 pixel aspect ratio and they disable Field Rendering if it's enabled. So, what are those and why do I change them?

LightWave heralds from a time when a lot of early CGI work was made for television and as such had out-of-the-box support for PAL and NTSC aspect ratios as well as interlaced (or Field) rendering. It's interesting that you mention the Blade scene as it's one of the worst offenders insomuch that it has both an NTSC aspect ratio and Field Rendering enabled by default. So what does mean practically? If you render the scene as-is on a modern display it'll look squashed vertically and it has comb-like motion artifacts.

This isn't a mistake, it was an intentional choice by the artist as a) NTSC (and PAL) displays were the norm in the 90's and b) Field Rendering (or interlacing) sacrifices vertical resolution to embed two fields into a single frame. The result being that playback of this 30 FPS animation on an appropriate display would look like 60fps.

But in 2026, this kind of playback setup is exceptionally rare and it's likely that only owners of a Video Toaster Flyer or a Personal Animation Recorder could see this sequence as it was intended by rendering it as-is.

So, the scene changes I make at install help get this (and the other scenes) to look much closer to how the artist would have set them up had their known display target been a 1:1 pixel aspect ratio progressive monitor. Note that I said "closer", whilst I'm pretty happy with the results I'm getting, there still needs to be some additional manual curation for some of these scenes. Anyone that's rendered the Blade scene without field rendering will notice it has a *lot* of motion blur (65%), why? Because the Field Rendering is essentially 60fps and not 30 so the blur trails are exactly half the length they would be for a 30fps progressive render.

So I have two choices: either I halve the amount of motion blur to get the "look" the artist intended at 30fps or (because the artist intended the playback to be 60 fields per second) I have to adapt the scene to render at 60fps, which is what I intend to do.

There's other minutiae too that have to be considered, switching to a 1:1 pixel aspect ratio from NTSC slightly changes the camera's field of view, it's very slight, and it's likely the artist wouldn't have bothered correcting for this had they made the change themselves, but it's my self-appointed job here to preserve this work as best I can which means I have to compensate for the change.

I've included three images, the first is Blade.LWS as it renders straight off the Toaster CD, the second is the "enhanced" version of the scene as of our current beta and the third is the final goal for the installer once some scene-specific tweaks have been implemented.

And - just to wrap this lengthy reply up, it's entirely up to the user as to what they install, if fact, you can install the classic scenes, rename the

scenes folder to say, "classic" and then install the enhanced scenes over the top (they use the exact same objects and images) then you have both classic and enhanced in a single install and can compare and contrast them as you please.

8. You recently collaborated with Midwan to add a PNG loader/saver. How much of a "game changer" is this for the Amiga workflow in 2026?

The PNG saver was actually the number one item on my wish-list of things we needed, I don't necessarily see it a game changer for those already familiar with LightWave (although it's undoubtedly nice to have), instead I really wanted it so that those trying out LightWave for the first time could render out images that they can use anywhere and not just in AmigaOS. In fact, it's become the default saver for our *enhanced* scenes for that specific reason.

9. You mentioned recently that you "officially ran out of space on the floppy." How are you balancing the desire to include "Enhanced Content" with the strict storage limits of the Amiga format?

We're having to be smart about it, sticking to a floppy disk is a self-imposed limitation, but there's also something quite appealing about it. The Video Toaster has its own install disk and since we're using the Toaster CD for the majority of our files I figured why shouldn't LightWave have one too? In terms of the reality of dealing with an 880k disk well, you just have to get creative. It also has the benefit of cutting down on feature creep, we have a planned release date for the project but in all likelihood it'll be *done* whenever we can't fit anything else on the disk.

I've recently just finished picking all the low-hanging fruit with regards to shrinking down the footprint of our installer and as of beta8 we have exactly 50% of the disk free. The installer itself is unlikely to grow much as it already does most of the things I wanted it to. We do however, intend to have extensive documentation and a few brand new tutorial/demo scenes, we've also had a request to include a benchmark scene that crushes modern hardware so wherever possible we'll use assets that are installed from the CD and be very selective about what gets added to the disk.

10. There's been talk in the thread about ModePro and RTG support. How are you approaching the challenge of making a Toaster-centric piece of software play nicely with modern graphics cards and UAE setups?

LightWave 5 is reasonably well supported in terms of its render displays (Toaster, OCS/ECS, AGA, Picasso II and especially André Hotz' CyberGFXRenderer) but the stark divide between running Modeler effortlessly on a 1080p screen vs. LightWave being stuck with PAL or NTSC resolutions is pretty wild. ModePro definitely makes the experience a better one but I had to watch a YouTube video to figure out what I had to do and I'd prefer that potential new LightWave users don't have to do that.

For the time-being, we have a config-based approach that we hope at least removes one of the steps to getting ModePro working with LightWave - this will continue to be an area we look to improve on.

My preference would be that our installer checks to see if you've got ModePro installed and if so checks if you have the necessary RTG modes available and then either replaces/appends your ModePro prefs (based on your choice) or saves out a custom prefs file for you that just works if you choose to use it.

10. You've been cautious about "muddying the waters" with incomplete versions. What does the "1.0" or final release look like to you?

So, ideally, 1.0 for me would be:

a) a smarter installer that caters to both novice and expert users and does as much behind the scenes as possible (ModePro setup for example).

b) all enhanced scenes that need it would have individual script tweaks to get them looking the best we can make them.

c) extensive documentation that not only covers the changes but also has simple tips and tricks for new users and tutorials for any new plug-ins we include.

d) a bunch of new scenes - some for learning, some just for fun that showcase any included plug-ins and celebrate this 30th Anniversary Edition.

(e & f) are two secret somethings I haven't spoken about yet ;)

12. Outside of this project, what do you think is LightWave 3D's greatest legacy on the Amiga?

It's cliché but it's also true: Babylon 5 simply wouldn't exist without the Amiga and LightWave, the only reason J. Michael Straczynski was able to convince Warner Brothers that the VFX were possible within budget was Ron Thornton's LightWave demos. The VFX work Foundation Imaging did may look dated by modern standards, but it's still genre-defining television and an important and enduring piece of Western culture.

