

## Re: RosAsm – right click

**Source:** <http://coding.derkeiler.com/Archive/Assembler/alt.lang.asm/2004-05/1243.html>

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**From:** Beth (*BethStone21\_at\_hotmail.NOSPICEDHAM.com*)

**Date:** 05/26/04

Date: Wed, 26 May 2004 03:27:25 +0100

The Wannabee wrote:

> *Beth wrote:*

>> *Wrong; NTFS (Windows) and ext3 (Linux) all the way...only time I*

>> *ever see FAT is for floppies (which are rarely needed these days*

>> *:) because you're not given a choice in the matter there...oh,*

>> *and I suppose there's that ISO / Joliet nonsense for CDs too*

>> *(which I confess to never having looked into to really know*

>> *what's going on there specifically)...*

>>

>> *Note: If you're still using FAT32 under XP or some other*

>> *NT-based version, then open up a DOS prompt and type*

*"CONVERT*

>> */?" to discover a handy little utility that can automatically*

>> *change that situation on your behalf...NTFS has journalling,*

>> *security, quotas, streams, compression and so forth...it's also*

>> *designed to lay out files in a fast access*

*manner...although,*

>> *yes, this otherwise "nice idea" is generally defeated in*

>> *practice by the journalling and the fact that Windows is*

*slow,*

>> *bloat and crap, anyway...*

>

> *Hi Beth ; -)*

Wannabee :)

> *So you are even fatter (FETT/FETA!) :-)? No. When it comes to NTFS, I am*

> *against on prinisple matters. Until I know exaxtly what it does. And I*

> *dont. Better safe than sorry.*

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It's an evolved HPFS ("High Performance File System"),  
basically...

[http://www.ntfs.com/ntfs\\_basics.htm](http://www.ntfs.com/ntfs_basics.htm)

<http://linux-ntfs.sourceforge.net/ntfs/index.html>

<http://www.lesbell.com.au/hpfsfaq.html>

(about HPFS but NTFS is an "evolved" version of HPFS)

Blah–blah–blah...

Google!!

> *For all I know it has properties that will*  
> *one day disallow me to play my MP3s.*

No, that's called "Palladium"...

> *Strange how you Beth seems to hate*  
> *M\$ so much, but still promote using their technology.*

Ummm, I'm the one working on and promoting a Linux  
assembler...you're the one evangelising a "Win32 specific"  
assembler with lines like "RosAsm is the future and all other  
assemblers will die when it realises its potential!" and so  
forth...

I was NOT "promoting" NTFS...I stated "\_IF YOU'RE STILL USING  
FAT32\_" as a condition...and, even then, I took a pretty  
underhand stab at Microsoft that the "least distance" design of  
NTFS is actually logically defeated by having a "journal" stuck  
in the middle of the drive where, for journalling to function  
properly, it must always return to write the current operation  
to the journal before actually doing that operation...it's a  
logical contradiction to lay out the files near each other to  
reduce the distance the read / writes heads have to travel...but  
then have one big "journal" file in the middle that, oh, you  
have to go and write down all your current operations to the  
"journal" before actually doing them...so, you're always rushing  
back and forth to the "journal" file...

[ Nope, the "journalling" should also be deliberately "localised"  
in the same way...so that the "journal" gets written right next  
to the files being operating on and divided across the file  
hierarchy...how do you find the "journal" after a crash?  
Easy...when the read / write head is about to move from one  
directory to another, it drops a note of where it is going into  
that directory's "journal"...and proceeds to do that for each  
directory until the directory where the work is to be carried  
out is reached, where the "journal" records what operation it's

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about to do...then the "least distance" concept is not defeated (the read / write head is either literally hovering over the journal in that directory or a file right next to it – "least distance" – that it's carrying out the actual operation in the journal about...when moving from directory to directory to reach a destination to perform an operation, it simply drops a note of this in that directory's "journal" about where it is going...leaving a "paper trail" from the root directory pointing to where the current operations are...when directed to some other directory elsewhere and it's a relative path ("..\Other") then it simply "undoes" the "paper trail" on its way back, changing the entries to guide the trail to this new directory...if it's an absolute path from the root directory ("C:\Folder\Directory\File.dat") then, well, when it returns to the root directory it can "cheat" – no need to "back-track" the entire distance "undoing" the "paper trail" in all the journals – by just returning to the root directory and wiping out the entry in that directory, severing the "trail" at its start...and, there, journalling and "least distance" without actually conflicting with each other... ]

