MCCC News

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Bubsy: Kitt'N Kaboodle for Vic20

This fun hack of Fast Eddie (Sirius Software 1982) was made possible by Hack-O-Matic 3.
http://atariage.com/forums/topic/90916-hack-o-matic-3-with-pinning-feature-and-comments/

The Woolies are at it again stealing Bubsy's stuff and this time they stole EVERYTHING and stored it on the planet Kaboodle! Bubsy will need to JUMP OVER the Woolies to get it all back. In the game you'll see objects Bubsy needs to collect on based on items he collected in:

- Bubsy: Claws Encounters of the Furred Kind.
- Bubsy 2 http://store.steampowered.com/app/426630/Bubsy_TwoFur/
- Bubsy Fractured Furry Tales
- Bubsy 3D
- Bubsy 3D: Bubsy Visits the James Turrell Respective

And even the newest which came out recently that I'm enjoying:

- Bubsy: Woolies Strike Back https://www.bubsy.com/

I started working on a hack of this for the Vic 20. The development was extremely rough and the character animations for that worked a bit differently than they did the 2600/5200/800 versions. I wasn't happy with it for a bit, but then I read this from a Vic 20 gamer:

> From TheTick1:
> "I played Fast Eddie on my Vic20 back in the early 80's. I may have to mess with the built-in ML monitor on VICE and work on a similar Bubsy for my good 'ole Vic20. Would be awesome to see Bubsy running on my early 80's Vic20 hardware."

Figured that was enough reason to get something going for people to try out. After ongoing development on this for two days and input from some folks on Atariage about how the Vic 20 colors work, I liked how the animations, color, and feel of the game has turned out.

Here is the Video gameplay:
https://www.youtube.com/watch?v=Po8TX0Id70E&feature=youtu.be

More of this can be read here:
http://atariage.com/forums/topic/274961-bubsy-for-the-vic-20/?p=3949437

And the ROM downloaded here:
Bubsy-V20-R2.crt.zip
(5.53 KiB)

...by Greg Goodwin
(aka DoctorClu)
http://sleepingelephant.com/ipw-web/bulletin/bb/viewtopic.php?f=10&t=8868

Categorizing Amiga Users

Welcome to the new year. Only time will tell if this year will be as crazy as the last year or so. It's only barely started and it's already tried to kill us a couple times with frigid weather, so it's not the best of starts so far.

In the news, the magazine "Amiga Future" celebrates twenty years of existence this month. This is pretty special in my opinion, mainly because I'm not aware of any Amiga-centric publications that lasted that long, aside from slightly less "official" publications like the AmiTech Gazette. Hardly any Amiga mags (or many mags in general) last from 1985 to 2005, or whatever corresponds to "x+20" from whatever the year of first publication was. This newsletter has that beat of course, but that's not that difficult at only a couple pages each month.

This month's meeting is our usual, January 20th at the Kettering-Moraine library study room. I'm planning to bring my Vampire'd-up Amiga 600 to the meeting, with a bit more to show than previous months. I've been meaning to be further along building the system and software, but it's not as easy to find the time as I wish it were. Still, I'll be there, and so will the system. Hope to see you there as well.

In the past, I've written about the various types of Amiga enthusiasts, divided into a few basic categories. The available technologies in the field have changed since my last visit to the subject, shifting the balance somewhat, if not the categories themselves. On one end of the spectrum lie the "retro" types, whose main goal is to run classic Amiga software, primarily games. This group has the greatest number of "casual" Amiga fans, and people who might've had no direct experience with Amiga systems when they were new, and are in it for the retro gaming experience.

Some may do this through emulation on their home computers, Raspberry Pi or other small systems, or even sufficiently powerful game consoles. Some may take the route of the FPGA "remake" systems like MiniMig and others. Still others are purists about it, and might only accept real discs on real hardware (probably an A500, maybe the A600, A1200, or CD-32), preferably attached to a real CRT monitor. Whether the hardware is real or virtual, it is usually modest, as most Amiga games rarely made use of anything beyond a baseline system (as opposed to modern PC gaming, where the opposite tends to be true).