13. For the "Installer wizards" or testers on EAB, what is the #1 thing you need help with right now to get this over the finish line?

So far I've been using Rob Cranley's excellent InstallerGen to build the installer but it's lacking a few things I'd like, specifically, unique install methods for Novice, Intermediate and Expert, some kind of hardware check so the installer can set the default render output based on the Amiga it's being installed on, and perhaps an in-depth Expert mode that allows you to customise the LightWave and Modeler config files at install.

None of this is deal-breaking, but the installer is your initial onboarding for this project so I'd like the experience of using it to be as polished as possible.

14. Thank you for your time and answers, to before we finish do you have any final words?

Whilst we have everything we need in terms of software and files to complete this project, we are sorely lacking documentation, the Video Toaster manual available at OpenVideoToaster does have a LightWave and Modeler section but it's my (perhaps flawed) recollection that LightWave 5's stand-alone manual came with LightWave-specific appendices that the Toaster manual doesn't have.

If anyone reading this happens to have a copy of that manual, please get in touch with us on the EAB forums.

To WhatIFF and its readers, thank you for giving me the time to chat about this project, we're really excited to get it in everyone's hands later on this year!

Bart ter Harr: Bomberplanbes Interview

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Interview: Bart ter Haar: Bomberplanes
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@{B}1. For readers discovering Bomberplanes for the first time, can you tell us a little about the game and its origins back in 1994?@{UB}

The idea for the computer game 'Bomberplanes' originated when I received the Shoot Em-Up Construction Kit [1989-Palace Software I.D.S./Sensible Software] with the CU Amiga magazine from 1994.

https://amr.abime.net/issue_611

I immediately started modifying an existing game/template and noticed that I enjoyed coming up with and animating sprites. One thing led to another, and before I knew it, the idea to create 'Bomberplanes' was born using SEUCK.

I was already quite skilled at graphically drawing and animating things in Deluxe Paint IV and had been fanatically creating music 'Modules' in Protracker (version 2.2a) for years. Making songs with friends and having competitions to see who could make the best tracks.

By then, I had also purchased an Amiga Sampler to use my own samples (voices) and sample sounds from CDs.

My Amiga 500 meant creative freedom to me, and I loved gaming with friends, but also creating graphics and music during many rainy (but also sunny) days and vacations back then.

Anyway, the idea was there, and I started building sprites, editing samples, and building the game with super enthusiasm!

I created the 3D intro title text in Deluxe Paint IV, a fantastic program, especially for that time. And I rendered the landscape underneath in 'Scenery'.

https://amitopia.com/s

There weren't many more options in SEUCK, just one simple start screen. I had even overwritten a SEUCK intro screen myself with a LASER SOFTWARE logo, a name I came up with myself. Only used it once, haha!

@{B}2. What inspired you to create the game originally, and why did you choose the Shoot-'Em-Up Construction Kit (SEUCK) as your development tool?@{UB}

I couldn't program, which is why this was the only option for me at that time to develop a game myself. Unfortunately, I didn't know anyone in my circle who could, and in 1994, without the internet as we know it today, it was difficult to find people.

The basis of SEUCK was quite understandable to me. I had the time because I was 16 years old, in high school, and back home early to continue building the game.

I enjoyed playing '1943' and 'River Raid' on the Commodore 64 and Amiga games like 'Sviv', 'Hybris', 'Xenon' and 'Banshee' (Amiga 1200).

Those shooters served as inspiration. But also the graphical style of 8-bit games from Nintendo and on the Commodore 64.

The collecting of gold coins naturally comes from the 'platform game world', which also strongly inspired me at the time.

@{B}3. SEUCK has a reputation for being quite restrictive. What attracted you to working within those limitations?@{UB}

I knew right from the start that I couldn't build a technically and graphically high-quality game; the limitations were noticeable immediately.

Too few colors, 8 per sprite set, and sprites/objects shared colors with the background. A total of 16-32 colors maximum visible on the screen.

And up to 30 enemies/projectiles were possible at the same time, but the more things moved simultaneously, the more frame drops you got.

So, pacing enemies and bullets to keep the game flowing was a challenge.

But as always with limitations, it makes you inventive and creative.

I built a colorful game with a deliberately calm background and not too many fast enemies.

In audio, for example, a sample could be used multiple times. With different playback speeds, you get variation (shrill or heavy explosions), and that makes the game more fun.

I recorded and sampled the spoken words 'Go' and 'Danger' myself.

@{B}4. What were the biggest technical or creative challenges you faced while building Bomberplanes?@{UB}

I think it involves creating the background and making the 'tiles' fit together so that you have a uniform-looking surface.

But also enough variation so it doesn't get boring.

Choosing the right colors for the complete game is an experiment. You want to maintain enough contrast with the background and a sense of calm, but also explosions, action, and slick visuals.

It is a balancing act with difficult choices, but you learn a lot from it.

@{B}5. Were there any tricks, workarounds or custom techniques you used to push SEUCK beyond what people normally expect from it?@{UB}

I lit fires on the ground; these are actually enemy sprites that move downwards at the same speed as the background screen.

They appear to be standing still on the surface, but they move and are not lethal if you fly into them.

You had to be that creative in SEUCK to get more variety.

Once you finish the game after about 10 minutes, there is a sort of final demo, and for that, I had to build a complete alphabet of letters in sprites since there was no option to add text to the game!

It was painstaking work, but I managed it.

I even secretly hid a drawn Lemming in the end credits.

@{B}6. Looking back at the original 1994 version, how much of the game survived unchanged into the final 2026 release?@{UB}

The bizarre thing is that this game was completely finished back in 1994.

Put on a floppy disk and ended up in a bin along with hundreds of other diskettes.

Moving from house to house, the Amiga went along with the bins of software, and I didn't do much else with it.

Every now and then, I would plug in the Amiga, grab a few beers, and have a back-to-those-days Amiga evening or weekend.

Sometimes with friends, sometimes alone. Nostalgia sometimes just calls.

@{B}7. What made you decide to return to the project after roughly 30 years and finally complete it?@{UB}

It would be a terrible shame not to release a project that so much time and energy went into back then.

