From:

Bill Gates

Sent:

Saturday, October 30, 1999 3:24 PM

To:

Eric Rudder

Subject:

RE: Windows 2000 breaking Office features

I didn't find a regini.exe in windows/system32 - I found a lot of other stuff.

I put the one you sent me in there and ran it so it will be interesting to see what happens.

---Original Message-From: Eric Rudder

Sent: Saturday, October 30, 1999 1:07 PM

To: Bill Gates

Subject: FW: Windows 2000 breaking Office features

<< File: regini.exe >>

i think it's in system32

-eric

---Original Message-

From:

Bill Gates

Sent:

Saturday, October 30, 1999 7:54 AM

To:

Eric Rudder

Subject: RE: Windows 2000 breaking Office features

I searched for a file named regini.exe on my machine and the search command didn't find it on drive c:. Where is it?

----Original Message--

From: Eric Rudder

Sent: Friday, October 29, 1999 8:06 AM

To: Bill Gates

Subject: FW: Windows 2000 breaking Office features

Importance: High

since i won't see you (or more accurately, your machine!) for a while, you might want to perform this operation on your own.

pls let me know if this doesn't solve your problem.

thx, eric

--Original Message-

Gerardo Bermudez (Exchange) From: Sent Friday, October 29, 1999 6:57 AM

Eric Rudder

Brian Valentine (Exchange); Iain McDonald (Exchange) Cc:

Subject: RE: Windows 2000 breaking Office features

Run "regini.exe outlook.reg" in Bill's machine to make this problem go away.

Outlook reg is a text file, in case you want to look at it. It creates a registry key that gives outlook the Win95/NT4 behavior when a process attempts to steal foreground from it.

If you need to get rid of it for whatever reason, just delete/rename the key.

Plaintiff's Exhibit

6676

Comes V. Microsoft

MS-CC-MDL 000000380561 CONFIDENTIAL

1

<< File: outlook.reg >>

----Original Message--

From: Gerardo Bermudez (Exchange) Sent: Thursday, October 28, 1999 7:17 PM

To: Rob Price (Exchange); Brian Valentine (Exchange); Kurt DelBene (Exchange); Steven Sinofsky Cc: Jon Thomason; Deborah Black (Exchange); David Cole; Jim Allchin (Exchange); Eugene Ho

(Exchange); S. Somasegar (Exchange); lain McDonald (Exchange); Rob Short (Exchange); Will

Kennedy (Exchange); Drew Carlson (Exchange)

Subject: RE: Windows 2000 breaking Office features

There's indeed a 100% repro case (this was sent to me by DrewC, Outlook dev)

- Set HTML as your default format and Word as your editor in Outlook. (Tools/Options/Mail Format)
- Exit Word & Outlook to get a clean slate.
- Boot Word (This is the key Word has to be running)
- Boot Outlook (I had to logoff or Outlook wouldn't restart in my machine for some reason....)
- File/New/Mail Message
- Bug: Word doesn't come to the foreground
- (Here is why we're dealing with this now)! couldn't find any reports of this in NT's bug database. (there might be one but it certainly didn't reach us) There's actually one entered on 10/6/99 (412392) but resolved not repro by PSS, reported by webbug.
- It should be the same in Win98. My guess is that it is app hacked there so it works.
- This is the typical AllowSetForegroundWindow issue. In this case applications need to be fixed or we apply an app hack to them (no code changes needed)
- The code that causes this behavior was checked in in July 97 (can point you to the SLM logs if
- Word was aware of this behavior since May 98 (can point you to email if interested). I guess Outlook was aware of this for a while too.
- In the long term Outlook needs to call AllowSetForegroundWindow or CoAllowSetForegroundWindow.
- In the short term the best solution is to give outlook the app hack. This "penalizes" outlook since any process will be allowed to steal foreground from outlook, just like they could in NT4 or Win95.
- (I can give you more options if interested but after discussing this with JohnC, this is probably the best)

gb

-----Original Message-

From:

Rob Price (Exchange)

Sent:

Thursday, October 28, 1999 5:07 PM

To: Cc: Brian Valentine (Exchange); Kurt DelBene (Exchange); Steven Sinofsky

Jon Thomason; Deborah Black (Exchange); David Cole; Jim Allchin (Exchange); Eugene Ho (Exchange); S. Somasegar (Exchange); Iain McDonald (Exchange); Rob Short (Exchange); Gerardo Bermudez (Exchange); Will

Kennedy (Exchange)

Subject:

RE: Windows 2000 breaking Office features

Thanks to all who investigated, followed up, and provided history.

