Subject: Restoring TrayIcon control
Posted by lucpolak on Wed, 20 Apr 2011 07:53:35 GMT
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Hello, i have another problem with the tray icon.

When the explorer.exe crashes (oh yes it's happens ), the trayicon is not correctly restored.

For example, here is my TrayIcon :

I kill explorer.exe (sorry for ms ) and restart it and my trayIcon is missing

So the question is : Can I handle this ? Can i detect an explorer crash and restore the TrayIcon Ctrl ?

Thanks a lot

Lucas

## File Attachments

1) tray1.png, downloaded 1409 times




2) tray2.png, downloaded 1633 times




Subject: Re: Restoring TrayIcon control
Posted by lucpolak on Fri, 22 Apr 2011 07:56:03 GMT
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Up up

I found on the web that restoring the TrayIcon can be made by catching the WM_TASKBARCREATED message.

It can be done by declaring this in the WindowProc fct :

// Somewhere in the code or header ....
UINT WM_TASKBARCREATED = 0 ;

```
// In the WindowProc
if (message == WM_CREATE)
    WM_TASKBARCREATED = RegisterWindowMessageA("TaskbarCreated");

if (message == WM_TASKBARCREATED)
{
  // Restore the icon ... how can i do it ?
}
```

I've tried de call TrayIcon::Show() method but it crash with a Shell_NotifyIcon Exception because in the Notify Fonction (TrayIconWin32.cpp) we have this line :

```
 if(visible) {
  nid.flags = NIF_ICON|NIF_MESSAGE|NIF_TIP;
  if(nid.icon)
   DestroyIcon(nid.icon);
  nid.icon = IconWin32(icon);
  String stip = ToSystemCharset(tip);
  int len = min(stip.GetLength(), 125);
  memcpy(nid.tip, stip, len);
  nid.tip[len] = 0;
  VERIFY(Shell_NotifyIcon(msg, (NOTIFYICONDATA *)&nid));
```

I change this to :

```
 if(visible) {
  nid.flags = NIF_ICON|NIF_MESSAGE|NIF_TIP;
  if(nid.icon)
   DestroyIcon(nid.icon);
  nid.icon = IconWin32(icon);
  String stip = ToSystemCharset(tip);
  int len = min(stip.GetLength(), 125);
  memcpy(nid.tip, stip, len);
  nid.tip[len] = 0;
  while (Shell_NotifyIcon(msg, (NOTIFYICONDATA *)&nid) == FALSE)
  {
   Sleep(100);
  }
```

but it change nothing ...

Helps please

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Subject: Re: Restoring TrayIcon control
Posted by lucpolak on Tue, 26 Apr 2011 14:25:19 GMT

Hello,

nobody can helps me  ?

I'm trying to understand the mecanism of UPP windows and it's not easy .

I'm find in the Win32Wnd.cpp the main WndProc witch enables me to initialize correctly my WM_TASKBARCREATED variable. This piece of code works fine and catch correctly the explorer.exe crashes :

```
LRESULT CALLBACK Ctrl::WndProc(HWND hWnd, UINT message, WPARAM wParam,
LPARAM lParam)
{
 if (message == WM_CREATE)
 {
  WM_TASKBARCREATED = RegisterWindowMessageA("TaskbarCreated") ;
  ELOG("Ctrl::TASKBARCREATED = "<<WM_TASKBARCREATED);
 }

 if (message == WM_TASKBARCREATED)
 {
  ELOG("Ctrl::TASKBARCREATED");
  // How can i translate and recreate order to the TrayIcon class ?
 }
[...]
```

But how can I recreate tray icon  when the message WM_TASKBARCREATED is received ????
How can i Translate this message to the TrayIcon::WindowProc ????

HElps Helps helps ....

Lucas

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## Subject: Re: Restoring TrayIcon control [SOLVED]
## Posted by lucpolak on Tue, 26 Apr 2011 15:20:21 GMT



After a long time, i've found the solution :

In CtrlCore, add a static variable to the class Ctrl to store the value of Windows Message TaskbarCreated :

[...]

```
#ifdef PLATFORM_WIN32
 static UINT WM_TASKBARCREATED;
#endif

 static LRESULT CALLBACK WndProc(HWND hWnd, UINT message, WPARAM wParam,
LPARAM lParam);
```

In Win32Wnd.cpp, initialize this static variable :

```
static bool sFinished;

UINT Ctrl::WM_TASKBARCREATED = 0;
[...]
```

