

Re: Getting a 2nd hard disk partition to mount in CE 5.0

Source:

<http://www.tech-archive.net/Archive/WindowsCE/microsoft.public.windowsce.embedded/2008-06/msg00123.html>

- *From:* "Michel Verhagen (eMVP)" <michel@xxxxxxxxxxx>
 - *Date:* Mon, 16 Jun 2008 18:21:54 +1200
-

This sounds like a load order problem, although I've never seen this result (not mounting of 2nd partition). Drivers without an "Order" specified load in reverse order when a hive is loaded. So, first boot driver A, B, C, D would load in that order. Then when the hive is restored and used driver D, C, B, A would load in that order.

Take a good look at the debug output and the order of relevant driver loading (create a release image with KITL enabled so you can see the order of loading). Once you figure out the differences between a clean boot and a hive boot, force that order by defining "Order" values in the relevant driver settings.

Can you post your "profile" registry settings for the partitions and other relevant registry settings (like hive, IDE, etc).

Good luck,

Michel Verhagen, eMVP
Check out my blog: <http://GuruCE.com/blog>

GuruCE Ltd.
Microsoft Embedded Partner
<http://GuruCE.com>
Consultancy, training and development services.

Courteous wrote:

Hi,

I am developing an image with CE 5 with a persistent hive based registry, using an IDE hard disk with two partitions. The registry sits on the first partition, which is mounted as root. The first time the image boots (using the default registry), both partitions mount fine.

The second and following times, the second partition does not mount automatically, even though I am able to mount it manually. Deleting the hives on the hard drive gets the 2nd partition to mount again. I would like to find a way to make it mount automatically, or failing that a programmatic way to mount a partition from a C#/managed application.

This problem is in the release version only, in the debug version it seems to mount every

Re: Getting a 2nd hard disk partition to mount in CE 5.0

00,00,00,02,01,00,00,00,10,00,00,00,f0,03,c2,00,10,00,00,00,00,00,00,73,00,\
74,00,61,00,00,00,00,f0,03,c2,b0,7e,6a,81,a5,c7,24,80,b0,7e,6a,81,00,e0,03,\
c2,fa,0f,00,00,00,00,00,00,00,1b,ba,24,80,b0,7e,6a,81,00,10,00,00,c0,ad,6a,81,\
18,e8,02,16,b0,7e,6a,81,90,e7,02,16,00,10,00,00,00,10,00,00,6f,b5,24,80,b0,\
7e,6a,81,00,10,00,00,b0,7e,6a,81,f0,e7,02,16,bc,e7,02,16,b6,b4,24,80,b0,7e,\

***** IN FIRST REGISTRY *****

[HKEY_LOCAL_MACHINE\Comm]
"BootCount"=dword:00000001

[HKEY_LOCAL_MACHINE\Comm\PCI\E100CE1\Parms\TCPIP]
"LeaseObtainedHigh"=dword:01c8bca6
"LeaseObtainedLow"=dword:e3a69f80

[HKEY_LOCAL_MACHINE\Comm\Security\Crypto]
"Seed"=hex:\
6a,37,80,71,44,78,d4,f4,88,b8,44,b4,39,37,ff,8b,cc,a3,c6,ab

[HKEY_LOCAL_MACHINE\Comm\SecurityProviders\SCHANNEL]
"RNG"=hex:\
5e,12,ee,9a,3b,10,94,47,7b,e5,31,40,2d,50,e4,f5,1a,c1,31,0b,4b,b3,79,6a,6a,\
c8,ec,e8,86,7c,53,78

[HKEY_LOCAL_MACHINE\Services\SMBServer]
"GUID"=hex:\
c3,7e,9c,42,4c,a0,eb,8f,7b,4d,be,d4,2d,85,67,0d

*** The "Hnd" is different in each of these keys. Also "BusParent" is different in 36–39

[HKEY_LOCAL_MACHINE\Drivers\Active\09]
"Hnd"=dword:00039ee0
"Key"="Drivers\BuiltIn\PCCARD"
"BusParent"=dword:00034250
"InterfaceType"=dword:00000000
"BusName"="BuiltIn_0_17_0"