The next step up are the "Power Classic" people. This group has expanded quite a bit recently thanks to an expansion of available options. In the old days, these were the Amiga users who had the big box systems, and/or spent the big bucks expanding them with RAM, storage, accelerators, new video cards, and more. Their goal is to maintain compatibility with a wide range of Amiga software, from entertainment to productivity to the stuff that needs a heavy-duty machine just to run. If they run classic games, it's probably done off the hard drive with the aid of software like WHDLoad, alongside ports of Doom or Quake.

Some in this category are happy with classic Amiga hardware with classic expansions, though that is considered the low end by today's standards. Others take the emulation route, as the average PC or even the humble Raspberry Pi is capable of running the Amiga system at beefed-up specs. The biggest bump to interest in this power class has been the Vampire FPGA-based hardware expansions from Apollo, which bump "small" Amigas like the A500 or A600 well beyond the power and speed of previously available A4000s with 68060 accelerators for a moderate price, with newer versions for the A1200 and a stand-alone version that requires no legacy hardware on the way. The Vampire hardware family has been the best fulfillment of previous promises to create a system beyond the spec of the classic Amigas, while maintaining a high level of past compatibility, at least for the time being, and has become very popular in a short time.

Next up are the "Modern Amiga" enthusiasts, those who hoped to bring the Amiga experience into the modern day and keep up with the likes of the Windows PCs, Macs, and Linux boxes, if not entirely successfully. These were the people that adopted one of the "successor" operating systems like OS4 or MorphOS, which run on PowerPC CPU-based hardware, such as the Aeon OS4 systems or the PPC Macs abandoned by Apple for Morph. The "Amithlon" partial emulation suite did much the same on PC hardware. While there is a good deal of compatibility with well-behaved classic Amiga productivity and other software, anything that depends on actual Amiga hardware and "bangs the metal" will not work at all, unless it's done inside an emulator. Still, that classic software can run at speeds far beyond what it would on original hardware, and new software directly written to the new OS and hardware is faster still.

Sadly, maintaining classic compatibility imposes limits to the potential system specs, at least the way it is now. Also, the PowerPC line of hardware is more and more of a dead end as Intel and ARM-based stuff moves further along. Switching to something new breaks classic compatibility too, leaving the users in this category with a dilemma as they try to move forward themselves. Do they push for classic compatibility and live with the possible performance penalties that imposes, or do they cast off the past like a gangrenous foot, and shoot for the moon? Considering new software development, especially for high profile software and applications hasn't exactly taken off for OS4 or MorphOS, this isn't exactly a simple answer, and divides people as much as the divide between MorphOS and Amiga OS4, Still…

The final category is the "no limits" group, those who advocate taking the Amiga experience at least as far as any other computer system, and far beyond the current Amiga experience. This category is closer to hypothetical than practical, with the basis of making a fully modern computer operating systems around the positive points of the Amiga, but running original software or hardware is not a requirement. (That can be emulated if you want). Examples include the open-source AROS project (which is actually a wide-ranging project with fingers in every category in this article) and Amiga-inspired OS projects like BeOS or Haiku.

One of the constant issues here is that all software has to be written new for the platform, or ported across from something else. People in this group tend to be enthusiasts for a lot of different operating systems, comparing and contrasting them. Everyone has a different view of where the 'line of "Amiganess" lies—where something stops being sufficiently Amiga. Is an Amiga its hardware? Its software? Only some of that hardware or software? Is it the operating system? The name? Or is it just a set of ideas and philosophies for a computing experience? You could probably get a slightly different answer from every Amiga fan you ask, and perhaps that's the best thing about it. While the differences of opinions may serve to spread thin the limited resources and efforts of the community, we're spoiled for choice, and that just makes it easier (and sometimes cheaper) to find exactly the kind of Amiga experience you want.