And in the WndProc function, Register the TaskbarCreated Message :

```
if (message == WM_CREATE)
 {
  WM_TASKBARCREATED = RegisterWindowMessageA("TaskbarCreated") ;
  ELOG("Ctrl::TASKBARCREATED = "<<WM_TASKBARCREATED);
 }
```

Finally, in the TrayIconWin32.cpp, restore the icon if needed :

```
LRESULT TrayIcon::WindowProc(UINT message, WPARAM wParam, LPARAM lParam)
{
 if (message == WM_TASKBARCREATED)
 {
  RLOG("TrayIcon::WM_TASKBARCREATED");
  visible = false;
  Show();
 }
 else if(message == UM_TASKBAR_)
[...]
```

So, can you integrate it in the next revision of Upp ?

Thanks,

Lucas

Subject: Re: Restoring TrayIcon control [SOLVED]
Posted by lucpolak on Tue, 26 Apr 2011 16:15:23 GMT
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I have another patch to do about the Shell_NotifyIcon function.

There are some problems with this function like discussed here :

http://msdn.microsoft.com/en-us/library/bb762159(v=vs.85).aspx
or here :
http://issuetracker.delphi-jedi.org/bug_view_advanced_page.p hp?bug_id=3747

A solution can be to modify the TrayIcon::Notify function like this :

```
void TrayIcon::Notify(dword msg)
{
 if(visible) {
  nid.flags = NIF_ICON|NIF_MESSAGE|NIF_TIP;
  if(nid.icon)
   DestroyIcon(nid.icon);
  nid.icon = IconWin32(icon);
  String stip = ToSystemCharset(tip);
  int len = min(stip.GetLength(), 125);
  memcpy(nid.tip, stip, len);
  nid.tip[len] = 0;
  BOOL Status = Shell_NotifyIcon(msg, (NOTIFYICONDATA *)&nid);

  // To prevent from Shell_NotifyIcon bugs...
  // discussed here : http://msdn.microsoft.com/en-us/library/bb762159(v=vs.85).aspx
  // and here : http://issuetracker.delphi-jedi.org/bug_view_advanced_page.php?bug_id=3747
  if (Status == FALSE)
  {
   // The status of Shell_NotifyIcon is FALSE, in the case of NIM_ADD, we will try to Modify
   // If the modify is OK then we cas consider that the add was worked.
   // Same, case with delete, we can try modify and if KO then we can consider that is icon
   // was deleted correctly. In other cases, we will retry after 100ms
   DWORD ErrorCode = GetLastError();
   if ( (ErrorCode == ERROR_SUCCESS) || (ErrorCode == ERROR_TIMEOUT) )
   {
    int retryCount = 0;
    BOOL retryResult;
    do
    {
     Sleep(100);
     if (msg == NIM_ADD) retryResult = Shell_NotifyIcon(NIM_MODIFY, (NOTIFYICONDATA
*)&nid);
     else if (msg == NIM_DELETE) retryResult = !Shell_NotifyIcon(NIM_MODIFY,
(NOTIFYICONDATA *)&nid);
     retryCount++;
```

```
    }while( (!retryResult) && (retryCount<50) );
   }
  }
    }
}
```

Thanks for patching.

Lucas

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Subject: Re: Restoring TrayIcon control [SOLVED]
Posted by mirek on Wed, 27 Apr 2011 04:57:38 GMT
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lucpolak wrote on Tue, 26 April 2011 11:20
So, can you integrate it in the next revision of Upp ?

Thanks,

Lucas

Yes! And sorry for delay. Good find.

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Subject: Re: Restoring TrayIcon control [SOLVED]
Posted by mirek on Wed, 27 Apr 2011 05:14:29 GMT
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lucpolak wrote on Tue, 26 April 2011 12:15I have another patch to do about the Shell_NotifyIcon function.

There are some problems with this function like discussed here :

http://msdn.microsoft.com/en-us/library/bb762159(v=vs.85).aspx
or here :
http://issuetracker.delphi-jedi.org/bug_view_advanced_page.p hp?bug_id=3747

Applied in altered form (what if notify is NIM_MODIFY?

Mirek

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Subject: Re: Restoring TrayIcon control [SOLVED]
Posted by lucpolak on Thu, 28 Apr 2011 06:59:49 GMT
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mirek wrote on Wed, 27 April 2011 07:14

Applied in altered form (what if notify is NIM_MODIFY?

Mirek

It's right

Thanks a lot for patching. ^^