Anyway, as I was saying, I was NOT promoting NTFS (it doesn't do the above, for example...and, thus, in many is, indeed, crap ;)...I was actually simply insulting FAT more than NTFS, as an even worse file system again...the "\_IF YOU'RE STILL USING FAT32\_" condition was an integral part of what I was saying there...that's, of course, kind of why I wrote it, on the presumption people might, like, kind of read it and understand it and that kind of thing...you know?

Think of it more like: "If you're still poking your own eyes out with red hot poker, then consider being punched in the face instead"...this is not a suggestion that being punched in the face is a good thing, it's a suggestion that it's better to getting your own poked out with red hot poker..."better" is a comparative and, thus, \_relative\_ word...but this doesn't always mean "better" has anything to do with "good", if you catch my drift...neither having your eyes poked out or being punched in the face is "good"...but one is, indeed, "better" than the other...and it would be "best", for sure, not to have either your eyes poked out nor a punch in the face ;)...

> *Maybe I am even more paranoid than you ?*

Quite possibly; But, ummm, is this some underhand "you're a mad, paranoid nutter!" comment written between the lines here? Actually, I'm not that paranoid, really...I simply apply the common sense military-style thinking of "Hope for the best...but always \_plan for worst\_"...it's a method that avoids all disappointments and nasty surprises, without totally requiring walking around with a big frown, depressed at everything ;)...

> *XP suck, but you use it.*

But it's the most stable Windows there is...note, again: No "promotion" there...they're all unstable, slow, bloated security nightmares...all of them...but XP is the least unreliable so far...yes, it's slow and bloated...yes, it's got stupid default security settings...yes, yes, yes, to a million things...but, overall, of all the mountains of crap Microsoft have offered over the time, XP is the least crap of a whole big bunch of crap...

XP is also an NT-based kernel...NT was actually put together by hired-in VMS programmers originally and, thus, though Microsoft's grubby fingerprints are all over it making it crap once more, this does mean that in some small little ways here and there, NT-based Windows do have some reasonable and alright things...if you like, the bits MS didn't touch but hired in people who actually knew what they were doing to implement it for them, are actually "not bad" in places...and, yeah, to a degree, NTFS is part of that...FAT is a cheap and cheerful Microsoft "hack" that has been hacked and hacked until...well, have you seen the "long filenames" documentation and how FAT implements that? It's a crap design, badly implemented and then hacked out of all recognition into a total mess...it ain't to say NTFS is the best file system but, well, at least it IS a file system...FAT is just some "cheap hack" stuck onto DOS without any great thought being put into it at all...and, over the years, it's been mutilated by Microsoft...much like it's hard to call DOS itself an "operating system" or those first pathetic attempts to write Windows as a DOS application which couldn't even overlap windows is as equally hard to call a "GUI"...FAT is difficult to take seriously as really a "file system"...

> *Win98 1st edition, is times faster.*

Indeed, I don't doubt it is; But part of the reason why that's the case is: No security, no FS journalling, no proper microkernel structure, etc....much like a very simple assembler that has no macro system and no constant expression support and can only deal with the very, very simplest of raw mnemonics and nothing else...that an assembler like this could very well be many times faster than an assembler with a good macro system and able to deal with complex constant expressions and data typing and "scope" and conditional assembly and...and...and a ton of other useful features like that...

But the reason that the simpler assembler is faster is simply because, well, it just isn't as good a tool and is only running faster because it has much less capability...

So, indeed, I don't doubt that Windows 98 will, for those `_five minutes only_` it's running before it bombs out to the "blue screen of death" again and again, go faster than XP...but if you add up all the time of your PC constantly rebooting because it crashes every five minutes and all that work you lose in the crash that heads straight to "digital oblivion" (the place from which NOTHING returns...kind of like a black hole, I suppose ;), then the speed advantage is soon dwarfed by the fact that you can't actually get anywhere...because, yes, you're speeding along and then – bang! – the BSOD and then there goes all that work and you've got to start all over again after a long reboot...until – bang! – BSOD again...there goes all that work again...and the loooong reboot...then we try to pick up where we left off and – bang! – BSOD once more...