[HKEY_LOCAL_MACHINE\Drivers\Active\10]
"Hnd"=dword:0003a2f0
"Name"="COM1:"
"Key"="Drivers\BuiltIn\Serial"
"BusParent"=dword:00034250
"InterfaceType"=dword:00000000
"BusName"="BuiltIn_0_18_0"

[HKEY_LOCAL_MACHINE\Drivers\Active\11]
"Hnd"=dword:0003b840
"Name"="COM2:"
"Key"="Drivers\BuiltIn\Serial2"

Re: Getting a 2nd hard disk partition to mount in CE 5.0

```
"BusParent"=dword:00034250  
"InterfaceType"=dword:00000000  
"BusName"="BuiltIn_0_19_0"
```

```
[HKEY_LOCAL_MACHINE\Drivers\Active\12]
```

```
"Hnd"=dword:0003cd90  
"Name"="COM3:"  
"Key"="Drivers\BuiltIn\Serial3"  
"BusParent"=dword:00034250  
"InterfaceType"=dword:00000000  
"BusName"="BuiltIn_0_20_0"
```

```
[HKEY_LOCAL_MACHINE\Drivers\Active\13]
```

```
"Hnd"=dword:0003cba0  
"Name"="COM4:"  
"Key"="Drivers\BuiltIn\Serial4"  
"BusParent"=dword:00034250  
"InterfaceType"=dword:00000000  
"BusName"="BuiltIn_0_21_0"
```

```
[HKEY_LOCAL_MACHINE\Drivers\Active\14]
```

```
"Hnd"=dword:0003f3c0  
"Name"="NLD1:"  
"Key"="Drivers\BuiltIn\NLed"  
"BusParent"=dword:00034250  
"InterfaceType"=dword:00000000  
"BusName"="BuiltIn_0_22_0"
```

```
[HKEY_LOCAL_MACHINE\Drivers\Active\15]
```

```
"Hnd"=dword:0003f6f0  
"Name"="NDS0:"  
"Key"="Drivers\BuiltIn\NDIS"  
"BusParent"=dword:00034250  
"InterfaceType"=dword:00000000  
"BusName"="BuiltIn_0_1_0"
```

```
[HKEY_LOCAL_MACHINE\Drivers\Active\16]
```

```
"Hnd"=dword:00040ca0  
"Key"="Drivers\BuiltIn\TAPI"  
"BusParent"=dword:00034250  
"InterfaceType"=dword:00000000  
"BusName"="BuiltIn_0_10_0"
```

```
[HKEY_LOCAL_MACHINE\Drivers\Active\17]
```

```
"Hnd"=dword:00040db0  
"Name"="WAM1:"  
"Key"="Drivers\BuiltIn\WAPIMAN"  
"BusParent"=dword:00034250  
"InterfaceType"=dword:00000000  
"BusName"="BuiltIn_0_11_0"
```

