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**To:** Bob Muglia; Brian MacDonald, Bill Gates  
**Cc:** Eric Rudder; Paul Maritz  
**Subject:** NetDocs and Office

As we get close to Forum 2000 and start talking about NetDocs I wanted to offer some unsolicited thoughts on our mail client strategy and where we are going. I also wanted to comment on the path we are on in terms of having NetDocs "replace" elements of Office.

It is tough for me to do this because it seems, for reasons that aren't clear to me, that no matter what I say about NetDocs, folks view this as something I am defensive about or something I am "against." I am very supportive of having a new code base around Office—we started the efforts in the universal canvas that moved to netdocs and I still feel very strongly that there is a need for Microsoft to have a new document creation tool around the canvas document type.

I want for this to be constructive and not seem like folks should be defensive. I feel like I am trying to be constructive, for what that is worth. This is mostly a summary of a conversation bob, brian, and I had.

At our 3 Year Plan there was another round of bashing the Outlook client. I still wonder what it is about this code base that is "holding us back" or what we should be doing differently. I really don't think it is holding us back in terms of evolving client-side email. I do think our customers on Outlook are bordering on crazy with the level of customization, support, and general persnickety nature they view the product. It really boggles my mind. The irony of this is that in a service world, the ability to have a mail client that is highly tailored to your corporation decreases (i.e. customizing the client gets harder not easier). The Outlook team has been one that we have, collectively, not managed well. The only truly customer focused release we got to do was Outlook 98 and even that release was predominantly focused on a customer we might have wished we had not focused on—the pure POP3 user. It is important to keep in mind (say for Forum 2000) that if we announce that there is a "replacement for Outlook" that all of this baggage comes along with that. That is why I am an advocate of the "companion" strategy of NetDocs, not a replacement strategy. I also think this is much more in line with what the code actually does and what we can deliver—customers can decide what they want to use based on how persnickety they are.

No doubt with Outlook we are "stuck" with a large client-side mail program that can do just about anything you want. Outlook10 makes this client symmetrical with what can be computed for messaging on the server. This is super helpful for customers that want to work in a mixed environment where some people use Outlook and want to access the same data from a web browser. But when it comes to "thick clients", Outlook wins hands down.

But as we see NetDocs become realized as a mail client as well, it is causing me to wonder if we are heading down the right path. I certainly realize the preeminent importance of email for our core customers, but I worry we overloaded the netdocs experience by adding email client (and a specific mail box) to the application (Outlook is already overwhelming to customers). I feel this mostly because I feel that document creation is something that is going to be predominantly client side (modulo some download and run improvements) for quite some time. On the other hand, I think very rapidly email will move to a straight HTML front end.

I believe that the high order bit, or the core scenario, for email will be "which email solution allows me to get to my inbox/calendar/contacts/tasks the fastest from any machine anywhere". The proliferation of high speed connected PCs is making it very practical to avoid lugging around a laptop. It seems to be that very quickly we will see a decline in "offline" use of email as people are surrounded by connectivity. We will be left with the only scenario for offline being literally on an airplane (in contrast to how we traditionally view airplanes as just the representation of offline). I know for me personally this is the case already. This becomes even simpler and more compelling when you combine the scenario with a handheld device (I use a blackberry). I believe, this is the IEU of the next 2 years, and certainly the BDM. Hotels, airports, conference rooms, etc. all seem to have high speed connections. DSL, cable modems in the home are a reality and for the IEU/BDM these are where it is "at".

Everywhere I go I see folks that are "browser only" for their email. I realize this is not statistical and I know that no matter what we say or think, Outlook and Notes will be clients used by tons of people for a long time. But what is increasingly clear to me is that people are not finding browser based mail "cumbersome" or slow. In fact, if you think about all the clicks and window management you do with Outlook, the browser based approach is probably no less efficient. It is "different" and we will see resistance, but I think side-by-side usability tests of a well designed browser client and Outlook would show things to be roughly the same in terms of efficiency. I freely admit, that if you have 1000 messages in your inbox and routinely rifle through them then a "transaction" client like Outlook will be far better for you.

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But if you ask "what does the internet make better", it definitely makes getting to your mail anywhere better. Everytime I'm with a friend that can check their mail at a kiosk or at another friends house, I am jealous. I'd trade my right click menus any day of the week for the ability to see my inbox in under 30 seconds. When I travel I just forward my mail to my yahoo account. I wonder how many Microsoft people do that—tons!

