Subject: support for I2C
Posted by wfischer on Wed, 25 Jan 2006 09:38:28 GMT
View Forum Message <> Reply to Message

I'm testing the current 2.6.8-022stab061.1 openvz kernel on a supermicro server (http://www.supermicro.com/products/system/1U/5015/SYS-5015P- TR.cfm)

I want to use the Supero Doctor tool (ftp://ftp.supermicro.com/utility/Supero_Doctor_II/) to monitor hardware fans, temperature, and so on. It uses I2C to get the values.

Unfortunately, I2C is not configured in OpenVZ.
kernel-2.6.8-022stab061-i686-smp.config.ovz says:
#
I2C support
#
CONFIG_I2C is not set

I know that I could configure it myself and rebuild openvz, but according to http://forum.openvz.org/index.php?t=msg&&th=25&g oto=88#msg_88 the next Virtuozzo will be based on the OpenVZ kernel. We will use then Virtuozzo, too.
So are there plans to enable I2C by default? Or what are the reasons to keep it disabled?

For us, hardware monitoring would be very valuable, as it allows us to reduce downtime of the servers when we know that a fan or power supply has failed -> so we can replace them before the remaining fans or power supplies fail too

Thanks in advance,
Werner

Subject: Re: support for I2C
Posted by vaverin on Wed, 25 Jan 2006 11:26:08 GMT
View Forum Message <> Reply to Message

Sehr geehrter Herr Fischer,

I've invetigated I2C question long time ago and discovered the following issues:

- different i2c versions are incompatiple. therefore lmsensors on the one distribution may work correct, but the other distribution requires lmsensors rpm update.
I would note that it was on the old 2.4-based distributions, and probaly it is not related to modern 2.6-based distributions.

- i2c/sensors drivers on 2.4 kernels was buggy, I've crashed my testnode during my experiments.

As far as I know it is possible to use acpi for hardware monitoring: try to see on the files in the /proc/acpi directory.

Also some Intel-based hardware have an IPMI interface for the hardware monitoring. I've not tested it, but the according config options are enabled in our kernels and I believe it should work too.

Mit freundlichen Gruessen,
Vasily Averin

Subject: Re: support for I2C
Posted by wfischer on Wed, 25 Jan 2006 12:28:00 GMT
View Forum Message <> Reply to Message

Sehr geehrter Herr Averin,

thanks for your fast reply. I have tried to use /proc/acpi, but unfortunately I did not get any useable output (see acpi-info.txt attachment).

Thanks for your hint regarding IPMI. I'm yet not familiar with IPMI in detail, and unfortunately our server does not have the IMPI card installed.

I did not have bad experiences with I2C in 2.6 kernels (for Kernel 2.4 it was necessary to patch the kernel, since kernel 2.6 I2C is part of the vanilla kernel itself - so I think I2C should be rather stable). When using kernel 2.6.9-22.ELsmp (it comes with CentOS4.2), the Supermicro tool wich uses I2C makes a very nice and useable output (see i2c-info.txt attachment).

Do you feel that there is a chance to include I2C to openVZ/virtuozzo? I think it would be a very valuable feature.

best regards and thanks for your support,
Werner

File Attachments
1) acpi-info.txt, downloaded 485 times
2) i2c-info.txt, downloaded 482 times

Subject: Re: support for I2C
Posted by vaverin on Wed, 25 Jan 2006 12:40:49 GMT
View Forum Message <> Reply to Message

Sehr geehrter Herr Fischer

wfischer wrote on Wed, 25 January 2006 15:28

Do you feel that there is a chance to include I2C to openVZ/virtuozzo? I think it would be a very valuable feature.

You are right, hardware monitoring is important task.

We will review the I2C layer in 2.6 kernels and probably we'll include it into our kernels later.

Thank you,
Vasily Averin

Subject: Re: support for I2C
Posted by wfischer on Wed, 25 Jan 2006 12:51:16 GMT
View Forum Message <> Reply to Message

Sehr geehrter Herr Averin,

that sounds very good. Thank you for taking a closer look on I2C to review whether or not you can include it to openvz/virtuozzo. I would be happy if you could reply to this post when you have new details on your progress on that.

Thank you very much,
have a nice evening,
Werner Fischer

Subject: Re: support for I2C
Posted by vaverin on Thu, 26 Jan 2006 14:32:33 GMT
View Forum Message <> Reply to Message

Sehr geehrter Herr Fischer

I've checked current status of I2C, looks like we should not have any troubles on the 2.6 kernels.

I'm going to take i2c configs from the latest RHEL4 kernel, prepare testkernel and test it on the next week.

Mit freundlichen Gruessen,
Vasily Averin

Subject: Re: support for I2C
Posted by wfischer on Thu, 26 Jan 2006 14:48:18 GMT
View Forum Message <> Reply to Message

Sehr geehrter Herr Averin,

thanks for your fast reply again. That sounds really promising.

Thanks for your great support,
best regards,
Werner Fischer

Subject: Re: support for I2C
Posted by dev on Tue, 31 Jan 2006 13:38:15 GMT
View Forum Message <> Reply to Message

Vasya checked it, will be added in 022stab068 kernel.

Subject: Re: support for I2C
Posted by wfischer on Tue, 31 Jan 2006 13:57:04 GMT
View Forum Message <> Reply to Message

Wow - thats great news! Thank you all for your efforts!