Re: Getting a 2nd hard disk partition to mount in CE 5.0

```
[HKEY_LOCAL_MACHINE\Drivers\Active\18]
"Hnd"=dword:000479e0
"Name"="SIP0:"
"Key"="Drivers\BuiltIn\SIP"
"BusParent"=dword:00034250
"InterfaceType"=dword:00000000
"BusName"="BuiltIn_0_12_0"
```

```
[HKEY_LOCAL_MACHINE\Drivers\Active\19]
"Hnd"=dword:00047d20
"Name"="TKT1:"
"Key"="Drivers\BuiltIn\TouchKit1"
"BusParent"=dword:00034250
"InterfaceType"=dword:00000000
"BusName"="BuiltIn_0_15_0"
```

```
[HKEY_LOCAL_MACHINE\Drivers\Active\20]
"Hnd"=dword:000484b0
"Name"="TKT2:"
"Key"="Drivers\BuiltIn\TouchKit2"
"BusParent"=dword:00034250
"InterfaceType"=dword:00000000
"BusName"="BuiltIn_0_16_0"
```

```
[HKEY_LOCAL_MACHINE\Drivers\Active\23]
"Hnd"=dword:00049140
"Name"="IPD0:"
"Key"="TCPIP\IPDevice"
"ClientInfo"=dword:00000000
```

```
[HKEY_LOCAL_MACHINE\Drivers\Active\24]
"Hnd"=dword:00049450
"Name"="TCP0:"
"Key"="TCPIP\TCPDevice"
"ClientInfo"=dword:00000000
```

```
[HKEY_LOCAL_MACHINE\Drivers\Active\27]
"Hnd"=dword:00049760
"Name"="IP60:"
"Key"="TCPIP6\IPDevice"
"ClientInfo"=dword:00000000
```

```
[HKEY_LOCAL_MACHINE\Drivers\Active\28]
"Hnd"=dword:0004da70
"Name"="DP60:"
"Key"="TCPIP6\DHCPV6L"
"ClientInfo"=dword:00000000
```

```
[HKEY_LOCAL_MACHINE\Drivers\Active\29]
"Hnd"=dword:00050640
"Name"="UIO1:"
```

Re: Getting a 2nd hard disk partition to mount in CE 5.0

```
"Key"="Drivers\\BuiltIn\\NDISUIO"  
"BusParent"=dword:00034250  
"InterfaceType"=dword:00000000  
"BusName"="BuiltIn_0_4_0"
```

```
[HKEY_LOCAL_MACHINE\\Drivers\\Active\\30]  
"Hnd"=dword:00050980  
"Name"="ARS1:"  
"Key"="Drivers\\BuiltIn\\autoras"  
"BusParent"=dword:00034250  
"InterfaceType"=dword:00000000  
"BusName"="BuiltIn_0_3_0"
```

```
[HKEY_LOCAL_MACHINE\\Drivers\\Active\\31]  
"Hnd"=dword:00050d00  
"Name"="V6H1:"  
"Key"="Drivers\\BuiltIn\\ipv6hlp"  
"BusParent"=dword:00034250  
"InterfaceType"=dword:00000000  
"BusName"="BuiltIn_0_7_0"
```

```
[HKEY_LOCAL_MACHINE\\Drivers\\Active\\32]  
"Hnd"=dword:00050b10  
"Name"="NPW1:"  
"Key"="Drivers\\BuiltIn\\NdisPower"  
"BusParent"=dword:00034250  
"InterfaceType"=dword:00000000  
"BusName"="BuiltIn_0_5_0"
```

```
[HKEY_LOCAL_MACHINE\\Drivers\\Active\\33]  
"Hnd"=dword:000510b0  
"Name"="ETM1:"  
"Key"="Drivers\\BuiltIn\\Ethman"  
"BusParent"=dword:00034250  
"InterfaceType"=dword:00000000  
"BusName"="BuiltIn_0_6_0"
```

```
[HKEY_LOCAL_MACHINE\\Drivers\\Active\\34]  
"Hnd"=dword:000513e0  
"Name"="NBT1:"  
"Key"="Drivers\\BuiltIn\\Netbios"  
"BusParent"=dword:00034250  
"InterfaceType"=dword:00000000  
"BusName"="BuiltIn_0_13_0"
```

```
[HKEY_LOCAL_MACHINE\\Drivers\\Active\\35]  
"Hnd"=dword:00051720  
"Key"="Drivers\\BuiltIn\\PCI"  
"BusParent"=dword:00034250  
"InterfaceType"=dword:00000000  
"BusName"="BuiltIn_0_0_0"
```