I thought, better late than never, and the Amiga scene is more alive than ever before.

Just like the Commodore 64 scene, for which I still have a soft spot. Especially for that SID chip that got me developing my love for synthesizers. :-)

And the itch.io platform really appeals to me and is very accessible.

I bought a lot of C-64 and Amiga games on it. Pure nostalgia. And supporting the retro scene, of course.

Respect to all the people who are still making beautiful things on old machines.

@{B}8. Did you still have the original files and disks, or did restoring the project become an adventure in itself?@{UB}

Two years ago, I decided to archive all my floppy disks as .adf to safeguard them for the future. Especially my Protracker music.

After years of searching online, I finally found an easy option to do this, namely via Rob Smith's DrawBridge aka Arduino Amiga Floppy Disk Reader/Writer:

https://amiga.robsmithdev.co.uk/waiting

https://www.youtube.com/watch?v=JAUrfksx8VU

With this, you can quite simply convert a cheap USB floppy disk drive via a PCB into one that can read and write to Amiga. Amazing and finally!

It is even possible to read your own floppy disks from emulation software:

https://www.youtube.com/watch?v=aJ0g7lQQVus

Now I had everything on a PC and could also open it on my Mac.

I use ADF Master on the Mac to reorganize and view the ADFs:

https://matze1887.itch.io/adfmaster

I also converted Bomberplanes back then and was able to play it again via an emulator, which was fun.

In early May this year, I suddenly realized that I could actually share the game on the web, so I put it on:

https://bartist.itch.io/bomberplanes

Amazingly enough, it was picked up by IndieRetroNews and had already been downloaded 500 times within a week!

It was great fun to finally see other people playing my game after 32 years, and I also received some nice reactions.

So the release literally took 32 years!

@{B}9. During the modern completion process, were you tempted to redesign the game with today's experience, or did you try to stay faithful to your younger self's original vision?@{UB}

I wouldn't really want to change this game because it was made in the 90s with the knowledge and gaming style of that time.

What I would do differently now, if that were at least possible in SEUCK, is add power-ups and bigger explosions.

In-game music would really be an addition, as would a higher frame rate.

Nowadays it would be easier to make a game with better graphics, but the pixel-by-pixel work still remains a kind of art form.

@{B}10. The game features custom pixel art and sound work. How important was presentation to you, especially within the limits of SEUCK?@{UB}

Simplicity is everything. And gameplay is always more important than visual violence or sound effects.

That is why some old games are still so playable.

And many new games rely too much on visual violence and sound effects. Because everything is technically possible now, creativity disappears, and you eventually end up with an abundance of the same junk in app stores, and so on.

A computer game needs a good structure, moments of calm, and a story.

I still consider 'Another World' by Eric Chahi to be the best (Amiga) game ever. It has such a good story, and you really develop an emotional connection with the characters.

A different category, of course, than a vertical shooter!

I did try not to make the game too messy, and in terms of sound effects, I created new sounds myself and varied a lot.

If you make a game yourself and play it often, you are inclined to make it too difficult.

I think Bomberplanes is a tad too difficult, but the trick is to start player 2 after your first plane explodes three times, so that you still have three lives left with player 2 :-)

@{B}11. Were you surprised by the continued enthusiasm for new Amiga releases and the modern retro gaming scene?@{UB}

Not surprised; the Amiga was, but above all still is, a masterful machine.

People cherish deep feelings for that device, as well as the memories they have of it.

A time without the internet, a time without mobile phone distractions. But with computer clubs, demo crews, and the exchange of software.

When the Amiga or Commodore went under, I was deeply disappointed at the time.

I never had a real connection with any of the PCs and Macs that followed.

They became slightly faster and more stable each time, but the passion, the feeling, was gone.

The scene splintered as well. But the internet has advantages too: bringing enthusiasts back together and letting them share a common passion!

The Amiga shaped me, and that is why I rolled into the world of Graphic Design.

It started with Deluxe Paint, and now I work daily with Photoshop and DaVinci Resolve.

And in between, I open Dirk Hoffmann's vAmiga to tinker around on the Amiga a bit.

See:

<https://dirkwhoffmann.github.io/vAmiga/>

He also built an online emulator:

<https://vamigaweb.github.io/>

And made a very good port of Metal Gear for the Amiga:

<https://hoffman.itch.io/metalgear-amiga>

And I can also recommend Worthy (Pixelglass), a modern Amiga game:

<https://pixelglass.org/#worthy>

12. After carrying this unfinished project with you for so many years, how did it feel finally pressing "release" on Bomberplanes?

It is a relief, and also really nice, that this is suddenly being picked up by enthusiasts.

It leaves me wanting more; perhaps I will make a more modern version with better graphics and sound effects.

I think it would be fun to make a game for the Amiga again, but just like 32 years ago, without any programming knowledge!

Maybe an AGA game on the Amiga 1200.

I am keeping an eye on Redpill and the Scorpion Engine. Very interesting developments are taking place there.

And I hope that, just like the Commodore 64 Ultimate, a brand-new Amiga will be released someday! Then the scene will get an even bigger boost.

Thanks for the interview; everyone who is going to play Bomberplanes, have fun playing, and please leave a comment at:

<https://bartist.itch.io/bomberplanes>

And keep enjoying (still) the most beautiful computer ever :-)

Bart ter Haar.

Heiko Janicke: AMIGO AI Interview

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Interview: Heiko Janicke: AMIGO AI
=====

@{B}1. For readers discovering Amigo AI for the first time, how would you describe the project and what it is designed to do?@{UB}

Amigo is an Amiga-focused AI assistant â€” think of it as a knowledgeable companion that has actually read the Amiga shelf: the manuals, the magazines, the hardware docs, the demo and tracker scene, the programming references. You ask it anything Amiga, a 68000 addressing mode, why your A1200 won't see the IDE drive, how to do a copper split in AMOS, and it answers from a curated Amiga knowledge base rather than from vague half-memories of the wider internet.