…Eric Schwartz
From the AmiTech Gazette
January 2018

The Wi-Fi Alliance Announces WPA3

The Wi-Fi Alliance, which certifies Wi-Fi products, has announced WPA3, a major upgrade to Wi-Fi security that will appear in 2018 and take care of known flaws while simultaneously requiring less effort on your part. Among other things, it will eliminate the nasty KRACK vulnerability and secure open Wi-Fi networks. (See "Wi-Fi Security

The Wi-Fi Alliance is a trade group that dates back nearly 20 years. It has long been responsible for keeping all the cats in the local wireless networking

bag, preventing forks and proprietary standards that have plagued other technologies. Almost 15 years ago, the Wi-Fi Alliance worked to recover from the terrible flaws in its original network encryption standard, WEP, by getting the whole industry to switch to the far more secure WPA2.

WPA2 encrypts traffic passed over the Wi-Fi wireless local area network to prevent anyone without the network pass-phrase or an enterprise login from being able to decipher the flow of data. On an enterprise network, even devices on the same Wi-Fi network can't see each other's data. It's supposed to work that way on passphrase-only Wi-Fi networks too, like what you have in your home, but flaws in the protocol allow someone with the network's shared password and a simple cracking tool to access data from other network users.

While the WPA2 standard was largely designed well, it hasn't changed in 15 years, which is a long time in the security world. Last year, a security researcher discovered a major flaw that he dubbed KRACK. It could allow someone in proximity to a Wi-Fi network to recover certain kinds of otherwise protected data. Major vendors, including Apple, released patches for Wi-Fi adapters and routers, but older hardware that is un-patched or un-patchable remains vulnerable, and the repairs were more bandages than curative surgery.

The new WPA3 fixes the fundamental flaw related to KRACK by replacing the four-way handshake between a Wi-Fi device and a base station that turned out to be vulnerable. Precise details of WPA3's redesigned method of establishing a secure connection aren't yet available.

The new WPA3 standard also adds the following:

- Even when a user picks a weak pass-phrase—like pass1234—WPA3 will process it without user involvement so that the password can't be extracted via brute-force attacks that rely on iterating through short, common, and dictionary-based passwords.
- WPA3 provides better security for devices with limited input methods, like printers, to join a network securely. That was supposed to be the job of WPS (Wi-Fi Protected Setup), but it never reached its potential, and the WPS spec has security flaws.
- Encryption key length in WPA3 rises from 128 bits to 192 bits to meet a level of protection required for U.S. government use.
- Joining a password-free network will now securely set up an encrypted connection.
- All connections will now be protected from other users of the same network, something that's reliably available only with enterprise connections today.

These last two points are a major improvement for public Wi-Fi networks. Unsecured networks are convenient because businesses and institutions don't have to provide a Wi-Fi password to everyone who walks in. However, eliminating the need for a password also means that users send their traffic across unprotected connections that can be intercepted by anyone nearby with a Wi-Fi sniffer. With WPA3, Wi-Fi providers won't have to choose between convenience and security.

The Wi-Fi Alliance also said it's upping its game with WPA2, adding more tests of how WPA2 is implemented by companies to provide better consistency and security.

WPA3 will start appearing in hardware in 2018, but WPA2 will remain available for compatible devices for some time to come—almost certainly for several years, given its installed base. Unfortunately, most devices that run WPA2 likely can't be updated to WPA3, possibly apart from some more recent devices that were designed with an idea of what hardware features WPA3 would require.

That means that WPA2 will remain the weakest link in Wi-Fi security until WPA3 is supported by every device you use and all the base stations to which you connect. As we saw with the transition from WEP to WPA2, which involved the interim WPA standard, that can be a long process.

...by Glenn Fleishman:
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article link:
http://tidbits.com/e/17719

February Calendar

February 11 — MCCC Meeting
2:30 PM — Grand Prairie Airport
3116 S. Great Southwest Parkway, Grand Prairie

February 11 — Board of Director's Meeting
Approximately 4:30 PM — Location TBD

March 1 — Newsletter Deadline — 8:00 AM