Re: Getting a 2nd hard disk partition to mount in CE 5.0

```
[HKEY_LOCAL_MACHINE\Drivers\Active\36]
"Hnd"=dword:0005ed30
"Name"="WAV1:"
"Key"="Drivers\BuiltIn\PCI\Instance\ichac971"
"BusParent"=dword:00051720
"InterfaceType"=dword:00000005
"BusName"="PCI_0_31_5"
```

```
[HKEY_LOCAL_MACHINE\Drivers\Active\37]
"Hnd"=dword:0005eb70
"Name"="HCD1:"
"Key"="Drivers\BuiltIn\PCI\Instance\UHCI2"
"BusParent"=dword:00051720
"InterfaceType"=dword:00000005
"BusName"="PCI_0_29_1"
```

```
[HKEY_LOCAL_MACHINE\Drivers\Active\38]
"Hnd"=dword:00050ec0
"Name"="HCD2:"
"Key"="Drivers\BuiltIn\PCI\Instance\UHCI1"
"BusParent"=dword:00051720
"InterfaceType"=dword:00000005
"BusName"="PCI_0_29_0"
```

```
[HKEY_LOCAL_MACHINE\Drivers\Active\39]
"Hnd"=dword:004b3f00
"Name"="HCD3:"
"Key"="Drivers\BuiltIn\PCI\Instance\ehci1"
"BusParent"=dword:00051720
"InterfaceType"=dword:00000005
"BusName"="PCI_0_29_7"
```

```
[HKEY_LOCAL_MACHINE\Drivers\Active\40]
"Hnd"=dword:004b8110
"Key"="Drivers\BuiltIn\ErrorReporting"
"BusParent"=dword:00034250
"InterfaceType"=dword:00000000
"BusName"="BuiltIn_0_14_0"
```

***** IN SECOND REGISTRY *****

```
[HKEY_LOCAL_MACHINE\Comm]
"BootCount"=dword:00000002
```

```
[HKEY_LOCAL_MACHINE\Comm\PCI\E100CE1\Parms\TCPIP]
"LeaseObtainedHigh"=dword:01c8bca9
"LeaseObtainedLow"=dword:b3143500
```

```
[HKEY_LOCAL_MACHINE\Comm\Security\Crypto]
```

Re: Getting a 2nd hard disk partition to mount in CE 5.0

```
"Seed"=hex:\
0e,eb,6a,34,57,74,a9,6a,3f,b9,7c,49,7f,56,27,d4,59,ca,86,d3
```

```
[HKEY_LOCAL_MACHINE\Comm\SecurityProviders\SCHANNEL]
"RNG"=hex:\
b6,4e,9e,2c,f3,5e,73,b5,8d,b9,ae,ac,16,92,79,3d,e5,cc,13,95,1a,23,dd,33,c5,\
d3,ea,16,44,83,a5,8e
```

```
[HKEY_LOCAL_MACHINE\Services\SMBServer]
"GUID"=hex:\
7a,0b,5a,f3,60,81,ae,07,de,fd,20,b5,31,4d,c4,f0
```

*** The "Hnd" is different in each of these keys. Also "BusParent" is different in 36–39

```
[HKEY_LOCAL_MACHINE\Drivers\Active\09]
"Hnd"=dword:000340a0
"Key"="Drivers\BuiltIn\PCCARD"
"BusParent"=dword:00034250
"InterfaceType"=dword:00000000
"BusName"="BuiltIn_0_17_0"
```

```
[HKEY_LOCAL_MACHINE\Drivers\Active\10]
"Hnd"=dword:0003a3b0
"Name"="COM1:"
"Key"="Drivers\BuiltIn\Serial"
"BusParent"=dword:00034250
"InterfaceType"=dword:00000000
"BusName"="BuiltIn_0_18_0"
```

```
[HKEY_LOCAL_MACHINE\Drivers\Active\11]
"Hnd"=dword:0003b900
"Name"="COM2:"
"Key"="Drivers\BuiltIn\Serial2"
"BusParent"=dword:00034250
"InterfaceType"=dword:00000000
"BusName"="BuiltIn_0_19_0"
```

```
[HKEY_LOCAL_MACHINE\Drivers\Active\12]
"Hnd"=dword:0003ce50
"Name"="COM3:"
"Key"="Drivers\BuiltIn\Serial3"
"BusParent"=dword:00034250
"InterfaceType"=dword:00000000
"BusName"="BuiltIn_0_20_0"
```

```
[HKEY_LOCAL_MACHINE\Drivers\Active\13]
"Hnd"=dword:0003b7b0
"Name"="COM4:"
"Key"="Drivers\BuiltIn\Serial4"
"BusParent"=dword:00034250
"InterfaceType"=dword:00000000
```