In the browser you can ask it questions and get those answers. The full experience lives in the desktop client: a built-in code editor, an AROS emulator, projects, and a memory that remembers what you're working on so you can try an idea the moment you have it and build on it, not just talk about it.

The whole design goal is to be trustworthy on Amiga topics, accurate, source-grounded, and honest when it doesn't know.

@{B}2. What first drew you into the Amiga scene personally, and what role did the platform play in your early computing life?@{UB}

I came to the Amiga 500 as a young teenager, straight from the C64 and the leap was enormous. Suddenly everything seemed possible: the graphics, the stereo sound, the Workbench, BASIC, and above all real multitasking on a home computer. It felt like stepping into another world.

Games hooked me immediately, Secret of Monkey Island most of all, that was an experience, not just a game. But it never stopped at playing: the Amiga was the machine where I made my very first attempts at programming. That mix of being amazed at what the machine could do and wanting to build something with it myself grabbed me and never let go.

@{B}3. Do you remember the moment where the idea for combining AI with Amiga computing first came to you?@{UB}

Yes, quite precisely. I'd stumbled across the PiStorm online and immediately decided to build one into an Amiga 500. To get up to speed I worked my way through countless videos and forum threads â€” and at some point I thought a chatbot might shortcut all that and save me time.

But the answers were so vague and shot through with wrong information that I ended up spending more time sorting out the nonsense than on the actual project. That's when it hit me: this has to be doable better, with real, verified Amiga knowledge.

That was the moment I decided to try it myself. What began as wanting to save time on a PiStorm build turned, in the end, into Amigo.

@{B}4. Before starting Amigo AI, what was your own background in programming, development or machine learning?@{UB}

Honestly, I'm not a classic programmer, I'm self-taught. I have a basic grounding in PHP, HTML and BASIC, and years ago I built websites for a while: chat systems, a web radio, a forum, company pages.

Writing code myself is still hard for me. What I'm good at is understanding

how things work: when I look at a script, I can usually tell quite well what it does and how the pieces fit together.

That's exactly why my team of me plus an AI as the coder works so well, I like to think outside the box, off the beaten track, and I push the AI to leave its well-worn solutions and build something new.

I came to AI the way probably every computer enthusiast does: out of pure curiosity. And it quickly turned into the realisation that AI can genuinely help me with a huge range of tasks â€” Amigo is really the most consistent expression of that.

@{B}5. What made you feel there was value in creating a dedicated Amiga-focused AI assistant instead of relying on broader AI systems already available online?@{UB}

Because the big general assistants are wide but shallow on the Amiga. Ask ChatGPT or Gemini something genuinely specific â€” a chip-RAM limitation on a particular Kickstart, a quirk of Blitz Basic's display library, an ARexx port command, and you often get an answer that sounds right and isn't.

They were trained on whatever was online months ago, with no real depth on AMOS, Blitz, ARexx or the hardware, and no way to tell you when they're guessing.

A dedicated system can do the opposite: a deliberately curated Amiga corpus, kept current, and answers that stay grounded in real sources. For a 30-plus-year-old platform where the knowledge is scattered across out-of-print magazines, Aminet readmes and forum threads, that focus is the whole point.

@{B}6. Amigo AI draws upon a huge amount of Amiga-specific knowledge and documentation. What kinds of material were most important when building the system?@{UB}

All the places the real knowledge actually lives: hardware references and service manuals, the programming documentation (68000, AMOS, Blitz Basic, ARexx, the C libraries), Aminet readmes and docs, the magazine archives, plus the softer but vital scene material â€” demos, tracker music, software descriptions, even cheats and tips.

All told, that's tens of thousands of curated Amiga documents. The hard part isn't volume, it's curation: deciding what's authoritative, pairing scanned material with its text so it's actually usable, and filtering out the noise so the assistant learns from good sources rather than the loudest ones.

@{B}7. The project supports subjects ranging from 68000 assembly to AMOS, Blitz Basic, ARexx and hardware troubleshooting. Which areas proved the most difficult to implement accurately?@{UB}

68000 assembly and the hardware-level questions were the most demanding, because there's no room to be "roughly right" â€” an addressing mode, a register, a chip revision, a timing detail either is correct or it sends someone down a rabbit hole.

The BASIC dialects are tricky for a different reason: AMOS and Blitz each have their own idioms and library quirks, and the line between "valid" and "almost valid" is thin.

Hardware troubleshooting is the hardest of all to get reliably right, because the real answer so often depends on the exact model, revision and what's been recapped or modded â€” so the assistant has to reason about specifics, not give a generic textbook reply.

@{B}8. One concern people often raise with AI is "hallucination" confident but incorrect answers. How challenging is that problem when dealing with highly technical Amiga topics?@{UB}

It's the central problem, and it's worse on technical retro topics than almost anywhere else â€” a confident wrong answer about a poke address or a jumper setting can cost someone hours, or a chip.

So we treat "I don't know" as a feature, not a failure. Rather than letting the model improvise, Amigo stays anchored to its curated sources and is built to refuse, to say it isn't sure, instead of inventing something plausible.

The goal we're working toward is zero hallucination on Amiga questions: an answer you can trust precisely because the system won't bluff. Getting there is exactly what the next-generation architecture I'm building is about.

@{B}9. The integrated editor and AROS emulator make Amigo AI feel more like a development environment than a simple chatbot. Was that always part of the vision?@{UB}

Fairly early, yes. A chat window alone breaks the loop, you get an answer, then you have to go somewhere else to actually try it.

On the Amiga, half the joy is doing: type it in, run it, watch it break, fix it. So in the desktop client the editor and the AROS emulator sit right next to the assistant, along with projects and a memory that keeps track of what you're building.

Ask how a copper list works, get the explanation, drop the snippet into the editor and run it without leaving the app.

The aim is less "search engine that talks" and more "a workbench with someone knowledgeable sitting next to you."

@{B}10. Game creators, demo coders and Amiga programmers often worked around severe hardware limitations. Do you think modern AI can genuinely understand that mindset and creativity?@{UB}

It can understand the techniques deeply â€” the copper tricks, chip-RAM juggling, cycle-counting, hitting the hardware directly because the OS was too slow. Those patterns are learnable, and an AI can explain and even reproduce them well.

