

## Re: DEBUGCHK error in smartcard

**Source:**

<http://www.tech-archive.net/Archive/WindowsCE/microsoft.public.windowsce.platbuilder/2004-07/0315.html>

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**From:** visi (zqvisi\_at\_hotmail.com)

**Date:** 07/08/04

Date: Thu, 8 Jul 2004 21:02:22 +0800

Hi Igor,

If I may use CETK to test my driver and if CETK is using CSP? Because I ever use CETK to testing my driver, but the result is the same to open control panel, driver reads ATR and returns ATR to OS, then CETK calls several times IOCTL\_SMARTCARD\_GET\_ATTRIBUTE and IOCTL\_SMARTCARD\_GET\_STATE, then IOCTL\_SMARTCARD\_CANCEL\_BLOCKING is called.

The Smart Card Resource Manager APIS is CryptoAPI other than CryptoSPI ?  
If I use CryptoAPI to develop simple test application, do i not permit to write/read data in card because having not CSP?

> (*SCardConnect, SCardTransmit, SCardLocateCards, etc*).

"Igor Dvorkin [MS]" <igord@online.microsoft.com> wrote in message news:slrnceot3b.2ns.igord@iggyppop.redmond.corp.microsoft.com...

> *It sounds to me like your reader is working. A way to validate this is to use*

> *the Smart Card Resource Manager APIS*

> (*SCardConnect, SCardTransmit, SCardLocateCards, etc*).

>

>

> *The Certificate Control panel applet talks to the smartcard using Cryptography*

> *API. Thus to use your smartcard from the Certificate Control Panel you will*

> *need a Cryptographic Service Provider (CSP) for your particular smartcard.*

> (*See following picture*).

>

>

> -----

> *| Certificate Control Panel Applet*

> -----

> *| Cryptography API*

> -----

> *| Smartcard CSP*

> -----

> *| Smart Card Resource Manager*

> -----

> *| Smart Card Driver*

> -----  
>  
> *If you need to write a CSP for your built in smartcard, we have a sample  
> smartcard CSP available at: public/common/sdk/samples/scwvscsp. However,  
this  
> sample is dependant on a particular smartcard.*  
>  
>  
>  
-----  
> *Igor Dvorkin ( igord at microsoft dot com)  
> This posting is provided "AS IS" with no warranties, and confers no  
rights.*  
>  
> \* visi <zqvisi@hotmail.com>:  
> > *Hi Igor,  
> > because the first card state is SCARD\_SWALLOWED, when calling  
RDF\_CARD\_POWER  
> > routine, it implements SCARD\_COLD\_RESET ,then read ATR, just then the  
card  
> > state is SCARD\_NEGOTIABLE. Lastly calling  
IOCTL\_SMARTCARD\_CANCEL\_BLOCKING,  
> > unload driver.  
> > I open Sertificate in Control panel, then select sertificate from smart  
> > card,The following debug message is output :*  
> > \*\*\*\*\*  
> > 0x8bdf623c: ==>>SCR\_Open( )  
> > 0x8bdf623c: build-in Smart Card Reader : Open(321ac0) - entered  
> > 0x8bdf623c: InitializeDevice  
> > 0x8bdf623c: build-in Smart Card Reader : CardState 2  
> > 0x8bdf623c: <<==SCR\_Open( )  
> >  
> > 0x8bdf623c: ==>>SCR\_IOControl( )  
> > 0x8bdf623c: ==>>SmartcardDeviceControl( )  
> > 0x8bdf623c: SCI!(SmartcardDeviceControl): Ioctl = GET\_ATTRIBUTE  
> > 0x8bdf623c: default  
> > 0x8bdf623c: ==>>OCTL\_SMARTCARD\_GET\_ATTRIBUTE  
> > 0x8bdf623c: <<==SMCDeviceIoControl( )  
> > 0x8bdf623c: SCI!(SmartcardDeviceControl): Exit  
> > 0x8bdf623c: <<==SmartcardDeviceControl( )  
> > 0x8bdf623c: <<==SCR\_IOControl( )  
> >  
> > 0x8bdf623c: ==>>SCR\_IOControl( )  
> > 0x8bdf623c: ==>>SmartcardDeviceControl( )  
> > 0x8bdf623c: SCI!(SmartcardDeviceControl): Ioctl = GET\_STATE  
> > 0x8bdf623c: default  
> > 0x8bdf623c: IOCTL\_SMARTCARD\_GET\_STATE  
> > 0x8bdf623c: <<==SMCDeviceIoControl( )  
> > 0x8bdf623c: SCI!(SmartcardDeviceControl): Exit  
> > 0x8bdf623c: <<==SmartcardDeviceControl( )  
> > 0x8bdf623c: <<==SCR\_IOControl( )