Re: Getting a 2nd hard disk partition to mount in CE 5.0

"BusName"="BuiltIn_0_21_0"

[HKEY_LOCAL_MACHINE\Drivers\Active\14]

"Hnd"=dword:0003f330

"Name"="NLD1:"

"Key"="Drivers\BuiltIn\NLed"

"BusParent"=dword:00034250

"InterfaceType"=dword:00000000

"BusName"="BuiltIn_0_22_0"

[HKEY_LOCAL_MACHINE\Drivers\Active\15]

"Hnd"=dword:0003f660

"Name"="NDS0:"

"Key"="Drivers\BuiltIn\NDIS"

"BusParent"=dword:00034250

"InterfaceType"=dword:00000000

"BusName"="BuiltIn_0_1_0"

[HKEY_LOCAL_MACHINE\Drivers\Active\16]

"Hnd"=dword:00040d90

"Key"="Drivers\BuiltIn\TAPI"

"BusParent"=dword:00034250

"InterfaceType"=dword:00000000

"BusName"="BuiltIn_0_10_0"

[HKEY_LOCAL_MACHINE\Drivers\Active\17]

"Hnd"=dword:00040ea0

"Name"="WAM1:"

"Key"="Drivers\BuiltIn\WAPIMAN"

"BusParent"=dword:00034250

"InterfaceType"=dword:00000000

"BusName"="BuiltIn_0_11_0"

[HKEY_LOCAL_MACHINE\Drivers\Active\18]

"Hnd"=dword:00047a20

"Name"="SIP0:"

"Key"="Drivers\BuiltIn\SIP"

"BusParent"=dword:00034250

"InterfaceType"=dword:00000000

"BusName"="BuiltIn_0_12_0"

[HKEY_LOCAL_MACHINE\Drivers\Active\19]

"Hnd"=dword:00047d60

"Name"="TKT1:"

"Key"="Drivers\BuiltIn\TouchKit1"

"BusParent"=dword:00034250

"InterfaceType"=dword:00000000

"BusName"="BuiltIn_0_15_0"

[HKEY_LOCAL_MACHINE\Drivers\Active\20]

"Hnd"=dword:000484f0

Re: Getting a 2nd hard disk partition to mount in CE 5.0

"Name"="TKT2:"
"Key"="Drivers\\BuiltIn\\TouchKit2"
"BusParent"=dword:00034250
"InterfaceType"=dword:00000000
"BusName"="BuiltIn_0_16_0"

[HKEY_LOCAL_MACHINE\\Drivers\\Active\\23]
"Hnd"=dword:00049180
"Name"="IPD0:"
"Key"="TCPIP\\IPDevice"
"ClientInfo"=dword:00000000

[HKEY_LOCAL_MACHINE\\Drivers\\Active\\24]
"Hnd"=dword:00049490
"Name"="TCP0:"
"Key"="TCPIP\\TCPDevice"
"ClientInfo"=dword:00000000

[HKEY_LOCAL_MACHINE\\Drivers\\Active\\27]
"Hnd"=dword:000497a0
"Name"="IP60:"
"Key"="TCPIP6\\IPDevice"
"ClientInfo"=dword:00000000

[HKEY_LOCAL_MACHINE\\Drivers\\Active\\28]
"Hnd"=dword:0004d9a0
"Name"="DP60:"
"Key"="TCPIP6\\DHCPV6L"
"ClientInfo"=dword:00000000

[HKEY_LOCAL_MACHINE\\Drivers\\Active\\29]
"Hnd"=dword:00050570
"Name"="UIO1:"
"Key"="Drivers\\BuiltIn\\NDISUIO"
"BusParent"=dword:00034250
"InterfaceType"=dword:00000000
"BusName"="BuiltIn_0_4_0"