What it doesn't have is the thing that produced them: the stubborn, almost playful refusal to accept "the machine can't do that."

Demo coders made the Amiga do things it was never specified to do, out of pride and joy and competition. AI can stand on the shoulders of that ingenuity and make it accessible to newcomers â€” but the spark itself is still very human, and I'd rather it stay that way.

@{B}11. Some members of the retro community are enthusiastic about AI, while others are cautious or even hostile towards it. Were you expecting such mixed reactions when you announced the project?@{UB}

Honestly, I'd expected a lot more goodwill. My hope was that the community would see Amigo for what it's meant to be: a tool that saves you hours of searching and cross-checking, especially for newcomers, who often despair in the forums because one person says A, the next says B, and there's rarely a clear "this is how it's done."

I knew the general AI sceptics would speak up, that comes with the territory. What I hadn't reckoned with was how much outright rejection there'd be: the accusation that I was simply appropriating knowledge the community had built up over years, right up to "knowledge theft" and copyright infringement.

That genuinely shook me, because my intention is the exact opposite, to preserve that knowledge, make it accessible, and point people back to the original sources, not hide it or claim it as my own.

The one that made me smile most was the criticism that Amigo costs money, even the view that I'm somehow obliged to give it to the Amiga community for free. That I really hadn't seen coming.

But on balance I take the sharpness as a compliment: it shows how deeply this community cares about its heritage, and that very passion is the reason I'm building Amigo in the first place.

@{B}12. There's increasing debate around AI systems learning from online communities, forums and archived material. How do you personally approach the ethical side of training and knowledge gathering?@{UB}

There's an important distinction to make here: Amigo isn't trained in the classic sense. The knowledge sits in a database, and Amigo draws its answers from that database, it doesn't indiscriminately pull text into a model.

And I deliberately do not learn from forums. In my experience that's one of the biggest drivers of hallucination: a single forum thread often has several competing solutions side by side, plus plenty of half-truths and guesses.

If an AI learns all of that, answer quality drops, because it absorbs the nonsense right along with the facts.

So Amigo feeds on official, validated sources, documentation, manuals, vetted material, to keep noise and hallucination as low as possible.

The provenance of the content is preserved in the database; showing source citations directly in the answers is one of the next things on my list.

@{B}13. Has working on Amigo AI changed the way you personally think about retro computing or preservation?@{UB}

Yes, very much so. Gathering the knowledge and archiving it in the database really brought home to me how important preservation is.

For a lot of information, hours went into simply finding a single reputable source, precisely because so much of it is scattered, contradictory or mixed up with half-truths.

And it made me realise how hard it is, especially for newcomers and returners, to get at reliable knowledge at all.

That has hugely reinforced my conviction that we need to actively preserve this heritage.

For me, preserving doesn't just mean storing files, it means keeping the knowledge findable and dependably usable, and that, in the end, is the real driving force behind Amigo.

@{B}14. Looking to the future, where would you like to take the project next? Are there features, systems or areas of Amiga knowledge you still dream of adding?@{UB}

Two directions excite me most.

First, a next-generation architecture that keeps its own knowledge current, a learning system that extends its corpus autonomously instead of being frozen at whatever it was trained on.

Second, getting Amigo off the modern screen and closer to the real machines: developing the client further so it hooks into your own tools, and the wild one, a serial bridge that lets a real Amiga talk to Amigo over a null-modem cable, so it can read the screen and answer questions about what's running.

Designed for any model, not tied to one particular machine, an AI co-pilot

for your real Amiga.

And since many of us Amiga fans secretly love other machines too, the knowledge base is already growing beyond the Amiga: C64, Atari and Nintendo are in the works. There's a whole retro lifetime of knowledge still to fold in.

@{B}15. At the moment it is accessible only from a web browser on a modern computer, will you be looking to create an Amiga client so internet-connected users can get access to Amigo as well?@{UB}

It's very much on my mind, with one small clarification: the browser is really the quick way in for a chat answer, while the fuller experience (editor, AROS emulator, projects, memory) already runs in a desktop client on a modern machine.

What's still missing is the Amiga side, and I see two routes there.

The near-term step is the serial bridge I mentioned: a real Amiga talking to Amigo over a null-modem link â€” it fits the machines most people actually run and needs no modern network stack.

The second, far bigger route is AmigoOS: a completely self-written Amiga ROM with a strong AI library built right in.

That's no weekend project, development could easily take another year or two. But the idea of the AI living directly in the Amiga's operating system is simply too tempting not to pursue.

@{B}16. Finally, stepping back from the technical side for a moment, what does the Amiga community mean to you personally, and what keeps you passionate about it today?@{UB}

A great deal. What this community has produced in the last few years the possibilities, the developments, is simply staggering.

Expansions like the Vampire or the PiStorm: you wouldn't even have dared to dream of them back in the day, and today they're real, purely because this community never gave up.

That's exactly what keeps my own passion alive: to build something that preserves these possibilities for us â€” and maybe even creates new ones.

The Amiga lives because people keep it alive, and getting to be a small part of that is motivation enough for me.

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Welcome to the links section!

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- = L I N K S = -

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<https://www.amiganews.net/en/>

One of the most up to date and comprehensive sources for Amiga news from around the globe.

English Amiga Board, the majority of the users are from Europe, a very friendly and helpful Amiga forum.

<https://www.exxoshost.co.uk>

The resource if you need help or information about the new Terrible Fire cards.

<https://www.amibay.com>

A great place for buying and selling Amiga hardware, they also have some very nice people to give advice about. Of recent it has become very hard to register on the website since their server migration.

<https://www.amiga.org>

Probably the longest running Amiga forum on the world wide web, most American Amiga users are on this board.

<https://www.amigaworld.net>

Another large Amiga website covering all Amigas, includes news, discussions and classifieds.

<https://www.amigans.net>

English Amiga website covering next generation, emulation and classic Amigas.

<https://www.amigafuture.de>

The longest running Amiga print magazine, issues are available in English and German.

