

Re: Exchange Server Hangs OR REBOOTS

Source:

<http://www.tech-archive.net/Archive/Exchange/microsoft.public.exchange.admin/2007-01/msg01978.html>

- *From:* matthew_h <matthewh@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx>
 - *Date:* Thu, 18 Jan 2007 06:04:00 -0800
-

PSS... MS Product Support Services... OK, I found it. Thanks again.

"matthew_h" wrote:

What is PSS???

Is this something that Microsoft Support could assist with over the phone?
Seems like a tough case to crack.

Thanks again for your help.

"Dave Goldman [MSFT]" wrote:

You defiantly have something going on there from the sounds of it. You can try to manually change it however I would contact the vendor to get more information about the equipment and how its supposed to function.

Error 00000d1 is the following:

```
DRIVER_IRQL_NOT_LESS_OR_EQUAL bugcodes.h  
ERROR_INVALID_SIGNAL_NUMBER winerror.h
```

If your server is locking up and you are getting a black screen and even the keyboard is not responding you have a hardware issue. I would recommend at that point that you open a support case with PSS so we can do some more advanced troubleshooting with the box.

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Dgoldman
<http://blogs.msdn.com/dgoldman>

Re: Exchange Server Hangs OR REBOOTS

"matthew_h" <matthewh@xxxxxxxxxxxxxxxxxxxxxxxxxxxx> wrote in message
news:5D89F2F6-3607-4E3B-B1E2-E814122A3001@xxxxxxxxxxxxxxxxxxxx

Here are some error codes that I have received after the manual power off/on to get Exchange back online...

0x000000d1
(0x00000047,0x00000007,0x00000001,0xf64fa205)

0000: 53 79 73 74 65 6d 20 45 System E
0008: 72 72 6f 72 20 20 45 72 rror Er
0010: 72 6f 72 20 63 6f 64 65 ror code
0018: 20 30 30 30 30 30 30 64 000000d
0020: 31 20 20 50 61 72 61 6d 1 Param
0028: 65 74 65 72 73 20 30 30 eters 00
0030: 30 30 30 30 34 37 2c 20 000047,
0038: 30 30 30 30 30 30 30 37 00000007
0040: 2c 20 30 30 30 30 30 30 , 000000
0048: 30 31 2c 20 66 36 34 66 01, f64f
0050: 61 32 30 35 a205

and...

Error Code 000000d1,parameter1 179590cc,parameter2
00000007,parameter3
00000000,parameter4 f675122b

0000: 53 79 73 74 65 6d 20 45 System E
0008: 72 72 6f 72 20 20 45 72 rror Er
0010: 72 6f 72 20 63 6f 64 65 ror code
0018: 20 30 30 30 30 30 30 64 000000d
0020: 31 20 20 50 61 72 61 6d 1 Param
0028: 65 74 65 72 73 20 31 37 eters 17
0030: 39 35 39 30 63 63 2c 20 9590cc,
0038: 30 30 30 30 30 30 30 37 00000007
0040: 2c 20 30 30 30 30 30 30 , 000000
0048: 30 30 2c 20 66 36 37 35 00, f675
0050: 31 32 32 62 122b

0x00000077
(0xc0000185,0xc0000185,0x00000000,0x03EB7000)

... this one had no BYTES data in the Sys log.

Below are the dpti2o errors which have no typical 0x00.....
description
in
the error code.

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```
0000: 0f 00 10 00 01 00 66 00 .....f.  
0008: 00 00 00 00 0b 00 04 c0 .....À  
0010: 07 00 00 00 00 00 00 00 .....  
0018: 00 00 00 00 00 00 00 00 .....  
0020: 00 00 00 00 00 00 00 00 .....  
0028: 00 00 00 00 00 00 00 00 .....  
0030: 00 00 00 00 06 00 00 00 .....
```

```
0000: 00 00 10 00 01 00 66 00 .....f.  
0008: 00 00 00 00 09 00 04 c0 .....À  
0010: 01 01 00 50 00 00 00 00 ...P...  
0018: 00 00 00 00 00 00 00 00 .....  
0020: 00 00 00 00 00 00 00 00 .....  
0028: 00 00 00 00 01 00 00 00 .....  
0030: 00 00 00 00 07 00 00 00 .....
```

