

## Re: Auto Restart a Custom Shell on termination

*Source:*

<http://www.tech-archive.net/Archive/WinXP/microsoft.public.windowsxp.embedded/2004-12/1140.html>

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*From:* KM ([konstmor\\_at\\_nospam\\_yahoo.com](mailto:konstmor_at_nospam_yahoo.com))

*Date:* 12/25/04

Date: Sat, 25 Dec 2004 11:43:23 -0800

Slobodan,

Right guess. The userinit.exe does use hardcoded explorer.exe (more precisely – %SystemRoot%\explorer.exe). Easy to find out with an Unicode binary search.

When I deal with different shells for Windows OSes I also prefer writing my own agent app that will take care of launching whatever

I need to depending on user rights. Just more control from my own code :-)

Yaron,

Anyway, there is possible another trick (on NTFS only, though):

- have explorer.exe as default shell for any user. AutoRestartShell=1
- after build, rename the explorer.exe to something like MSexplorer.exe
- rename your custom shell app to explorer.exe
- have a peice of code in your custom shell app to launch explorer.exe (e.g., CreateProcess). If

MSexplorer.exe launched properly, do nothing then.

- at runtime lock down MSexplorer.exe access permission (NTFS security) to Admin account only. (or automate this with cacls.exe during FBA).

I have never tried this but it may work just fine.

Only problems we can expect from some system components that have explorer.exe hardcoded and rely on some MS explorer.exe functionality much.

Also, regarding the scripting you posted the link to... You are probably aware that most of the scripts there are based on WMI. WMI

component stack is pretty heavy, especially for a Minlogon image. Also, from performance point of view, a monitoring script is way

too worse than you own app (even VB based, but C++ is definitely better). Also,

Regards,

Konstantin

microsoft.public.windowsxp.embedded: Re: Auto Restart a Custom Shell on termination

> *Hi Yaron,*

>

> *I'm still wondering why this functionality do not work for your shell also.*

> *Personally I would prefer to solve this problem rather than to write application for this purpose. Especially since functionality*

> *is*

> *already there.*

>

> *Problem might be with userinit.exe program that use hardcoded explorer.exe file name for some purposes. Maybe (just maybe) if your*

> *application was called explorer.exe autorestart would work for you.*

>

> *In mean time you can use similar approach that I use on minlogon images.*

> *Your first program that is started should launch "your shell" and stay active in background.*

> *Now when your shell is closed you can respawn it again. Also you can use this application to control/implement software and*

> *hardware*

> *WDT features if you need them.*

>

> *Regards,*

> *Slobodan*

>

> *"YaronM" <nospam> wrote in message news:uub8Nyo6EHA.3616@TK2MSFTNGP11.phx.gbl...*

>> *Hi Slobodan and KM,*

>>

>> *I start my custom shell as described in*

>>

>> <http://msdn.microsoft.com/library/default.asp?url=/library/en-us/dnxpesp1/html/tchDifferentShellsForDifferentUsers>

>> *the default shell is Explorer.exe and is used for the local administrator.*

>> *the Custom-Shell is user specific and is used for a limited-user account.*

>> *I tried using the AutoRestartShell Dword but it only affect the Explorer..*

>> *I'm thinking maybe to create somekind of a KeepAlive service that will*

>> *monitor the task list and will re-launch the shell if it fails..*

>> *I understood that I can't mix Minlogon and Winlogon but I still need this*

>> *functionality.*

>>

>> *any ideas would be great.*

>>

>> *thanks,*

>>

>> *YaronM*

>>

>>

>> *"KM" <konstmor@nospam\_yahoo.com> wrote in message*

>> *news:%23ewy5le6EHA.3756@TK2MSFTNGP14.phx.gbl...*

>>> *Yaron,*

>>>

>>> *Tha Config flag is Minlogon specific.*

>>> *With Winlogon you should use AutoRestartShell dword flag.*

>>>

>>> *Minlogon and Winlogon can't be mixed as they esentially provide similar*

Re: Auto Restart a Custom Shell on termination

>> > *functions (with a bit different approach) and have the same name binaries.*  
>> >  
>> > *How do you start your own custom shell application?*  
>> >  
>> > *KM*  
>> >  
>> >> *thanks Solobodan. I saw the setting you mention in the minlogon*  
>> >> *component.*  
>> >> *I currently use the "Windows Logon (Standard)" component and it doesn't*  
>> >> *have it.*  
>> >> *I'm not sure if I can add both milogon and the "Windows Logon (Standard)"*  
>> >> *and which one will take effect.*  
>> >>  
>> >> *basically, what I am trying to achive is to have the Explorer as the*  
>> >> *default Shell and my Custom-Shell as an alternative shell that I will*  
>> >> *manually configure for a specific user. and I need both Explorer and my*  
>> >> *Custom-Shell to be AutoRestarted when they accidently crash.*  
>> >>  
>> >> *thanks,*  
>> >>  
>> >> *YaronM*  
>> >>  
>> >>  
>> >> *"Slobodan Brcin (eMVP)" <sbrcin@ptt.yu> wrote in message*  
>> >> *news:%234guZ9Y6EHA.3076@TK2MSFTNGP15.phx.gbl...*  
>> >>>>  
>> >>>> <http://groups-beta.google.com/group/microsoft.public.windowsxp.embedded/msg/3592185ea728a439>  
>> >>>>  
>> >>>> *Regards,*  
>> >>>> *Slobodan*  
>> >>>>  
>> >>>> *"YaronM" <nospam> wrote in message*  
>> >>>> *news:OyMeD1Y6EHA.2876@TK2MSFTNGP12.phx.gbl...*  
>> >>>>> *Hello,*  
>> >>>>>  
>> >>>>> *I'm testing my new custom shell on XPe.*  
>> >>>>> *I've tried using the AutoRestartShell = 1 registry value to force*  
>> >>>>> *windows to*  
>> >>>>> *reload my custom shell in case of an unexpected termination.*  
>> >>>>> *unfortunately,*  
>> >>>>> *it doesn't work.*  
>> >>>>>  
>> >>>>> *I thought about creating a new system-service application that will*  
>> >>>>> *monitor*  
>> >>>>> *the custom-shell, but I don't know how to accomplish that*  
>> >>>>> *programmatically.*  
>> >>>>>  
>> >>>>> *what techniques do you use to get your shell to auto restart?*  
>> >>>>>  
>> >>>>> *thanks in advance,*  
>> >>>>>

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>> >>>> YaronM  
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