<https://www.amiga-addict.com>

Newest English Amiga print magazine, if you are missing the likes of Amiga Power and Amiga Format, then this is the magazine for you.

Commodore and Amiga print magazine available in English and Polish. Lots of games content.

<https://mancave-ramblings.blogspot.com>

Our own John Scolieri's personal website.

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If you have a link that you would like added to list

contact: submissions@whatiff.info

#Links - WhatIFF? Issue 5.20 - June 2026#

Welcome to the Amiga vendors section!

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-= A M I G A * V E N D O R * L I N K S =-----
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· Alinea

<https://www.amiga-shop.net>

· Amedia Computers

[openurl](#)

· Amiga 68k

<http://amiga68k.com>

· Amigakit

<https://amigakit.amiga.store>

· Amiga MC1

<http://amiga1.com>

· Amiga Shop

<https://www.amigashop.org>

· AmigastoreEU

<https://amigastore.eu>

· Amiga on the Lake

<http://amigaonthelake.com>

· Arananet Retro Products

<https://www.arananet.net/pedidos>

· Arcade Shopper

<https://www.arcadeshopper.com>

· BuyElbox

<http://buy.elbox.com>

· Electronics Is Fun

<https://electronicsisfun.com>

· GGS Data

<http://www.ggsdata.se>

· My Amiga Shop

<https://shop.myamigashop.com>

· Relec

<http://www.relec.ch/fr>

· RetroAMI

<https://retroami.com.pl>

· Retro Passion

<https://www.retopassion.co.uk>

· Retro Ready

<https://retroready.one>

· Sell My Retro

<https://www.sellmyretro.com>

· Retro Rewind

<https://retrorewind.ca>

· Sordan

<https://sordan.ie>

· Tindie

<https://www.tindie.com>

· Vesalia

<https://www.vesalia.de>

#Amiga Vendor Links - WhatIFF? Issue 5.20 - June 2026#

Welcome to the Amiga Groups section!

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- = A M I G A * G R O U P * L I N K S = - - - - -

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* United Kingdom United States Canada Germany Sweden *

* France Belgium Czech Republic Denmark Finland *

* Australia Russia Ireland Scotland Malta Japan *

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#Amiga Group Links - WhatIFF?#

United Kingdom

Amiga Group Links

United Kingdom

Amiga North Thame

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

Birmingham Amiga Group

<https://www.facebook.com/groups/BhamAmigaGroup/>

LINCS Amiga Group (LAG)

<http://lincsamiga.org.uk/>

Norwich Amiga Group

<https://norwichamigagroup.co.uk/>

North West Amiga User Group

<http://www.bambi-amiga.co.uk/spudmiga/nwag/index.html>

Kickstart Amiga User Group

<https://www.kickstartamigagroup.org.uk/>

South West Amiga Group

<http://www.southwestamiga.org.uk/>

#Amiga Group Links - WhatIFF?#

United States

Amiga Group Links

USA

Sacramento Amiga Computer Club
<http://www.sacc.org/>

Central Texas Amiga Computer Society
<http://main.org/ctacs>

Central Texas Commodore Users Group (Last meet in 2016)
<http://ctacs.classiccmp.org/>

Metroplex Commodore Computer Club
<http://www.amigamccc.org/>

Southern California Commodore and Amiga Network
<http://www.portcommodore.com/dokuwiki/doku.php?id=sccan:start>

Fresno Commodore User Group
<http://www.dickestel.com/fcug.htm>

Westchester Amiga User Group
<http://www.westchesteramigausergroup.org/>

Amiga Computer Users Long Island
<https://www.facebook.com/groups/202203702519>

Southeast Amiga User Group
<https://www.facebook.com/groups/SoutheastAmigaUserGroup/>

Stamford Peterborough Amiga Group
<https://www.facebook.com/groups/spaguk>

RELICS (Formally The Other Group of Amigoids)
<https://www.meetup.com/toga-the-other-group-of-amigoids/>

RELICS started out as an Amiga user group known as "TOGA: The Other Group Of Amigoids" in 1991. User groups and computer clubs were common in the early days of personal computing, serving as a way for computer users to get together and support each other in their endeavors. Some still survive to this day, such as this one!

Like many other beloved platforms, the Amiga is still supported with new hardware and software releases from a community of loyal fans to this day. Today the group focuses on all retro platforms throughout history from all over the world, hence the name change.

#Amiga Group Links - WhatIFF?#

Canada

Amiga Group Links

Canada

Amiga Users of Calgary (No website update since 2020)
<http://www.amuc.ab.ca>

Toronto PET Users Group (TPUG)
<http://www.tpug.ca>

* Started in 1979, TPUG is also the operator of the annual World
of Commodore computer show.

#Amiga Group Links - WhatIFF?#

Germany

Amiga Group Links

Germany

AUCB Treffen

<http://www.amigaclub-bautzen.de/>

Amiga Club Munster

<http://acmuenster.de/>

#Amiga Group Links - WhatIFF?#

Sweden

Amiga Group Links

Sweden

Swedish User Group of Amiga
<http://suga.se/>

Amiga Computer Group
<http://www.amiga-cg.se/>

Syntax Society
<http://www.syntaxsociety.se/>

France

Amiga Group Links

France
Triple
<http://www.triplea.fr/>

AFLE
<http://afle.free.fr/>

AmigaPower
<http://www.amigapower.net/>

#Amiga Group Links - WhatIFF?#

Belgium

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Amiga Group Links
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Belgium

Belgian Amiga Club <http://www.amigaclub.be/>

#Amiga Group Links - WhatIFF?#

Czech

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Amiga Group Links
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Czech Republic

Luky & Amiga Klub Forever + Czech PowerPC User Group
<http://powerpc.lukysoft.cz>