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> >
> > 0x8bdf623c: ==>>SCR_IOControl( )
> > 0x8bdf623c: ==>>SmartcardDeviceControl( )
> > 0x8bdf623c: SCI!(SmartcardDeviceControl): Ioctl = POWER
> > 0x8bdf623c: default
> > 0x8bdf623c: IOCTL_SMARTCARD_POWER
> > 0x8bdf623c: ==>>TLP3ReaderPower( )
> > 0x8bdf623c: SCARD_COLD_RESET
> > 0x8bdf623c: build-in Smart Card Reader !TLP3ReaderPower: Enter (1)
> > 0x8bb14774: build-in Smart Card Reader : SCRSerialEvent(321ac0) -
entered
> > 0x8bdf623c: ==>>SCRio( )
> > 0x8bdf623c: <<==SCRio( )
> > 0x8bdf623c: SCI!SmartcardUpdateCardCapabilities:
> > 0x8bdf623c: ATR:
> > 0x8bdf623c: 3B
> > 0x8bdf623c: 16
> > 0x8bdf623c: 94
> > 0x8bdf623c: 01
> > 0x8bdf623c: 01
> > 0x8bdf623c: 02
> > 0x8bdf623c: 07
> > 0x8bdf623c: 01
> > 0x8bdf623c: 00
> > 0x8bdf623c:
> > 0x8bdf623c: Card parameters from ATR:
> > F1 = 09 (5000 KHz), D1 = 04, I = 00, P = 32, N = 00
> > 0x8bdf623c: PTS parameters (PTS_TYPE_DEFAULT):
> > F1 = 01 (3571 KHz), D1 = 01 (9600 Bps, 2 Stop Bits)
> > 0x8bdf623c: Calculated timing values:
> > Work etu = 105 micro sec, Guard time = 0 micro sec
> > 0x8bdf623c: T=0 Values from ATR:
> > WI = 10
> > 0x8bdf623c: T=0 Timing from ATR:
> > WT = 1008 ms
> > 0x8bdf623c: Mode: Negotiable
> >
> >
> > 0x8bdf623c: build-in Smart Card Reader !TLP3ReaderPower: Exit (0)
> > 0x8bdf623c: <<==TLP3ReaderPower( )
> > 0x8bdf623c: <<==SMCDeviceIoControl( )
> > 0x8bdf623c: SCI!(SmartcardDeviceControl): Exit
> > 0x8bdf623c: <<==SmartcardDeviceControl( )
> > 0x8bdf623c: <<==SCR_IOControl( )
> >
> > 0x8bdf623c: ==>>SCR_IOControl( )
> > 0x8bdf623c: ==>>SmartcardDeviceControl( )
> > 0x8bdf623c: SCI!(SmartcardDeviceControl): Ioctl = GET_STATE
> > 0x8bdf623c: default
> > 0x8bdf623c: IOCTL_SMARTCARD_GET_STATE
> > 0x8bdf623c: <<==SMCDeviceIoControl( )
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> > 0x8bdf623c: SCI!(SmartcardDeviceControl): Exit
> > 0x8bdf623c: <<==SmartcardDeviceControl( )
> > 0x8bdf623c: <<==SCR_IOControl( )
> >
> > 0x8bdf623c: ==>>SCR_IOControl( )
> > 0x8bdf623c: ==>>SmartcardDeviceControl( )
> > 0x8bdf623c: SCI!(SmartcardDeviceControl): Ioctl = GET_ATTRIBUTE
> > 0x8bdf623c: default
> > 0x8bdf623c: ==>>OCTL_SMARTCARD_GET_ATTRIBUTE
> > 0x8bdf623c: SCARD_ATTR_ATR_STRING
> > 0x8bdf623c: <<==SMCDeviceIoControl( )
> > 0x8bdf623c: SCI!(SmartcardDeviceControl): Exit
> > 0x8bdf623c: <<==SmartcardDeviceControl( )
> > 0x8bdf623c: <<==SCR_IOControl( )
> >
> > 0x8bdf623c: ==>>SCR_IOControl( )
> > 0x8bdf623c: ==>>SmartcardDeviceControl( )
> > 0x8bdf623c: SCI!(SmartcardDeviceControl): Ioctl = *** UNKNOWN ***
> > 0x8bdf623c: IOCTL_SMARTCARD_CANCEL_BLOCKING
> > 0x8bdf623c: SCI!(SmartcardDeviceControl): Exit
> > 0x8bdf623c: <<==SmartcardDeviceControl( )
> > 0x8bdf623c: <<==SCR_IOControl( )
> > 0x8bdf623c: ==>>SCR_Close( )
> > 0x8bdf623c: build-in Smart Card Reader : Close(321ac0) - entered
> > 0x8bdf623c: ==>>ValidateAndEnterDevice( )
> > 0x8bdf623c: <<==ValidateAndEnterDevice( )
> > 0x8bdf623c: <<==SCR_Close( )
> > *****
> > I think after driver returns ATR string to OS by SCARD_ATTR_ATR_STRING
> > of OCTL_SMARTCARD_GET_ATTRIBUTE in Smcioctl.c, OS doesn't recognise ATR
> > correctly or OS doesn't support this type smart card or the ATR string
> > format returned is error, so calling IOCTL_SMARTCARD_CANCEL_BLOCKING.
> > the card that I is using is SIM card issued by china mobile, unsureing
who
> > produces it.
> >
> > I ever use ATR=0x3f0x670x250x000x210x200x000x0F0x680x900x00
rather
> > than reading from card, the card state is SCARD_SPECIFIC, when the ATR
is
> > returnd to OS,IOCTL_SMARTCARD_CANCEL_BLOCKING still is called.
> >
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> >
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