Not that XP isn't capable of a BSOD but they are now at least rare happenings that you actually have to work hard to cause...price of this slightly better reliability and security and a recoverable file system and so forth? Takes an extra second to load something sometimes...ooh, big deal...and not everything's slower necessarily...some things are about the same and could that be some DirectX stuff running slightly faster because while Win98 still carries some 16-bit code for some of these things, XP has finally gotten most things 32-bit (I would say "all", except, simply, I don't trust Microsoft...they've got something hidden away somewhere that they ain't talking about, I bet ;)...)

> *My asm applications that are pretty slow on XP (graphics), are so*  
> *fast drawing on win98 1st edition that I have problems sizing them....*  
> *because they react so fast to the size operation.*

Your programs have problems reacting to a window sizing because of "fast reactions" in Windows 98? What kind of problems? Starts drawing it wrongly?

Oh, please, Wannabee...who do you think you're speaking to? A line like this may work on others but...well, single-threaded, right? Sits in a message loop and then uses GDI to respond to a WM\_PAINT?

There's no "timing" involved...it's single-threaded and sequential...the speed will have `_no effect_` on how it operates...only on how quickly it draws things and nothing else...

Or, put another way, if you ain't just making this up and your ASM programs really are drawing things wrongly because they "react too fast" to the sizing operation, then you've just `_got`

to be\_ coding it wrongly somewhere...

Order of events during a size drag:

GetMessage -> WM\_PAINT -> "PaintProc" draws the entire window ->  
GetMessage -> WM\_PAINT -> "PaintProc" redraws entire window ->  
GetMessage -> WM\_PAINT...etc., etc....

So, how "fast" it reacts isn't just Windows but your own WM\_PAINT handler...which, under Windows' message loop scheme in a single-threaded program, \_WON'T\_ return to get another message in the loop until you've drawn what you need to draw...

Also, to add insult to injury, WM\_PAINT messages are \_consolidated\_ together on the message queue...\_unlike\_ other messages, these don't build up on the message queue in the same way, however "fast" they are sent to an application...

If you're not making this up, then you must be programming your ASM routines wrong...these aren't "timing" related operations and, though event-driven, Windows is still firmly single-threaded and sequential in its operations (unless, of course, you deliberately start multiple threads...in which case, you must be messing up your concurrency constructs that keep the threads in order...by design, WM\_PAINT messages could happen at any time so, even under a multi-threaded program, this should have nothing to do with "timing" or you've design it or written it wrongly...as it doesn't make too much logical sense that because the system runs a little faster, the graphics should suddenly screw up...I mean, if you run it on a PC that's three times as fast again, does the graphics screw up even more because of the even faster "reactions" of the better hardware? If it does, you're coding it wrongly and should proceed to review the entire design of your code)...

> *Not so on XP. Somebody told you XP was faster huh? Well, its not.*

I know...I just said that myself...but "faster" ain't necessarily "better" when you also value things like reliability, security, recoverability, etc....yeah, yeah, I know...it's \_WINDOWS\_ here so this stuff is, indeed, in incredibly short supply, even with XP...but, well, that's kind of the point...XP has the smallest crap offering about these things...but the other Windows are \_non-existent\_ with this stuff...totally void...completely absent...

Nobody "told" me anything, Wannabee...I know what's what sufficiently to have a reasonably useful opinion of it myself...the only thing I've been told is what you just said above about Win98 "reacting" so fast that it's somehow defying

its own design...which, if there's nothing wrong with your code, doesn't sound too credible...oh, I'm sure it runs faster...but not this rather bizarre "so fast, it stops working properly!" assertion...in which case, if this is the kind of quality I should expect from people "telling" me what system is best and so forth, I was right not to pay any attention...

