

Re: Wince address space allocation

Source:

<http://www.tech-archive.net/Archive/WindowsCE/microsoft.public.windowsce.platbuilder/2008-06/msg00183.html>

- *From:* deepu <pradeepit@xxxxxxxxxx>
 - *Date:* Fri, 6 Jun 2008 19:34:43 -0700 (PDT)
-

Dear all,

In that case can i check the contents in the cache. Not only in Wince but on any other platforms like RVDS or any other armsimulators. I basically want to see the cache dataflow in arm. and the cache data updated in the processor, as i am not sure from my application has cache been used efficiently or not. I can also run my application without any OS.

Any suggestions regarding this.

Regards

Deepu

On Jun 6, 11:53 pm, "Tom Gensel (eMVP)"
<tgensel.at.ptgsystems.dot.com> wrote:

The address your application receives from the malloc call is a process specific user-space address within Slot 0 of the Windows CE 5.0 address space.

malloc allocates memory from your process' heap which is created by the kernel within the RAM memory region specified in the MEMORY section of CONFIG.BIB and should be located within the cacheable range.

You do not need to do anything else to allocate cacheable memory for your application unless that memory needs to reside somewhere specific within the kernel's virtual address space.

Tom

On Thu, 5 Jun 2008 21:08:00 -0700 (PDT), deepu <pradee...@xxxxxxxxxx> wrote:

Dear steve,

Thanks for the response. I wanted to allocate a memory location in a cached address space and lock it in the cache. As I am working in arm9

Re: Wince address space allocation

processor. cache locking is possible.
You mean the whole of the userspace is already cacheable in windows CE. But the variable address it returns doesnot match with any of the addresses mentioned in the virtual map. How can i relate these 2?

Regadr
Deepu

On Jun 6, 12:43 pm, "Steve Araiza" <sara...@xxxxxxxxxxxxxxxx> wrote:

but I think that the OEMAddressTable only applies to the kernel process..

In your example, your tempPtr is in cached memory.

The cache is usually only enabled for RAM access, it usually does not make sense for peripherals. With that in mind, explicitly asking for 0x80000000 (probably RAM) will likely corrupt something if you write to it.

What are you actually trying to do?

steve araiza

"deepu" <pradee...@xxxxxxxx> wrote in message

news:edd142cb-c806-4e79-8823-b5fb72522b9f@xx

Dear all,
I am working on a ARM9 platform that has WINCE 5 ported onit. I want

Re: Wince address space allocation

to use some cached memory space in user application. The normal malloc is allocating the address at 0x004ea14c, but when i saw the virtual address space mapping in OEMAddressTable, it shows that cached memory space lies between 0x80000000–0x9FFFFFFF. Hence I am trying to use virtual alloc to allocate some memory from that address space, I am not able to allocate at that location. When I verify the address returned by virtualalloc, it remains the same as returned by normal malloc. I am not able to understand the difference in here between

- 1) malloc and virtual alloc, and also
- 2) cached memory space reserved in kernel space and userspace memorymap where does it points to.

Or am I missing some thing in here. I am using the virtual alloc as follows.

```
unsigned int* tempPtr;  
tempPtr = (unsigned  
int*)VirtualAlloc((LPVOID) 0x80000000,  
2468,  
MEM_RESERVE, PAGE_READWRITE);
```

I also tried with other (MEM_RESERVE || MEM_TOP_DOWN).

Can any one please letme know if something is wrong in my approach.

Re: Wince address space allocation

Regards

Deepu– Hide quoted text –

– Show quoted text — Hide quoted text –

– Show quoted text –