Multitasking and the Amiga

February has been punctuated by repeated snowstorms around here, followed by repeated snow shoveling, followed by repeated curses as the snow comes back. So far 2010 is shaping up to be an interesting time in the Amiga world. With developments such as the Amiga One X1000 hardware somewhere on the horizon, and MorphOS slowly expanding its coverage from the Mac Mini to other PPC-based Mac hardware, the year, or maybe the decade, is showing some potential for growth for the first time in a long time. It's only fitting as the 25th anniversary of the release of the original Amiga 1000 draws close that we get a glimmer of new hope, however small it might be.

I've often talked in the past about how the Amiga excelled in advantages that doubled as disadvantages at other times or circumstances. The Amiga was famous for being the first consumer-level computer with a full pre-emptive multitasking operating system. This was quite the challenge to do affordably in the latter half of the eighties, as most other examples of multitasking required hardware support, such as a memory management unit (which could have priced the system out of the market at the time), but it was managed. The early Amiga OS got a reputation for being crash-prone, as software programmers learned how to code for a multitasking OS, making sure their program didn't step on the toes of other tasks that might be running at the same time. The end result was mostly stable, as good or better than most of its contemporaries, but the

lack of on-board hardware resource management meant a big enough error could still take the whole system down with it. Over the years, the Mac and Windows slowly waded into multitasking, first with limited and crippled forms where only one program actually ran no matter how many were open, or the resources any program could use were set from the start. Eventually Windows, Mac and others came to pre-emptive multitasking, thanks in no small part to CPUs with memory management becoming affordable at the consumer level.

By the time the others adopted true multitasking, they didn't have to solve the problem of doing so without hardware help. The advantage the MMU provides makes it easier for separate tasks to keep from overlapping the resources they use, and one failing program can be stopped and removed without dragging the rest down with it. It was around this time the Amiga's multitasking started becoming more of a liability. As the AmigaOS was designed to multitask without hardware memory management, it wasn't possible to just add it in, not without breaking the software that already runs. To be honest this was an issue for the other operating systems too. Mac OS reinvented itself as the Unix-based OSX to achieve true multitasking, and Windows did much the same. There were problems with older software breaking under the multitasking system (Mac OSX was not compatible with older software at all, except when running an older version of the operating system as a separate process) but the problems passed quickly as they plowed ahead, knowing that any software publishers

would either release new versions that work properly or be left behind.

Unfortunately years of uncertainty and inviability left the Amiga OS marginalized with hardly any serious software developers remaining, and its modern descendants, MorphOS and Amiga OS4, dependent on compatibility with years-old, even decades-old software, and the baggage of instabilities that come with it. As a contrast, the AROS Amiga-like system does not currently support classic Amiga software transparently, which means the only software available for it is that which is specifically written for it — which isn't much at this time. Perhaps updates would bring in more stability, either with new software replacing old, or the system managing to shoehorn resource management onto the classic software. It's hard to say either way, but it's fun to hope. I'll be watching either way, if only because Windows, Mac, and Linux still annoy me in ways the Amiga and its relatives don't.

…by Eric Schwartz
from the AmiTech Gazette, February 2010

Hyperion and A-EON

Hyperion Entertainment CVBA and A-EON Technology CVBA announce strategic partnership

Brussels, Belgium
February 20, 2010

Hyperion Entertainment and A-EON have entered into a strategic partnership to provide the Amiga

community with a dedicated high-end PowerPC based platform for AmigaOS 4.x which aspires to be worthy of the Amiga hardware tradition going back to the original Amiga 1000 from Commodore.

The massively expandable AmigaOne X1000 will inspire both current and former AmigaOS users and will also appeal to those looking to exploit the incredibly versatile onboard functionality offered by the unique "Software Defined Silicon" technology from XMOS (www.xmos.com) which, in true Amiga tradition, provides the AmigaOne X1000 with a custom chipset of potentially unparalleled flexibility and scalability.

Software development by Hyperion to bring AmigaOS 4.1, the most advanced incarnation of AmigaOS ever, to the AmigaOne X1000 hardware has been ongoing for quite some time and is progressing very well.

More details about the AmigaOne X1000 hardware and housing will be forthcoming from A-EON Technology shortly.

Google's Experimental Network

2/10/2010 08:00:00 AM
Imagine sitting in a rural health clinic, streaming three-dimensional medical imaging over the web and discussing a unique condition with a specialist in New York. Or downloading a high-definition, full-length feature film in less than five minutes. Or collaborating with classmates around the world while watching live 3-D video of a university lecture. Universal, ultra high-speed Internet access will make all this and more possible. We've urged the FCC to look at new and creative ways to get there in its National Broadband Plan — and today we're announcing an experiment of our own.

We're planning to build and test ultra high-speed broadband networks in a small number of trial locations across the United States. We'll deliver Internet speeds more than 100 times faster than what most Americans have access to today with 1 gigabit per second, fiber-to-the-home connections. We plan to offer service at a competitive price to at least 50,000 and potentially up to 500,000 people.

Our goal is to experiment with new ways to help make Internet access better and faster for everyone. Here are some specific things that we have in mind:

- Next generation apps: We want to see what developers and users can do with ultra high-speeds, whether it's creating new bandwidth-intensive "killer apps" and services, or other uses we can't yet imagine.
- New deployment techniques: We'll test new ways to build fiber networks, and to help inform and support deployments elsewhere, we'll share key lessons learned with the world.
- Openness and choice: We'll operate an "open access" network, giving users the choice of multiple service providers. And consistent with our past advocacy, we'll manage our network in an open, non-discriminatory and transparent way.

Like our WiFi network in Mountain View, the purpose of this project is to experiment and learn. Network providers are making real progress to expand and improve high-speed Internet access, but there's still more to be done. We don't think we have all the answers — but through our trial, we hope to make a meaningful contribution to the shared goal of delivering faster and better Internet for everyone.

As a first step, today we're putting out a request for information (RFI) to help identify interested communities. We welcome responses from local government, as well as members of the public. If you'd like to respond, visit this page to learn more, or check out our video.

We'll collect responses until March 26, and will announce our target communities later this year. Stay tuned.

http://googleblog.blogspot.com/2010/02/think-big-with-gig-our-experimental.html

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March Calendar

March 1 — Amiga-By-The-Loop Chapter 7:00 PM — Main Grand Prairie Library 901 Conover Drive, Grand Prairie	March 1 — MCCC Board of Director's Meeting Approximately 9:15 PM — Location TBD March 26 — Newsletter Deadline — 7:00 AM

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