I do have Windows 98 on a CD here and used to run it...but XP came with my PC and I gave it a try...and, yeah, nothing to write home about...no miracles anywhere...but, sorry, it's the best Windows that Microsoft have authored so far...of course, every version of Windows is utter crap...but it's the "least crap" out of a whole bunch of really crap things...

> *M\$ OS are allways slower, than last time, and XP is no exception.*

Yup; Quite right there...in fact, MS Oses suspiciously seem to slow down in a very subtle way as the pre-planned release date for the next Windows release draws near, no matter how much maintenance you do on the thing...I think they must deliberately put in some kind of "memory leak" style of thing into it so that you can't carry on using it indefinitely without re-installing it...and then that's when they hit people with "New! Windows XP 2!" adverts...

> *At least here, this is true. Theres*  
> *some things XP seems to do faster, like font drawing, but for the things I*  
> *need, antialized stretched bitmaps, or rather HALFTONE bitmaps, Win98 is*  
> *at least 3 times faster. I dont know why. Also, I have tried NTFS, and it*  
> *is NOT faster.*

Yeah, NTFS isn't faster...it's slower because it has to keep the "journal" all the time and has to check security permissions and there's some more "overhead" in keeping it all ticking over smoothly...plus, if you've got the compression (or encryption) switched on, then that's going to require compression / decompression all the time to slow it down further...blah-blah-blah...

NTFS isn't faster...but it is better...

Note, the comment about "files laid out in a fast access manner" was immediately followed by a counteraction that this, though, is entirely defeated by the need to "journal" every single operation all the time (and that's not the only thing conspiring to slow it down)...again, please pay attention to what I AM saying, not these strange things you invent that you think I'm

saying...files under NTFS are laid out according to a "least distance" principle, designed to, in theory, allow faster access but reducing the movement of the read / write head...BUT, I did not say it \_was\_ "faster"...in fact, I said the reverse and pointed out that this idea was "generally defeated in practice"...

Hey, English isn't your first language so perhaps you need to re-read things or something...I \_didn't\_ say it was "faster", I said that it was designed to lay out the files in a way to make access faster but that this was "generally defeated in practice", citing that the "journaling", for example, requires that details of operations are written to the journal all the time so that the FS can be "recovered" after a crash (and due to this being about recovering after a crash that can happen at any time, "journaling" \_CAN'T\_ be cached or anything...it must write to the "journal" prior to any critical disk operation...where's the "journal"? Oh, stuffed in a file in the middle of the disk...so, ummm, that stuff about putting files close together to reduce head movement? Oops, defeated in practice by the need to constantly rush off to the "journal" all the time...someone wasn't entirely thinking clearly while they were designing that, eh? ;)...

> *Maybe thats due to using a slower OS, but Win98 is faster*  
> *on al things I use it for, except for outputting fonts. Now*  
*truth be told,*  
> *XP is better to program DirectX in, because its more stable,*  
*but when the*  
> *app runs, it runs faster on 98. Not really scientifically*  
*tested, but for*  
> *my own apps at least, this is true.*

No; That sounds about right to what would be expected...Win9x often runs faster because, well, it simply \_does less\_...while the NT-based stuff does more but runs a little slower because of that...what NT is doing extra, though, is usually all the stuff that actually makes it a more reliable system...

[ The fonts? Well, just a case that – like the mouse pointer routines, which had an annoying "visual artifact" removed – the routines got re-written, for once, rather than re-used because it had to be changed from the ground up to support all the new graphical features like anti-aliasing everywhere and transparencies (like the "mouse shadow") and that kind of thing...as that code is newer because it's re-written, they must have also decided to improve the algorithm while they were there or something...after all, the mouse pointer routines were clearly getting "re-use" all the way through from Win3.x until XP changed it because the same "visual bug" of the pointer jumping when it's changing shape is present in them all...well,

is it the case that they also simply "re-used" their font rendering code from Win3.x up until XP...but the new style with XP and having to add in "clear type" so that the anti-aliasing worked on laptop screens properly and that kind of thing, meant that they finally went back over that font code and actually bothered to re-write it rather than "hack" it some more...and, like the mouse pointer "bug" was automatically cured by its re-write, they simply chose a much smarter algorithm or something when they went back to their font code to re-write that to support the newer features...well, that's my guess, anyway, looking at things and thinking what's most likely...only Microsoft's OS coders could actually say if that's what actually happened or not :) ]

