Subject: AMD PowerNow /CoolQuiet Disabled Intentionally in 686 Stab and RHEL Kernels ?
Posted by tchipman on Thu, 31 Aug 2006 13:39:23 GMT
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Just wanted to ask, it seems to be the case that the 32-bit X86 precompiled kernels for OVZ (RHEL or STAB versions) have "cool n quiet / powernow" type features disabled

in contrast, the 64-bit stab. kernel appears to have this enabled

Is this something that will be enabled in the future hopefully (hint hint?! or was it left off for a specific reason ?

I have a machine here which I initially setup as 64-bit platform and for which coolNquiet worked well. Then reinstalled box as 32-bit platform for better support with openVz tools (package, template creation etc) but now note that PowerNow/CPUFreq. scaling isn't there / available.

Just a thought / comment.

Many thanks,

--Tim

Subject: Re: AMD PowerNow /CoolQuiet Disabled Intentionally in 686 Stab and RHEL Kernels ?
Posted by Vasily Tarasov on Fri, 01 Sep 2006 08:18:49 GMT
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"cool n quiet / powernow" features are implemented only on AMD64 (x86_64) platform. x86 (32 bit) kernel are shipped for both AMD and Intel processors, so we can't make this option on, 'cause this feature will not work on Intel CPUs.

Besides, I don't know does it work when kernel runs on AMD64 in 32-mode...

HTH!

Subject: Re: AMD PowerNow /CoolQuiet Disabled Intentionally in 686 Stab and RHEL Kernels ?
Posted by dev on Sat, 02 Sep 2006 04:26:45 GMT
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Tim, do you know the exact kernel config options to turn this functionality ON?
is it CONFIG_CPUFREQ_XXX or something else?

I personally thought that this is used for notebooks mostly, but if not only for them...

Subject: Re: AMD PowerNow /CoolQuiet Disabled Intentionally in 686 Stab and RHEL Kernels ?
Posted by Vasily Tarasov on Sat, 02 Sep 2006 06:41:17 GMT
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CONFIG_PM
CONFIG_CPU_FREQ
and driver for appropriate CPU type...

By the way,  Tim, in x86_64 configs for OpenVZ kernel (like in x86)
CONFIG_CPU_FREQ is disabled too.

Subject: Re: AMD PowerNow /CoolQuiet Disabled Intentionally in 686 Stab and RHEL Kernels ?
Posted by tchipman on Wed, 06 Sep 2006 00:46:57 GMT
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Hi,

sorry for the lack of clarity in my initial post. My machine in question is AMD Athlon "X2" (dual-core 2000mhz) which supports 64bit operation.

I guess I'm not 100% positive which kernel features must be enabled. I can refer you to the EXCELLENT url,

http://gentoo-wiki.com/HOWTO_PowerNow!

which details how to check what kernel features are needed, how to check if PowerNow! is available, etc.  So - maybe this is of some help.

Only reason this is "of use" (IMHO) in a server: It allows the machine to operate at lower-wattage/lower mhz settings when the workload is appropriate. Thus power used / heat generated are better.. always a nice thing in a server IMHO

Hope this helps clarify my posting somewhat.

Thanks,

--Tim