Since this issue got broad exposure fast, let me try to provide a bunch of relevant facts just so y'all have the background.

I will follow up with Gerardo as Brian asked but it's worth clarifying the picture for everyone I think.

Re John's statement that "The bottom line is yes the OS is broken if Outlook or any application can not bring one of it's own windows to the foreground. I have never seen that* - that is exactly the problem here but not everyone will see it internally depending on user settings. (I think we have some work to do in the Outlook learn to get more of the NT team running Outlook, and using the same settings our customers are likely to use.) A huge percentage of our users use WordMail (tools.options, mail format, "Use Microsoft Word to edit email messages"). When they edit RTF mail, this works fine (it's docobj hosting word in an Outlook window in the Outlook process), But when they edit HTML mail (and maybe plaintext?) we actually switch to a Word window in Word's process space which has an added (Outlook-authored) toolbar for email

functions. This can happen when using the "new mail," "reply", and "forward" commands. So this is the case that appears busted. It doesn't repro 100% of the time for some reason, but all repro scenarios require you to turn wordmail on and don't involve rich text format email. The end-user of course has no idea that sometimes a window for editing/composing email is in one process space and sometimes another, they think these are all "Outlook windows". (Someone speculated that this issue could be about following URL's in email. That works reliably due to the API's we use to ensure we get a new browser window and don't recycle an open one, and is not the issue in question here.)

- Our bug database includes dozens of duplicate filings of this bug a sure sign that it will be a
 very common issue noticed by customers. Yes we have raised the issue since the spring, my
 team tells me we did ask the NT team to consider fixes on their side. I wasn't there though and
 history is sort of moot at this point, we are where we are.
- I was mistaken, this is not an issue for versions of Outlook prior to Outlook 2000 for the
 composing email case since the new WordMail architecture was introduced in Office 2000. For
 other features like NNTP news reading, mail merge, etc. which invoke another app like OE or
 Word, we will still have this focus issue and it affects older products. Sorry for the confusion
 there.
- Contrary to an earlier mail on the thread, Outlook 2000 does NOT call the new Win2000 APIs, unfortunately. May 99 was well after Office 2000 was locked down and on the path toward release. New Outlook code to call AllowSetForegroundWindow will be checked in to Office 2000 SR-1 in the next couple of days (it's been in the works for some time), so for this specific UI path the problem will be limited to golden Office 2000. That's still a lot of people though.
- I am worried that after Windows 2000 release this will quickly rise to the very top of our support
 calls, manifesting itself first as an Outlook support call. Our answer will be "get Office SR-1" but
 it may still be at great cost to us and annoyance to customers.
- Yes, Windows 98 made a step in this direction to prevent apps from stealing focus, though the specifics of when seem slightly different. However, the Win98 team provided a documented way to allow focus changes early enough that shipping Outlook 2000 actually includes specific calls that make the scenario work right on Win98. Therefore, end-users won't see this specific issue except with Windows 2000. What seems odd to us is that the Win32 programmer needs to do something different on Win98 vs. Win2000 to get the focus in the right place at the right time, i.e. Win98 and Win2000 implemented different semantics around setting the foreground window. I am not an OS guy and it's been a long while since I played one on TV <g> so I can't say whether there's a hard trade-off that forces these differences or it was just a lack of communication. Our SDE suggested that he thought perhaps Win2000 could support the Win98 workaround we have already coded and that would make Outlook 2000 golden work right, or in fact that OLE could call AllowSetForegroundWindow on our behalf, increasing app compatibility and giving 'legacy' apps the behavior they have come to expect. Obviously you-all are in a better position to investigate and accept or reject those ideas than we are!
- John Colleran's embedded message refers to changes the Outlook Express ("OE") team made to their app. That's not the same as Outlook. Sorry the names are confusing. Outlook is in Office, OE ships with IE.

• The thing that is scariest to me, that I understand least:

- As I mentioned there are many other features in Outlook and Office where one app brings another to the fore. I know there are also many solutions built on top of Office which use VBA in one app to invoke another, one app drives another via DDE, etc. etc.. I don't know for sure but would guess that there are many other vendors with products that cross process spaces, e.g. integration features in SmartSuite, GroupWise, bundles of management console apps, etc. etc. The Windows 2000 team hopefully has done lots of app compat testing or invited lots of those ISV's to give early beta feedback so they likely know more specifics than I do. I suppose if this were a huge compatibility issue and Outlook's issues were just one data point, it would make more sense to make the default behavior the compatible choice (any app can steal focus), and make the new behavior (apps must give permission to steal focus) an option we evangelize over time. That would certainly make the Outlook team less concerned about the support implications.
- o Hopefully the NT team is satisfied that they understand whether it's a broader issue than this Outlook case. Have we done sufficient investigation to be confident that the cases I mentioned above (VBA solutions, other ISV suites, etc.) are non-issues and the Outlook/WordMail case is the only sufficient issue to solve? If it's just Outlook then we are doing the best we can by lobbying you for a change and/or fixing in our service release (and we may have to consider issuing a patch, UGHI) but if it's a broader app-compat issue then of course it is more clearly best addressed in the OS.