Our current mail strategy doesn't really optimize for this type of customer experience. In many ways we are optimizing to consume client-side cycles and RAM rather than focusing on a core scenario that can be reflected by "power users". Our current strategy has the following mail clients (and servers, though that is not as critical):



#### HotMail

The fastest solution from Microsoft to read your mail. Yahoo provides a rich experience for these. The UI is filled with advertising and there is no facility for scheduling and contact management, nor is there a way to get the information out of HotMail into a handheld.

#### Outlook Express

This is a traditional Win32 app. It has the advantage that it also connects to your HotMail account and offers contact management. For the purposes of this mail, let's assume the Mars client is essentially this one. The client only supports internet protocols and not the Exchange 2000 HTTP work.

#### Outlook Web Access, Navigator UI

This is a very fast UI for getting to Exchange 2000 mailboxes. It is probably the fastest way to read your mail and easily offers the most ubiquity.

UI still suffers from a desire to impart the Win32/Outlook UI on top of a browser. For example, by opening up messages in a new window you leave the "browser experience".

#### Outlook Web Access, IE 5.5 UI

This UI fully utilizes DHTML to "simulate" the full Outlook UI.

This is proving to be very slow in terms of user-interaction, and downloading the script slows things down, especially over a slower link or on a machine where things are cached (assuming caching). It definitely is not "web like" (whatever that means)

#### NetDocs

This UI offers a new type of experience and most importantly a new document surface for creating documents. There is a significant infrastructure for supporting offline.

The roaming scenario described above is a NetDocs attribute. If you move to another machine, you either have to download the code (and cache you inbox) or just use the Web Access clients. Thus for the "power user" we are "forcing" our most engaged customers to use multiple clients. Downloading code and running it most certainly won't be allowed on kiosk machines.

#### Outlook

The behemoth of mail clients. This supports all the kitchen sink functionality.

The local store work has consumed the team. This means we are going another release with very few advances in the basic mail experience, which is itself offering a static target for the mail client community.

So I believe a couple of things to be the case:

> We need a strategy that is about developing the best ubiquitous mail client for Windows that passes the "how long to read my mail from a machine I've never been to before" test. It needs to support all of the "features" that we expect from our mail infrastructure—mail, scheduling and meetings requests, contacts, tasks, etc. It needs to be able to sync up with handheld devices very easily and routinely.

> We might consider that offline support, however cool 3 years ago and however necessary in many parts of the world today, might not be worth all the baggage that it brings. This is especially true when our predominant clients moves to a model that requires seeding a cache or operating in a "this is my machine" mode (the obvious privacy security issues associated with trying to roam but leaving behind some of your mail everywhere you go).

> I am not advocating "thin client" as much as I am advocating that for reading mail and looking at your schedule, the dominant scenario will move to one that values mobility over client-side richness. There is no doubt an enormous amount of design work to be done to enable an efficient experience in a browser-driven UI for an email client, but it needs to be done.

> I think offline is important, but it will become less important over time. If we are to make a bet on the future we should bet on bandwidth making offline a thing of the past. We should always support slow lines and offline through "replication" (i.e. handhelds). I know this is somewhat counter to the communications environments in much of the world, but the good news is that we have good old "Outlook" to help us out.

> I was surprised to learn that the NetDocs download size is going to be a challenge. Perhaps on a Whistler machine we can improve things. I hate to keep saying this, but I hope folks understand that easily the second most hated feature of Office 2000 is install on demand (after Clipt). People do not like the idea of having incremental stuff. You can see this in ThinkFree and HalfBrain and it is a yucky experience. Just doing it in the background does not change the fundamental dislike of having to wait. I am a little surprised we are touting this feature so much, so I must be out of touch.

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What I am worried about with NetDocs the mail client is that we are creating a new client that does not have the attributes we most badly need. The "new UI" is most clearly something we could do in the Outlook code base (and I believe we are seeing this happen in the OE code base as well) if we felt it was compelling enough. By new UI I just mean the arrangement of the command structure and primary windowing model. I am worried that you cannot get the "new experience" by roaming to a new machine and just logging on. I am worried that by supporting all the offline work we actually build another client and offline storage mechanism that makes it hard to solve the core scenarios

A number of times during Office10 planning we talked about the idea of having Outlook and Outlook Web Access be the same team. I think for the purposes of design this is a fine idea—in fact because of CDO and the object model work we have done, the back ends and core features are roughly the same. Last year, I did not think (and still don't think) that the idea of a offline email and a browser-based client go together—I think the efforts to twist offline and "retro-fit" that model on top of a browser are not worth the effort and as fast as we can get that done, the customer needs will change from "make everything work offline" to "let me use the bandwidth I have available to me". This isn't really new for me, as I think for this whole release I have been a skeptic of our efforts to drive so much effort into making things work online and offline. It is a huge amount of work that really makes the development complex.

