

Cold Migration VM from AMD to Intel ...



[thesimpsons](#) 12 posts since

May 15, 2008

Hello folks,

I've tried cold migration of an virtual machine from host running AMD CPUs to Intel Xeon CPUs. After the cold migration (VM was OFF during the migration) the VM boots up and run normally. However, the CPU usage is extremely high although there is no user or application running at all. I let it runs for about 6 hrs to see if the CPU usage slows down but it doesn't. CPU is always above 85% (2 vCPU) This is an VM with Citrix MetaFrame installed. The same configuration with the VM running on the AMD box, CPU usage shows very low which is expected. Do you guys have any ideas about this? Thanks.

Toan



[Anton V Zhbanov](#) 2,904 posts since

May 26, 2008 **1. Re: Cold Migration VM from AMD to Intel** Jun 11, 2008 5:50 AM

Take a look inside VM - which process consumes CPU.



[wila](#) 3,269 posts since

Jun 27, 2006 **2. Re: Cold Migration VM from AMD to Intel** Jun 11, 2008 6:01 AM

Some bog standard replies to your questions.

1. It doesn't really matter if your processor is intel or AMD, they are both as capable to do the work.

I'm not aware of windows having a special AMD kernel, so besides windows activation logic getting triggered it should be fine.

2. Unless your host can take it, it is recommended to use single vCPU VMs, this is due to the CPU scheduling done by ESX. If your VM requires 2 CPUs then on each context switch it will need 2 CPUs at the same time. If only 1 CPU is available your VM will have to wait.

On a reasonably loaded dual CPU dual core host this will be very noticable and it will look as if your VM is busy... while it is mainly busy waiting.

See also [How to repeatedly upgrade Windows 2003 to SMP and revert to uniprocessor](#)

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Wil



[juchestyle](#) 1,357 posts since

Jun 20, 2005 **3. Re: Cold Migration VM from AMD to Intel** Jun 11, 2008 6:48 AM

Does it have the right HAL (uni verse multi processor)

If you migrate it back, does it still have high cpu?

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We recently ran into a situation where we had two vms that were very sluggish, they were using as much memory as they could and not running any better. We finally destroyed them and rebuilt two new vms and everything ran like a champ.

Maybe there is corruption on the files that make up the server. You could also try creating a new config file and attaching it to the hard drives to see if that makes a difference.

Kaizen!



[bradley4681](#) 239 posts since

Jul 6, 2005 4. **Re: Cold Migration VM from AMD to Intel** Jun 12, 2008 5:17 PM

just as a troubleshooting step i would update the HAL to multi again, I know it'll already have it since you said it has 2vCPU's but since you went from AMD to intel i'd try it and it's easier then rebuilding. it really shouldn't make a different but windows really should run the same on every machine but we all know it doesn't.

so update/reinstall the HAL, i.e. run through the little wizard and reboot and see if it gets better.

Cheers,

Bradley Sessions

If you found this or other information useful, please consider awarding points for "Correct" or "Helpful".