I will follow up separately with John Colleran on his concerns about resources and crashes.
 Hopefully Office 2000 SR-1 has already made those things better but if not we want to identify and fix them.

Obligatory postscript:

Most of us here in outlook-land run Windows 2000, and it is an awesome product we want to succeed hugely. Please don't get us wrong. I think we have a common interest that if our customers deploy Office 2000 and Windows 2000 and a common scenario feels wrong, they'll be unhappy customers. If we can avoid them ever seeing that, it's a mutual win. I don't mean to be throwing flames at all, but it's great that the issue has been raised so visibly if it means that a potential big support hit for both of the products gets dodged. We're here to work in a spirit of cooperation for happy users, not blame and finger-pointing. Thanks....

-Rob

----Original Message-----

From: Brian Valentine (Exchange)

Sent: Thursday, October 28, 1999 11:40 AM

To: Kurt DelBene (Exchange); Steven Sinofsky; Rob Price (Exchange)

Subject: FW: Windows 2000 breaking Office features

More on this...

-----Original Message-----

From: John Colleran (Exchange)

Sent: Thursday, October 28, 1999 11:38 AM
To: Jon Thomason; Brian Valentine (Exchange)

Cc: Deborah Black (Exchange); David Cole; Jlm Allchin (Exchange); Eugene Ho (Exchange); S. Somasegar

(Exchange); Iain McDonald (Exchange); Rob Short (Exchange); Gerardo Bermudez (Exchange)

Subject: RE: Windows 2000 breaking Office features

This is a fairly complicated issue with a lot of history. The bottom line is yes the OS is broken if Outlook or any application can not bring one of it's own windows to the foreground. I have never seen that and have contacted Eric to get more details. However, there is a related problem where if you click on a link in email from Outlook and if the other process that will handle the link (such as IExplore, Excel, PowerPoint) is already running than Outlook may not give focus to that app.

The techie details:

The background of this issue is previously in NT4 & Win95 you could be typing or using the mouse in an application and another application could pop to foreground right in the middle of your typing. In Win2k & Win98 the application you are typing in must explicitly give permission to the other app to take focus. Outlook supposedly made these changes:

<< Message: Re: Mail message doesn't take foreground from browser >>

Other Nasty problems in Outlook:

There are 2 other known problems with Outlook that I have recently noticed:

 It eats resources. On my machine it has consumed over 423 kernel handles, 945 USER objects, 550 GDI objects and over 9 1/2 hours of CPU time. No other has more than 100 USER objects or 200 GDI objects or more than 10 Minutes of CPU time. Eventually you need to kill and restart Outlook

<< File: outlook.clp >>

When Outlook crashes (or it hangs because of above) you need to kill other Office processes. Just like Rob Price said:

When Outlook does crash, killing processes "Outlook," Mapisp32," and "winword" will do the trick.

This is not very intuitive. We'll talk to Rob about these too.

----Original Message----From: Jon Thomason

Sent: Thursday, October 28, 1999 9:37 AM

To: Brian Valentine (Exchange)

Cc: Deborah Black (Exchange); David Cole; Jim Allchin (Exchange); Eugene Ho (Exchange); S. Somasegar (Exchange); Iain McDonald (Exchange); Rob Short (Exchange); John Colleran (Exchange)

Subject: RE: Windows 2000 breaking Office features

The specific 'windows not coming to the foreground' issue he's talking about is done by User and is in both Win98 and Windows 2000. It has been a contentious feature over time. I have never seen this while reading mail—if Outlook is the focus app and it brings up a window, it will come to the front. This foreground thing is done by which "application" (not window) has focus, so even though outlook makes multiple top-level windows, the fact that its main app has focus allows its other owned windows to come forward. This would definitely happen if, for example, outlook were sluggish, you clicked on a message, switched away while waiting for it to do something else, then the message came up later. The taskbar would flash and the window would stay in the background. Windows 98 behaves identically. I don't know how wordmail plays into this, I haven't tried it

The person to talk to about these SetForegroundWindow issues is gerardob (on debbl/bharats team)...but this is hardly new stuff as it's in Win98 as well.

