From:

Bill Gates

Sent:

Thursday, March 16, 2000 9:28 AM

To:

Chris Jones

Cc:

Eric Rudder; Brian Valentine; Jim Allchin; David Vaskevitch; Rick Rashid; Bob Muglia

Subject:

RE Some thoughts on Trident

I agree with your mail as far as it goes.

One thing to be clear on - just vecause in point 2 we want to get the benefits of XMF/Ebook in Trident it does NOT mean we want to take those things to a standard committee to give them away.

I am sending this mail to a smaller group

One idea I have is that we could ask Peter Pathe to run Trident bringing across all the Tony Williams guys.

BrianMac has mentioned that maybe Christian should be utilized to fix trident but Eric tells me that will be controversial.

Trident is so key. It is the runtime for Office and the Shell. It is our browser. It is our forms runtime. It is our presentation runtime.

I am still not sure how we are going to address some of the tougher problems:

- How do we use the Williams talent to get the Trident code base that is factored right and that we love?
- 2. What is the relationship to the WebForms efforts (or Winforms)?
- How do we address the needs of Netdocs how does the elivezer work fit into this?

The only way to deal with these questions is to get your views and then get us (Paul, Jim. me, Rick Rashid, Bob) to either reorg or set the right priorities.

----Original Message-----

From: Chris Jones

Sent: Wednesday, March 15, 2000 4:54 PM

To: Bill Gates

Cc:

Michael Wallent: Jan Ellison-Taylor: Hock San Lee (NT); Brian Valentine; Jim Allchin; Paul Maritz; David Vaskevitch; Rick Rashid; Peter Pathe; Bob Muglia; Brian MacDonald; Dick Brass, Ted Peters; Eric

Rudder, Darryn Dieken

Subject:

RE: Some thoughts on Trident

thanks for the mail on this. I think we have a big opportunity to push for the next gen platform that really umbrellas over what is going on in trident, webforms, gdi+, netdocs, xmf, ebook, and others. there have been good conversations happening in these areas and i think the right people are talking. what we need to do now is pull it all together and start executing.

qoals

our goals are i think in alignment

- build the next generation client platform that optimizes for client/service, web connected solutions.
- build the next generation document format/viewer that optimizes for online, protected distribution of media.
- make windows the best way to use these apps and view documents online.
- ensure we have a consistent message and investments across the company.

work/thinking in progress

how are we getting there? I have three areas that my group is investigating (note some of this is in sync w/ ngws thinking).

- 1) platform, i asked mwallent (with a small group of people) to work and do the following:
- identify the critical scenarios and types of applications that people will be building, identify the killer apps.
- stack rank these by importance and investment
- survey the teams out there doing work

Plaintiff's Exhibit 6727 Comes V. Microsoft

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- come back with a proposal on what the groups working for me should be doing and how they relate to webforms and netdocs in particular

he is through phase 1 of this (initial investigation) and we are slowly moving to phase 2 (architecture and resource allocation). he has been talking to ted peters, the xsp folks, and other groups. the next critical group for him to sync up with is netdocs. michael is also on the ngws platform team with jimall.

- 2) xmf/online viewing. In parallel, from our meeting on xmf earlier this year, I asked lanel and hockl to do the following:
- focus our "xmf" planning targeting the next generation of ebook format
- talk to the ebook team and ensure that xmf meets their requirements
- make "xmf" = "binary html." in other words, figure out what needs to be done to change both "html" and "xmf" so that one is the binary version of the other.
- make "ie" = "the viewer/printer." figure out what we need to do to ie to have it be the xmf viewer and printer.
- come back with the 2 year dev plan that gets us there.

i sat down with the team yesterday to review where we are at with this. there have been good conversations (i'm told) with both ebook and trident/ie so i think we are on a good path. In terms of getting to a consistent viewer, the view i think is that ie should be able to view ebook files, but we may need a separate ebook viewer for downlevel platforms and specialized use. we need to close on this with the ebook team and ie team in the coming 1-2 weeks.

- 3) clear type, i also asked hockl/darrynd to update me on where we are with cleartype. I saw a demo of this yesterday we have two choices i think for whistler:
- put cleartype into gdi, make it an option that apps can conditionally call. also provide a switch so oem's/apps can "try it out."
- put cleartype into gdi+, where apps can conditionally call into it.

due to some app compat issues, we do not think it is realistic to make this a global switch in the whistler timeframe. but we do want to make it available and get the key apps to make the right gdi calls. today, word 10 is working on making these calls, and we are trying to book the work on the ie schedule—at this point, it is not realistic to schedule this for ie in whistler, we will see what we can do to bring this in, we know it is important.

note that to make this work there will be a list of things (e.g. international hinted fonts) that we will need from the cleartype team—i will work to get this list but we will need support to make this happen. we will send you our plan by the end of this week.