[HKEY_LOCAL_MACHINE\\Drivers\\Active\\30]
"Hnd"=dword:000508b0
"Name"="ARS1:"
"Key"="Drivers\\BuiltIn\\autoras"
"BusParent"=dword:00034250
"InterfaceType"=dword:00000000
"BusName"="BuiltIn_0_3_0"

[HKEY_LOCAL_MACHINE\\Drivers\\Active\\31]
"Hnd"=dword:00050c30
"Name"="V6H1:"
"Key"="Drivers\\BuiltIn\\ipv6hlp"
"BusParent"=dword:00034250

Re: Getting a 2nd hard disk partition to mount in CE 5.0

"InterfaceType"=dword:00000000
"BusName"="BuiltIn_0_7_0"

[HKEY_LOCAL_MACHINE\Drivers\Active\32]
"Hnd"=dword:0004b140
"Name"="NPW1:"
"Key"="Drivers\BuiltIn\NdisPower"
"BusParent"=dword:00034250
"InterfaceType"=dword:00000000
"BusName"="BuiltIn_0_5_0"

[HKEY_LOCAL_MACHINE\Drivers\Active\33]
"Hnd"=dword:0004be10
"Name"="ETM1:"
"Key"="Drivers\BuiltIn\Ethman"
"BusParent"=dword:00034250
"InterfaceType"=dword:00000000
"BusName"="BuiltIn_0_6_0"

[HKEY_LOCAL_MACHINE\Drivers\Active\34]
"Hnd"=dword:00051050
"Name"="NBT1:"
"Key"="Drivers\BuiltIn\Netbios"
"BusParent"=dword:00034250
"InterfaceType"=dword:00000000
"BusName"="BuiltIn_0_13_0"

[HKEY_LOCAL_MACHINE\Drivers\Active\35]
"Hnd"=dword:00051390
"Key"="Drivers\BuiltIn\PCI"
"BusParent"=dword:00034250
"InterfaceType"=dword:00000000
"BusName"="BuiltIn_0_0_0"

[HKEY_LOCAL_MACHINE\Drivers\Active\36]
"Hnd"=dword:0005ed00
"Name"="WAV1:"
"Key"="Drivers\BuiltIn\PCI\Instance\ichac971"
"BusParent"=dword:00051390
"InterfaceType"=dword:00000005
"BusName"="PCI_0_31_5"

[HKEY_LOCAL_MACHINE\Drivers\Active\37]
"Hnd"=dword:0005eb40
"Name"="HCD1:"
"Key"="Drivers\BuiltIn\PCI\Instance\UHCI2"
"BusParent"=dword:00051390
"InterfaceType"=dword:00000005
"BusName"="PCI_0_29_1"

[HKEY_LOCAL_MACHINE\Drivers\Active\38]

Re: Getting a 2nd hard disk partition to mount in CE 5.0

```
"Hnd"=dword:00051200
"Name"="HCD2:"
"Key"="Drivers\\BuiltIn\\PCI\\Instance\\UHCI1"
"BusParent"=dword:00051390
"InterfaceType"=dword:00000005
"BusName"="PCI_0_29_0"
```

```
[HKEY_LOCAL_MACHINE\\Drivers\\Active\\39]
"Hnd"=dword:0005d6a0
"Name"="HCD3:"
"Key"="Drivers\\BuiltIn\\PCI\\Instance\\ehci1"
"BusParent"=dword:00051390
"InterfaceType"=dword:00000005
"BusName"="PCI_0_29_7"
```

```
[HKEY_LOCAL_MACHINE\\Drivers\\Active\\40]
"Hnd"=dword:004d8100
"Key"="Drivers\\BuiltIn\\ErrorReporting"
"BusParent"=dword:00034250
"InterfaceType"=dword:00000000
"BusName"="BuiltIn_0_14_0"
```