#Amiga Group Links - WhatIFF?#

Denmark

Amiga Group Links

Denmark

Amiga Club Denmark

<http://www.amigaclubdanmark.dk/>

Danish Amiga User Group

<https://www.facebook.com/groups/101927439851660>

#Amiga Group Links - WhatIFF?#

Finland

Amiga Group Links

Finland

Finnish Amiga Users Group
<http://saku.amigafin.org/>

#Amiga Group Links - WhatIFF?#

Australia

Amiga Group Links

Australia

Sydney Amiga Users Group
<http://www.saug.org.au>

Amiga Users Group
<https://www.amiga.net.au/>

MAUG
<https://www.facebook.com/groups/MAUGr/>

Perth Amiga User Group (PAUG)
<https://www.facebook.com/groups/perthamigausergroup/>

#Amiga Group Links - WhatIFF?#

Russia

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Amiga Group Links
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Russia

Amiga Information Center (AIC)
<http://amiga.org.ru>

#Amiga Group Links - WhatIFF?#

Ireland

Amiga Group Links

Ireland

Amiga Ireland Meetup

<https://www.facebook.com/groups/amigaireland>

#Amiga Group Links - WhatIFF?#

Scotland

Amiga Group Links

Scotland

Scottish Amiga User Group

<https://www.facebook.com/groups/626138110921245>

#Amiga Group Links - WhatIFF?#

Malta

Amiga Group Links

Malta

Amiga Malta

<https://www.facebook.com/groups/amigamalta>

#Amiga Group Links - WhatIFF?#

Japan

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Japan

Commodore / Amiga Fan Club Japan
<http://cfc.amiga.co.jp/>

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Cover Disk Contents

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-= June 2026 Cover Disk Contents =-----

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- * PDF Disk Label
- * Updated Music Playlist MODs

Meet the writing staff of WhatIFF?

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`-= W R I T I N G * S T A F F =-----`

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WhatIFF? is an independent magazine created by Amiga enthusiasts from around the world looking for a more serious magazine. The main writers at the moment are a small group but hope to grow in coming issues.

* Main Writing Staff *

Andy Vaisey

ByteBandit

Ivan Sorensen

John Scolieri

Kevin Saunders

Kristian GK

Martyn Bampton

Roald Strauss

Rob O'Malley

Steve Lord

Timo Paul

Tristan Shiflett

We are always interested in new articles, guides or stories, if you have something you wish to submit please send it to:
submissions@whatiff.info

#Writing Staff - WhatIFF? Issue 5.20 - June 2026#

andyvaisey

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Bio:

timopaul

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Bio:

My journey with the Amiga started in either '87/'88 when the family got an A500 (Back then it was a computer for the whole family), I remember the monitor and A500 boxes almost being as high as myself. Before this time I had only been exposed to the ZX Spectrum and C64, using the blue Workbench for the first time was an amazing experience. When I saw DigiPaint in action I could not believe my eyes. From that moment I was a devoted Amiga user going through various Amigas, A500+A570, A600, A3000 and A1200. Over the years my Amiga has been used to creating digital artwork and for making or shall I say trying to make music. Then in the year 2021 I decided for some crazy reason that the Amiga scene needed a digital magazine similar to Amiga Report. It was my intention to have something that picked up where the great Amiga magazines such as Amiga World and Amazing Computing left off, providing a more serious look at Amiga usage through tutorials and reviews.

stevelord

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Bio:

Steve enjoys doing impossible things on his Amiga 4000 and CDTV. Whether it's using his CDTV for email, playing Internet radio through his bluetooth speakers from his Amiga 4000, or talking to the world via the ISS from either. If people say the Amiga couldn't do it, he's probably looking for a way to do it. Steve writes his WhatIFF articles mostly using Arnor ProText.

johnscolieri

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Bio:

Like many Amiga users my first computer addiction was the mighty Commodore 64! One day close to Christmas of 1986 I drove to my local Commodore store called Comspec...I was in high school and played rep hockey at the time and didn't have the time I used to when I was in grade school to visit Comspec each weekend to check out the latest magazine and games. Imagine my surprise when I stepped into the store and immediately in front of me was THE AMIGA! It was looping the Defender of The Crown intro and I fell in love instantly! From that day on it was my mission to buy that Amiga but I had just worked a few part time jobs to help pay for my first ever used car and didn't have a hundred bucks to my name lol. The Amiga was close to \$2,000 Canadian dollars (after taxes) and unlike my C64 my parents didn't fall for the 'I need it for school' rant again.

To (try) to make a very long story short I didn't save up to buy my Amiga until I started University in 1989. In the mean time I saw another Amiga called the Amiga 500 at Comspec and it was a lot cheaper than THE AMIGA but my eyes and heart and soul were only set on THE AMIGA! When I finally bought it that was the proudest/happiest moment I've ever felt and I jumped straight into University with Excellence! word processor and Logistix spreadsheet/ database. In my 2nd year I bought my first ever hard drive, a whopping 33MB which had its own case which sat atop my Amiga 1000 case. Later fast ram side cars showed up and I mingled with Manx Aztec C compiler in computer science class. Of course all the great games with awesome music/sound effects made my Apple/PC friends envious!

By my 3rd year we had a small Amiga computer club and a few of us got our first accelerator boards for our Amiga which was called LUCAS and was based on a design in a Transactor magazine. It had a 68020 at 16 MHz with FPU on it and it really helped out with the more complicated spreadsheets and compiling programs. Life was good, the internet was just starting up, I graduated University and got my first full time job and then the bad news of Commodore going bankrupt hit the newspapers, magazines, and BBS boards! There was so much activity going on still in user groups and computer stores so us Amiga users just figured that it would sort itself out. At work there were only PC's running AutoCAD and I despised using the early Windows systems and couldn't wait to get back home to my Amiga. Over the years busy with work and 'adult life' many of my Amiga friends moved on to PCs and I ended up getting my first Amiga 1200 and later Amiga 4000 for great prices. I was still amazed how the Amiga community was still active and so helpful up to the early 2000's. By then I was married and working harder than ever to save up to buy a home instead of

renting an apartment and my Amiga's were left at my parents house until around 2010 or so I read about a brand new Amiga which was coming out based on PPC CPU called the AmigaONE X1000 running a new AmigaOS4. I was skeptical at first after hearing about the technical issues with the earlier SE, XE boards with the initial AmigaOS4 release but after consulting with some friends I joined the beta test team to get one of the first X1000 boards and I immediately felt at home with AmigaOS4.1 and have used it as my home Amiga ever since. Once I got some space set up in my house I got my Amiga's out of my parents house finally and eventually my original Amiga 1000 sits next to my AmigaONE X1000 and original C64 and of course my Amiga 1200 and 4000 came along too and with new accelerator cards and ram boards and spare motherboards and parts etc etc etc. Here I am today grateful to the Amiga computer and especially to the amazing Amiga community who back then and today has always been resilient, creative and helpful !