```
0000: 0f 00 10 00 01 00 66 00 .....f.  
0008: 00 00 00 00 0b 00 04 c0 .....À  
0010: 10 00 00 00 00 00 00 00 .....  
0018: 00 00 00 00 00 00 00 00 .....  
0020: 00 00 00 00 00 00 00 00 .....  
0028: 00 00 00 00 00 00 00 00 .....  
0030: 00 00 00 00 06 00 00 00 .....
```

These error codes are not displayed everytime the server hangs up, unresponsive, black screen.

I found KB articles for 0x00000077... KB 130801 228753 & 315266 and for 0x000000d1... the link to KB

<http://technet2.microsoft.com/WindowsServer/en/library/fc8efbed-4ea6-4068-9f55-4080129>

Both of these error codes point to the SCSI system. If there were an IRQ conflict wouldn't it show up in the Device Manager? When I boot up I see that the Adaptec card is on IRQ 5 in the POST startup. When I look at Device Manager, IRQ 5 is used by Intel E7520 DMA Controller-3594 and the Adaptec card is on IRQ 24 (virtual or shared?). I assume that IRQ 5 is being shared

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by these devices, however I have an identical server which does not show the Intel E7520 DMA Controller at all in Device Manager. Should I try to assign the DMA Controller to another IRQ?

Thanks for your time! I really appreciate it.

"Dave Goldman [MSFT]" wrote:

Yeah, I would say that you have either some bad hardware or a bad driver. Drivers that sit at the kernel level that can not be paged out can cause a blue screen if something goes wrong. You can post the bytes here and I will see what I can do.

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Dgoldman
<http://blogs.msdn.com/dgoldman>

"matthew_h"

<matthewh@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>
wrote in message

<news:C1199E4B-72E7-4911-9DDB-26178F3A3A85@xxxxxxxxxxxxxxxxxxxx>

The lights on the HDD array are green in OK status. Adaptec told me Adaptec Storage Manager will not work with Windows 2003 Server and that this was not a problem with their SCSI card. The OS is not part of the RAID array. Only my

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Exchange Program Files and DB are on the D: drive raid array. Because the C: is not part of the raid array, would this rule out the SCSI raid system as a cause of the problems?

I continue to get a "unresponsive system" in which there is only a black screen. The problem has grown from intermittent reboots in which the server would come back online to the unresponsive black screen with no error messages other than the dpti2o. I have to manually power off and back on. After restarting, I see the window where you choose what happened such as "power failure" or "system unresponsive" and then log in. There is no error code or message displayed anywhere.

I have seen the Blue Screen of Death only once. It led me to this info from its error code...

0xC0000185
STATUS_IO_DEVICE_ERROR,
caused by improper termination or bad cabling on SCSI devices.

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I reseated the SCSI cable and termination appears to be correct. My gut feeling is this is a hardware issue, but I can't nail down which component is failing.

Are there any resources online to interpret the System Log Event Properties DATA that is displayed in BYTES?

"Dave Goldman [MSFT]" wrote:

I would look at the Adaptec Storage manager if you are using it and inspect every disk that could have possibly generated a log entry about any Bad SCSI statuses. You should see a SCSI status similar to this output below:

Bad SCSI
status –
Check
condition

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28 00 02 D3
31 00 00 00
80 00 00 00

NOTE: If the first byte is the SCSI Status (0x28), then this indicates that the drive's Queue was full and it could not accept anymore I/O requests from the controller.

and

Request
Sense
70 00 06 00
00 00 00 28
00 00 00 00
29 02 00 00
00 00
Unit
Attention

NOTE: The 12th & 13th positions indicate the important response from the device – in this case 29 02 indicates "SCSI Bus Reset Occurred".

Do you

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have any
drives that
have orange
or red lights
on them as
this
would
indicate a
problem
with that
drive in
your array?
You might
be
able
to look at
this:
<http://www.moojit.net/Networking/downloads.shtml>.

I
have
never used
this utility
but you can
give it a
whirl.

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Dgoldman
<http://blogs.msdn.com/dgoldman>
"matthew_h"
<matthewh@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>
wrote in
message
<news:0B8BA7FA-2436-4CD9-AA38-1E8E3BC6C339@xxxxxxxx>

Regarding
the
\Device\Scsi\dpti2o1
message,
does the 1
at the end of
dpti2o1
relate to

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hard drive 1
in my
array?

"matthew_h"
wrote:

> I have a
Windows
2003
Exchange
server that
is often
locking up
and/or
> rebooting
itself. There
is a SCSI
RAID 1 & 5
array. All
updated
with
current
> drivers. In
the Event
Viewer
System log,
I routinely
see the
following
> errors.
These are
the only
errors in the
log...
>
> Source:
dpti2o
> Category:
None
> Event_ID:
9
>
> Description:
The device,
\Device\Scsi\dpti2o1,
did not
respond
within
the
> timeout

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period.
>
> Shortly thereafter, I see this error...
>
> Source: dpti2o
> Category: None
> Event_ID: 11
>
> Description:
The driver detected a controller error on
\Device\Scsi\dpti2o1.
>
> How do I determine which device is
\Device\Scsi\dpti2o1?
>
> What can I do to further isolate the problem?
>
> Would this dpti2o error cause the system to hang and/or reboot?
>
> Any ideas or suggestions???
Thanks in advance..

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