It is also important to know that today the customer feedback on Outlook Web Access is about parity with desktop Outlook—at the minutia from delegate access, send on behalf, message flags, free busy, check names, etc. Our customers are already telling us they like the experience of browser-based mail but they want the features too. We are not on a path to deliver that as our primary strategy.

Ideally, we would develop Outlook and the next generation client together where the next generation client continues to mirror the support of the "fast ubiquitous" email client and focuses on making it easy to use the "desktop" client and the mobile client easily. It could be that NetDocs+Web Access offers this choice—the only problem with this strategy is that we won't be able to sell it to corporations that already use Outlook because NetDocs suffers such a feature deficit relative to Outlook. Whereas Outlook+Web Access has the downside of Outlook, but it does have more parity between the two

All of this was a long way of asking, if we think NetDocs might be "inbetween" – not a rich enough client to be a full Win32 application and not ubiquitous enough to be the fastest and easiest way to get to your mail? If it isn't clear, I worry that it is not the best of the new world and the best of the old but some of the lesser desirable elements of both.

Related to NetDocs replacing an element of Office, I think we need to look seriously at where the market is going. We rarely say NetDocs can replace Excel because we think Excel is "special" which usually means that everyone understands that it is a unique document type. I believe this to be the case, though it is important to know that 3/4ths of Excel's users never use formulas, but rather use Excel as an infinite left/right/top/bottom list manager—this has important ramifications for any "table" editing that one presumes would replace Excel.

I believe PowerPoint has rapidly become as "special" as Excel (PowerPoint is used by 60% of our customers now, Excel 84, Word 99, Outlook 74). The document semantics of PowerPoint are unique—from structured bullets, to the outline view, to the fact that presentations have become the de facto mission critical business communication. People don't write memos, they send PowerPoints; people don't send out meeting notes, they send out the PowerPoints, etc. Just as Excel has the infinite x-y paper, powerpoint has the constrained page size—it is a page editor. PowerPoint also has very specialized printing (so does Outlook, which is another issue for above).

On the other hand, Word is the application that is going to be replaced by email. It is this concern that has been the primary driver of our WordMail strategy (and word's HTML strategy). The "business memo" is a thing of the past. Even "business plans" are now replaced by powerpoint and pitch books (done with powerpoint or even excel). I think the people that use word the most are writing press releases or phd theses ☺

The main things keeping Word from vanishing altogether are printing and collaboration. People can collaborate on a Word document mailed around as an attachment. This allows comments to be separate from the document and allows the collaboration tools to be used. It is also the case that for anything more than a page, the writing tools of Word do matter, particularly spelling and grammar (used by 70%). But nearly 40% of Word documents are now less than a single page—this is up 8% from Office 97. Only 17% of documents are longer than 5 pages, which is down from 21% in 1997 and down from 40% several years ago. We know that Word's usage is still about 13 or 14 hours per week, but browsing and email record nearly similar usage—if you question this data because it seems high it is fair and you are just a leading edge customer. The second thing that people need from Word is high fidelity printing—printing is actually increasing. HP said that the internet would change documents from "edit, print, copy, distribute" to "edit, distribute, print" which is definitely true. This means high fidelity printing is needed more than ever at the client (it also points to the Acrobat risk we have discussed).

We should not be confused by WordMail or by the desire for "rich documents". It is clear that images and pictures are on

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a steep rise (70% reported using photos). But we need to understand and internalize that the majority of Word documents being replaced are being replaced not by rich email, but by plain text email. Most people today still use plain text mail and since the guarantee of recipients reading rich mail cannot be met, most people wish to default to plain text and just assume that. We even did work in WordMail in Office10 to ensure that you can send nice plain text mail.

The first part of Office that NetDocs will unseat is no doubt Word. This means we should recognize this and work to understand the implications. Do we wish to accelerate this (file converters) or do we wish to avoid this. There are obvious revenue ramifications, but I think we need to "ride the horse in the direction it is going".

So some conclusions I might draw.

➤ NetDocs universal canvas will be seen as a replacement for Word. We should focus on that scenario and realize the product and business issues around that.

➤ Replacing PowerPoint and Excel are going to be extremely difficult and we should not focus on that, but rather given the impending replacement of Word we might choose to capitalize on the fact that you need Excel and PowerPoint (and FrontPage) too.

➤ By focusing on the Word scenario, we are also focusing on NetDocs mail note being a WordMail replacement as well—so this means we need to make sure that to edit rich mail you do not require a big download and make it slow to use the product, or that it is easy to switch between rich mail and plain text that just "works" like Yahoo/HotMail just work (has anyone tried Yahoo's rich mail using IE?)

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