

Re: CE device driver help, virtual memory and physical memory

Source:

<http://www.tech-archive.net/Archive/WindowsCE/microsoft.public.windowsce.embedded/2006-09/msg00247.html>

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It should work the way you are describing. It is probably a mistake somewhere with the Virtualxxx flags. Personally I'm using MmMapIoSpace/MmUnmapIoSpace instead of VirtualAlloc/Copy (it should be no difference) for the same purposes with no issues when releasing the memory.

On Mon, 25 Sep 2006 22:37:05 +0200, Andy Purcell <Andy_Purcell@xxxxxxxxxxxx> wrote:

Hello,

At startup, my driver needs to allocate some memory for DMA purposes. I currently use HalAllocateCommonBuffer() for this. I use this because it gives me a physical address (needed for DMA).

I would like to make this memory available to the application for R/W. This is because after the DMA is done, the app needs to see the content of the memory. I am currently doing this with VirtualAlloc() and VirtualCopy() up in user space. This all seems to work fine.

However, the problem is that when I close down the app and the driver, if I try to do a VirtualFree() followed by a HalFreeCommonBuffer(), I hit a DEBUGCHK() in the CE memory code.

Any thoughts about how best to

- 1) allocate some physical memory for DMA
- 2) make it available up in user space for R/W
- 3) free the memory when the app closes (user space actions and kernel driver actions)

would be greatly appreciated.

Thanks in advance,

Andy

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