kevinsaunders

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Bio:

My journey with the Amiga started around 1988, The first time seeing the Amiga 1000 in the shop window playing animations such as the Amiga Juggler I fondly remember. My Brother and I saved up for an A500, and eventually bought an A4000 (cybervision 64 card) and then an A1200 with an 030 accelerator. I loved collecting every Amiga Magazine with demo disks. My interest in game designing for the Amiga started with deluxe paint and I did dabble with The Miracle Keyboard but that skill in music didn't last. It is because of the Amiga that I now work in video animation and game design.

ivansorensen

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Bio:

Danish Amiga fan since the 90s. Started with a 1200 and a 1200 is my machine today. I am interested in the casual and the philosophical aspects of the Amiga computer.

My cats enjoy Turrican.

robomalley

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Name:	Rob O'Malley
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Mr.Roboto

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Bio:

Rob has been making music on Amiga ever since in the mid to late 90's his guitar teacher suggested that he get a drum machine to practice along to, and he instead opted to use OctaMED on his Amiga 500+ with A590 to craft beats and basslines

Favourite quote:

'...all she wanted to do was play with my ears all night' :P

roaldstrauss

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Name: Roald Strauss

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www.IndieGameMusic.com

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Bio:

I was introduced to the Amstrad CPC464 at age 10, and had a great childhood because of all the BASIC coding I could do. I am also a musician. And when I discovered I could program my Amstrad to play music, by inputting tons and tons of DATA lines, things became even more interesting.

When everyone left the Amstrad CPC in favour of either the PC or Amiga, I stayed with my trusty CPC464 - until a couple of mates lured me over to the Amiga many years later. Since no one ever introduced me to options like AMOS or Blitz Basic, it sadly meant that my coding days were over - for a period of time anyway. Instead, I used my Amiga 600 for lots and lots of Protracker MOD creations.

From 2012 to 2017 I wrote "8-bit Memoirs", which is a semi biography about those good old days. Download from www.8bitMemoirs.com (Use a download tool so you can resume).

jman

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Bio:

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Tristanshiflett

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Bio:
Manical started making music for the Amiga in early 2021 (December) and has released at some demoparties, and is planning to go to more along the way. He's in the demogroups MoonShine and Hokuto Force as a musician, and soon to be a coder or graphician. He started out with Protracker for his first 3 mods, then moved to FastTracker primarily, and then he started exploring Impulse Tracker and started making tracks with Furnace. His songs have gotten good reviews by many famous people in the demoscene, such as Jammer, Purple Motion, Skaven, and cTrix (Most known for his gAtari). Since his music journey, he's entered Syntax 2021, Mysdata 2022, BoozeDrome VI (Which his track that he entered ended up on the official BoozeDrome tape which was limited to 50 copies).

Favorite quote: 'You see, we are here, as far as I can tell, to help each other; our brothers, our sisters, our friends, our enemies. That is to help each other and not hurt each other.'

martynbampton

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Bio:

Like a lot of us I got my first computers during the late 80s and 90s, an exciting time for home computer owners. It seemed like every week brought something new and there were loads of computers and accessories to choose from. If you had the budget ;) My family had a Spectrum and then a BBC Micro but *my* first computer was an Amiga 500, all generous hand-me-downs from my uncle. I did play games of course - Lemmings, Pinball Dreams and Stunt Car Racer spring to mind but I also loved messing about in Deluxe Paint, eventually becoming half decently productive. I never had a console and I was never interested in truth, actually I don't think I really played on a console until my friend got a Playstation. An A500 Plus came next and then in March 93 I upgraded to an A1200 with a "huge" 80 MB harddisk!

It was with the A1200 and its harddisk that I was really able to get into productive computing as well as enjoying the new AGA specific games. I loved Animating with Deluxe Paint 4, I knew Wordworth inside and out got into generating fractal landscapes with VistaPro and 3D rendering with Real 3D. I would spend countless hours in Workbench, setting it up just the way I liked, I made my own icons very much inspired by MagicWB. Soon enough I need more performance and added a Blizzard IV, Squirrel SCSI and CDRom and I figured out how to make an RGB cable for my specific telly. Still... After Commodore went bankrupt and the chances of a successor to the A1200 evaporated I saved up and was able to buy a secondhand A4000 complete with 1942 monitor.

The A4000 was amazing, even more so when I loaded it with a Cyberstorm Mk-III and a Cybervision 64/3D (with scandoubler) and maxed out the RAM. I had a eventually got a 17" monitor and ran Workbench in an unimaginably spacious resolution - compared to 640 x 512 anyway. By this time I was a long time loyal Amiga fan and enjoyed simply upgrading and pushing the limits, way beyond anything my younger self could have imagined. My A1200 was rehoused in an Infinitiv tower case and even ran Linux, launched from within Workbench. My A4000 spent some time as a Mac thanks to ShapeShifter and was my first computer to go online with a 56K modem! I knew I was fortunate to have these computers and upgrades and it was hard to leave them behind when I left the country.

It's funny. Years pass, you forget things - you don't even realise you miss things and then someone releases a Mini A500 thingum and you start watching retro channels. Soon you end up on eBay and a week or two later you boot up an A500 for the first time in... Let's say a while. I kept nearly all of my Amiga gear, all apart from the very first A500 and A500 Plus. I was able to collect everything from my childhood home where it had been mostly stored safely all this time and bring it back with me. Now I have them again I hope to share my experiences with repairing, restoring and upgrading them with modern stuff over the coming months and years, maybe my trusty A4000 will boot once more!

It was an amazing time to experience and I'm glad I can do so again with a fresh perspective.

kristiangk

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Bio:

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bytebandit

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