

Re: Fade into a Picture Box or Image Control

Source:

<http://www.tech-archive.net/Archive/VB/microsoft.public.vb.winapi.graphics/2005-06/msg00024.html>

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 - *Date:* Mon, 13 Jun 2005 23:54:26 +0100
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> Still pretty damn fast! Thanks, my friend.
>
> I have got this fade-in working reasonably well but I would like the effect
> to be just as smooth as possible while only taking about 2 seconds from
> start to finish.
>
> I'm calling the following timer event every 20 ms. After the alpha value is
> increased and AlphaBlend() is called, I am calling my PictureBox.Refresh to
> display the changes. Is there a better way than .Refresh to allow User to
> see this effect?

The killer with fixed increments like this is that whilst it may play great on your hardware accelerated hyperthreaded quad-Zeon, Joe users old P3 only manages to draw a couple of frames a second and the same animation takes forever. The way to circumvent this problem but still retain the high performance where available is to make your animation time based rather than frame based, this also means you can drop the timer control which can actually slow down the performance on faster machines because it doesn't 'tick' fast enough!
To change your animation to a fixed duration, you'll need something like this:

```
Private Declare Sub Sleep Lib "Kernel32.dll" (ByVal dwMilliseconds As Long)
Private Declare Function timeGetTime Lib "WinMM.dll" () As Long

Private Sub RunFade(ByVal inFrom As Byte, ByVal inTo As Byte, ByVal inDuration As Single)
Dim StartTime As Long, EndTime As Long, TimeNow As Long
Dim MSecDuration As Long
Dim Opacity As Byte

' Don't be silly..
If (inDuration <= 0) Then Exit Sub

' Work out animation parameters
StartTime = timeGetTime()
MSecDuration = CLng(inDuration * 1000)
EndTime = StartTime + MSecDuration
```

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TimeNow = StartTime

Do

' Where am I?

Opacity = (((TimeNow - StartTime) / MSecDuration) * (inTo - inFrom)) + inFrom

Call DrawFrame(Opacity)

' You're feeling sleepy...

Call Sleep(1)

' You could stick DoEvents in here if you want your app to remain responsive

' Woah, what time is it now??

TimeNow = timeGetTime()

Loop While (TimeNow < EndTime)

' Always ensure you draw the end point

Call DrawFrame(inTo)

End Sub

Where Dr