The only Windows 2000 breakage I've experienced has to do with conflicts between SFP and Darwin during various upgrade and install scenarios.

-JonT

----Original Message---From Brian Valentine (Exchange)

Sent: Thursday, October 28, 1999 8:24 AM

To: Jon Thomason

Cc: Deborah Black (Exchange); David Cole; Jim Allchin (Exchange); Eugene Ho (Exchange); S. Somasegar (Exchange); Iain McDonald (Exchange); Rob Short (Exchange); John Colleran

(Exchange)

Subject: FW: Windows 2000 breaking Office features

Importance: High

Jon, is it the shell doing this? Or it is something else?

I have seen the task bar items blink when the want to come forward (i.e. for input, etc) but I have never seen it reading email - maybe I'm not typical.

This thread is short in facts - can someone please reply to the people on this email as to why it does what it does and the scenarios when it happens?

thanks! brian

-----Original Message-----

From: Bill Gates

Sent: Wednesday, October 27, 1999 6:33 PM

To: Jim Allchin (Exchange); Brian Valentine (Exchange)

Cc: Eric Rudder

Subject: Windows 2000 breaking Office features

Importance: High

I think it is pretty amazing that Windows2000 is breaking a lot of Office features.

The number of phone calls and unhappiness that a user can't use Office like they are used to will be huge.

I think there is a bad judgement call being made here. Compatibility isn't supposed to mean users not having mainstream functionality work.

Someone needs to review the criteria that Windows2000 is using. They also need to review this particular problem.

It happens to me on about 1/4 of the mail I reply to.

My usage is so limited I can't believe I run into a serious incompatibility.

-----Original Message---From: Eric Rudder
Sent: Wednesday, October 27, 1999 9:34 AM
To: Bill Gates
Subject: FW: funny email
Importance: High
!
-eric

----Original Message---From: Rob Price (Exchange)

Sent: Wednesday, October 27, 1999 9:32 AM To: Eric Rudder; Kurt DelBene (Exchange)

Subject: RE: funny email

Yes, Bill has hit a serious problem that has me gravely concerned. Windows 2000 added a "feature" whereby applications can no longer bring themselves to the foreground. For some messages, when he replies or forwards, he's probably set up to launch Word to do the editing. (I, like many users, set the prefs to always use Word as my email editor, even for new messages, so this is worse still for me.) Word then tries to bring itself to the foreground, but since it's a different process it can't. This works on other OS's but Windows 2000 denies the action and just makes the task bar button blink in blue.

This is a serious incompatibility. I understand that it was a conscious trade-off to improve security etc. but it could be a huge source of customer complaints. It breaks other features in Outlook (e.g. mail merge, newsreader), particularly around integration between apps. (Note that the OS makes an exception for the browser, which can bring itself to the front!) It probably breaks scenarios in other apps too.

I am not sure but I believe we may have found a workaround to introduce into Office 2000 SR-1 (for the mail message cases, but we can't afford to fix all the features that broke). Golden Office 2000, Office 97, and Outlook 98 will remain "busted" in this way though, if the Win2K team preserves current behavior through RTM.

BTW, Bill's correct that the new problem (messages not appearing in foreground) is related to the old problem about focus landing in the message body, though subtly.

When Outlook does crash, killing processes "Outlook,"Maplsp32," and "winword" will do the trick. (Save any open Word files first!) Hopefully with our SR-1 release crashes on Win2K just won't happen with any frequency worth noting... sigh.

----Original Message---From: Eric Rudder
Sent: Wednesday, Octobe

Sent: Wednesday, October 27, 1999 8:57 AM To: Kurt DelBene (Exchange); Rob Price (Exchange)

Subject: funny email

any ideas?

----Original Message-----

From: Bill Gates

Sent: Wednesday, October 27, 1999 8:48 AM

To: Eric Rudder Cc: Steven Sinofsky Subject: FW: Tablet group

I am having a NEW problem with Outlook.

Some messages when I forward them (I think it is these BIZARRE HTML messages) the new message doesn't come up on top of the screen.

Instead on the task bar I get the new message blinking in blue but my screen stays on the message I forwarded - not the forwarded copy.

This is NOT the same as the problem where Outlook used to move the focus into the message. In fact I get that a lot less now. Maybe the fix for that problem caused this problem?

Also whenever Outlook crashes I never know what processes to kill. It is the only application that forces me to reboot on NT.