> *Another thing I noticed when I tested XP was : they had removed OpenGL*  
> *default support, and DirectX on XP ran actually faster than Direct X on*  
> *98, when I used Counter Strike. The framerates for DirectX on XP was*  
> *identical to my OPENGL frames on 98. What the heck is that all about ? On*  
> *98 directX frame rates are 1/3 of openGL for CounterStrike. So DirectX on*  
> *XP is faster, above I was talking about GDI. See you.*

Embarassed that OpenGL was doing better than DirectX, Microsoft removed OpenGL default support so no-one would Hopefully notice...and then looked at how OpenGL was doing things better than they were and then just copied it??

Mind you, on Win9x, the DirectX drivers can sometimes be 16-bit, while they must be 32-bit all the way on XP...depending on that kind of thing, this could also be a factor, maybe...

But, no, don't know what that is for certain...all a bit strange, eh? Best not to spend too much brainpower on trying to fathom out Microsoft...they have no idea what they're doing half the time and they're the ones actually doing it! ;)

> *PS:*  
> *Now I have a problem Betty,*

Yes, I know...oh, wait...you mean a \_new\_ problem? Ah, well...carry on...

> *maybe the oracle will help me?*

Maybe; I'm Trinity, remember...not the Oracle...

Heck, I couldn't even point out where Delphi is on a map...

[ Although, at least I'd do better than these fine examples of "American geography" from Phil's website:

[http://fatphil.org/errors/american\\_geography.jpg](http://fatphil.org/errors/american_geography.jpg)

(Lucky Putin wasn't wanting to visit Switzerland...and where did Austria move to when no-one was looking? ;)

[http://fatphil.org/errors/american\\_geography2.jpg](http://fatphil.org/errors/american_geography2.jpg)

(this one is, though, absurdly bad...what the hell is Iraq doing there?!? And wasn't the country they're now labelling "Czech Republic" just referred to as "Switzerland" on the last map? Yup, next to Poland and the same shape...they can't even be consistent, let alone actually, you know, looking it up on an atlas that, like, has the countries in the right places (I mean, there's got to be one atlas or globe in America that's got the countries labelled correctly, surely? ;)...so, now where'd "Switzerland" gone and moved to? "These darn European countries! They just won't stop moving around!! Crap! Umm, let's just bomb the lot of them!!" ;)...

Kind of makes you worry...did Bush actually mean to invade Poland – you know, like his right-wing idol Hitler did – but they accidentally sent all the troops to Iraq? And, well: "seeing as we're here, we might as well invade this country instead, yeah?" ...this could actually go some way to explaining why they thought there might be WMD and had all that "evidence" to present...it was actually evidence of WMD programmes in Israel but they stuck the wrong labels on the files and folders because they'd been depending on CNN's maps to work out where all the countries were ;)

Woah! Cool, Phil...you're the "mathematician" that has been creating prime numbers that just so happen to coincidentally be illegal under the DMCA?

[http://www.theregister.co.uk/2001/09/11/worlds\\_first\\_decss\\_executable\\_prime/](http://www.theregister.co.uk/2001/09/11/worlds_first_decss_executable_prime/) ]

> *Read my entry in this thread to learn about the problem. Then come back an*

> *teach me all about it :-)*

>

>

<http://easbell.quanta-it.com/RosAsmForum/viewtopic.php?p=2054#2054>

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Ummm, what is it that you're doing there exactly? Creating your own COM object or something?

> *If you help me, you get a free directshow app, when its done :-)) :-)) I*

> *put you in the credits. Promise.*

Oh, it's "DirectShow"...that wasn't part of the core DirectX package until DX8 or whatever...and I've never really ever looked at it yet...can't really help you there, as I'm probably more "newbie" than you are with "DirectShow"...oh, well...didn't want to be put in the credits, anyway...but that's academic, as I don't really know what you're doing there...and by the time I study up on "DirectShow" and unravel what all your macros means, you'd have probably solved it yourself or found someone who does know what's going on there...sorry about that...

Beth :)