

Re: Smartcard CSP Problem

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From: Eric Perlin [MS] (ericperl_at_online.microsoft.com)

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The answer to 1 depends on the scenarios you want to cover. It would work for S-MIME. It won't for Smartcard Logon.

Emulating a smartcard reader is required for smartcard logon. Winlogon uses the standard smartcard APIs to detect readers and cards.

The answer to 3 is NO (see above).

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Eric Perlin [MS]

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"WinstonT" <wyt168@earthlink.net> wrote in message

news:n3pEd.3215\$pZ4.1865@newsread1.news.pas.earthlink.net...

> We are trying to do similar things too--except we do have a hardware USB
> flash drive with an embedded crypto processor to perform the encryption.

> However, the crypto processor is not a smart card and it has its own
crypto

> interface API for the application to access its crypto functions.

> We are trying to write a custom CSP to allow apps to access the crypto
> processor via the CryptoAPI to perform things like two factor

> authentication. In a sense, we want the USB token to perform the exact
> function of a smart card.

> Here's my questions:

> 1. Would a simple CSP DLL work in this case? My idea is to write the CSP
DLL

> to access the native crypto processor's API and wrap them so as to expose
> these native API's as the CryptoSPI.

> 2. Is there a need to emulate a smart card? If the answer to Q1 is no,
then

> I may have to write a driver to virtualize our USB token as a smart card.
Do

> I have to emulated the complete PC/SC interface? i.e. do I have to emulate
> all the card tracking functions, the T=0, T=1 transactions, etc.?

> 3. From your comments below, it appears that MSGina actually monitor the
> card insertion/removal events to check for the physical presence of a
smart

> card. Can we define a new custom class of devices such as USB tokens such
> that they can also be allowed for WinLogon or authentications?

> Best regards,

> Winston

>

> "Eric Perlin [MS]" <ericperl@online.microsoft.com> wrote in message

> news:%23T0VpV%232EHA.1076@TK2MSFTNGP09.phx.gbl...

> > You don't need to emulate a smartcard CSP for it to work with S-MIME. A
> > software CSP can be used in this case.

> > But your "simulated" smartcard CSP is not going to work for Windows
logon.

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> > Winlogon/msgina really look for physical smartcards.
> > Without something that's exposed through the smartcard subsystem, you're
> > not
> > even going to get a PIN prompt.
> > --
> > Eric Perlin [MS]
> > This posting is provided "AS IS" with no warranties, and confers no
> > rights.
> > ---
> >
> > "Alf" <alf1982@hotmail.de> wrote in message
> > news:eoy#CMglEHA.2624@TK2MSFTNGP11.phx.gbl...
> >> Hello, maybe somebody can help me out!
> >>
> >> I am to develop a SmartCard CSP, but with no actual SmartCard behind
it,
> > but
> >> rather a Software System that simulates it.
> >>
> >> I so far developed a CSP which wrappes the MS Base CSP for the common
> >> functionality and will use the System for the Rest.
> >>
> >> Now, I have a logical problem.
> >>
> >> The CSP should be used for Mail Signing and encrypting in Outlook, as
> >> well
> >> as for windows logon.
> >>
> >> If I understood the concept of the certificate handling in windows, you
> > have
> >> to enroll a certificate for a certain user who is present in the active
> >> directory - let's call him Bob. When enrolling this certificate, you
> > choose
> >> the type (smartcard certificate) and the corresponding CSP (in this
case,
> > my
> >> CSP).
> >>
> >> The result of the enrollement would be a new certificate stored on the
> >> SmartCard and installed in windows.
> >>
> >> Question: Am I righth with the above?
> >> Then - next Question: How does the enrollemnt process create and store
> >> the
> >> certificates on the SmartCard since the CryptoApi (CP*) functions do
not
> >> provide certification handling - Does the enrollement task itsself
store
> > the
> >> certificate to the SmartCard? (And how, cia driver?)
> >>
> >> Are there any other usefull documentations on what a SmartCard CSP has
to
> >> implement?
> >>
> >> Thanks!
> >>
> >>
> >>
> >
> >
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