
Subject: Amiga Multi-tasking Overhead
Posted by [wagner](#) on Tue, 02 Dec 1986 15:25:42 GMT
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Article-I.D.: utcs.1986Dec2.102542.4658
Posted: Tue Dec 2 10:25:42 1986
Date-Received: Tue, 2-Dec-86 10:39:51 EST
Organization: University of Toronto Computing Services, general purpose UNIX
Lines: 33
Checksum: 37661

I've heard it said on the net that, when idling, an Amiga is using about 17% of the CPU (at least in my case, the numbers seem worse, but that's another problem). I've also heard it said that this is the price for multi-tasking.

The more I think about this, the less likely it seems. People have often criticized large mainframe operating systems like MVS for using up 3 or 4 % when idling. In MVS's case, there is a small amount of timer-interrupt driven performance monitoring going on all the time. In the case of the Amiga, some work is being done every vertical retrace time, to set up the copper. But 17%? ...

So I did some simple experiments. It happens even for simple screens. It happens even at the very beginning of boot (well, once one can ^D out of the boot process). It decreases if you take out one of the disks, and, on close examination, the clicks correspond to times when the CPU load *goes down*!?! Does this mean that some disk-related software is polling? Whatever for? The disks are nice, interrupt-driven things, aren't they?

I have a simple performance monitor tool that I got from someone in the Toronto area. It produces a bar-chart sort of display of CPU and memory use (its real handy, as far as it goes). (It's Icon is a cute little rabbit, but, once again, that's another story). What I'd really like now is a tool that told me which task/process was using how much of the CPU. Does such a thing exist?

The search for answers continues.

Michael

P.S. The monitor I have deduces CPU busy by putting a subservient, low-priority task into a loop. There are two fields in the EXECBASE structure for counting idle and dispatched time slices. Are they not good enough, somehow?

Subject: Re: Amiga Multi-tasking Overhead
Posted by [mwm](#) on Wed, 03 Dec 1986 01:59:50 GMT
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Article-I.D.: jade.1806

Posted: Tue Dec 2 20:59:50 1986

Date-Received: Wed, 3-Dec-86 09:23:02 EST

References:

Sender: usenet@jade.BERKELEY.EDU

Reply-To: mwm@eris.BERKELEY.EDU (Mike (Don't have strength to leave) Meyer)

Organization: Missionaria Phonibalonica

Lines: 25

In article wagner@utcs.uucp (Michael Wagner) writes:

>
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> of the CPU (at least in my case, the numbers seem worse, but that's another
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> Amiga, some work is being done every vertical retrace time, to set up the
> copper. But 17%? ...

One thing to remember - 3 or 4 % of a 3081 or 3090 is a *LOT* more CPU
than 17% of an Amiga (or maybe even 100% of an Amiga!). The larger the
CPU, the less you expect to spend on system overhead. For instance,
17% for 4.2BSD on a VAX 750 is high, but not outrageous. The same
figures on an VAX 8800 are bad enough to call for firing a system
manager.

For the Amiga, 17% is high enough that someone should explain it, then
fix it. The Amiga CPU is about the same as a 750, but the OS is doing
a lot less, and so should have correspondingly lower overhead.

Subject: Re: Amiga Multi-tasking Overhead
Posted by [Anonymous](#) on Wed, 10 Dec 1986 10:58:18 GMT
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Originally posted by: daveh@cbmvax.cbm.UUCP (Dave Haynie)

Article-I.D.: cbmvax.1085
Posted: Wed Dec 10 05:58:18 1986
Date-Received: Wed, 10-Dec-86 11:49:16 EST
References:
Sender: news@cbmvax.cbm.UUCP
Organization: Commodore Technology, West Chester, PA
Lines: 37

> Checksum: 37661
>
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> the CPU. Does such a thing exist?
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> The search for answers continues.
>
> Michael

I saw a nice tool up at the World of Commodore show, in Toronto this past weekend, that looks like it would do just such a thing. Its called "System Monitor", from Zen Software (815 East 7th Avenue, Olympia, WA 98501, or on the Well as "zen"). This utility answers questions like "How much RAM is available", "How hard is the 68000 working (globally)", "What is slowing down this program", "What's this task waiting for", "Could this task use more CPU time if available", "How much of the allocated stack space is this task actually using", "What program is a given CLI running", etc. You could give 'em a call at (206) 352-0766. I'm not in any way affiliated with these guys, but even so, they've put together a nice utility, and its not very expensive (somewhere under \$60, not sure exactly).

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Dave Haynie {caip,ihnp4,allegra,seismo)!cbmvax!daveh

"Laws to supress tend to strengthen what they would prohibit.  
This is the fine point on which all the legal professions of  
history have based their job security."  
-Bene Gesserit Coda

These opinions are my own, though for a small fee they may be yours too.

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