exciting ie?

you did mention exciting ie. note that we are not doing a lot in this area outside of the platform space, mainly because we think most of the innovation will come out of the mars team in msn. for blackcomb, as we make browsing/app navigation consistent, we can think about the shell as "exciting ie." for whistler, we are doing minor visual tweaks and that is really it. let me know if this is not your expectation, we sent most of the "ie ui dev" folks over to the mars/msn team.

timeline

in terms of timeline, people on my team are working on the following schedule:

- q1/q2 01, whistler rtm this is mostly incremental work. trying to get cleartype into this release. also fixes in the platform required for netdocs. plan as part of this to have a downlevel ie release that simships.
- q1/q2 02, blackcomb planned rtm. this is where new feature innovation in the platform will happen, we hope to roll a significant percentage of the dev team to blackcomb in q3 of this year, so that blackcomb will be an 18 month project.

we will of course evolve this over time as ngws thinking goes out but i want to put some stakes in the ground. brianmac and i had a good conversation today about whether we could align netdocs to blackcomb (or a q2/02 date) and then we could have the killer app to bet the platform on. I think this date alignment is extremely important for teams to work together.

next steps

next steps i think are:

- darrynd/chrisjo send update on cleartype plan for whistler. (by end of week)
- mwallent meet with netdocs folks and iterate on platform definition, there is a lot of good we can do in both teams here. (within 1-2 wks)

- review/update all of this with you. (maybe in 2 weeks?)
- agree on dates/timeline so we can get focused. (maybe as part of this review?)

does this make sense? let me know and I will schedule an update w/ you in a couple of weeks

thx -- chris

----Original Message----

From: Bill Gates

Sent: Tuesday, March 14, 2000 11:46 AM

To: Chris Jones

Cc: Brian Valentine; Jim Allchin; Paul Maritz; David Vaskevitch; Rick Rashid; Peter Pathe; Bob Muglia; Brian MacDonald; Dick Brass; Ted

Peters; Eric Rudder

Subject:

Some thoughts on Trident

I know you are working through some plans for where we go with Trident- the presentation/editing part.

I thought it might be helpful to share some of my thoughts on the topic.

We did not have one of the "hard problem" groups focus on this but at some point we may need to gather some people as a subproblem of Programming model or UI to discuss this.

I can think of 5 groups that working on Trident related code and we have to define exactly how these pieces fit together to have a Trident road map.

- 1. The Trident group. I understand by combining in some of the XMF talent you are increasing the capacity of the group. I don't think there is much of a road map past IE 5.5. I think it is great that XMF and Trident have been brought together.
- Winforms/Webforms. These are two groups and the split shows through in our tools UI and our control work. Ted Peters has been working on a plan to try and rationalize these. It is a big issue for our programming platform.
- 3. Eliyezer Kohen doing Page Layout work.
- 4. Ebook land. They don't build on Trident today and aithough they say "sure someday" I haven't seen the plan to merge.
- 5. The Peter Pathe/Tony Williams group working on proper factoring of presentation runtime along with general development approaches. I was clear with this group when I saw them that the talent level and resources they have only make sense if we get a clear plan for them to contribute to shipping products even if the road map takes some time for the convergence. A radical plan would be to move this group in with Trident but I simply put that out as a possibility here.

Brian MacDonald came to talk to me last week and he made one point very clearly and very strongly. In order for Netdocs to have the future I demand of it there is a lot of work that has to be done in Trident. He is not even suggesting that it work for him but he thinks we need to get serious about the Netdocs requirements for Trident. For example printing, Its unclear to me how much integrating the Eliyezer work in will move us in this direction. Netdocs is required to replace Office over time so features like virtual tables and printing will be critical. There are some things that could be done outside Trident but apparently a lot of things need to be done inside trident

I think that Ebook and Trident must come together. I am confused about what it takes for us to have a browser that uses the Cleartype capabilities in GDI-plus. Strategically we need it. This is a specific topic that we need a plan for. I want the browser in Whistler to support Cleartype which as I understand it right now means using GDIPlus. Ebook can have extra layout intelligence that somehow hooks into Trident. I have never seen the issues to get Ebook on top of the browser.

No one should let business issues prevent them from seeing Trident as a key runtime. We will have to figure out ways to make sure that the Trident we ship in Windows doesn't commoditize our Office editing asset but this can be done as some kind of hack after we get the engineering done. Parts of Trident like things relating to Ebook do not go to standards bodies.

We know that the shell will be built on top of Tndent - in fact I think we will use a subset of Netdocs for the

shell in order to provide mail/file system viewing. Some of this roadmap awaits the storage and UI and programming model task forces doing their job.

Our strategy for exciting IE is unclear to me although I also think that is important.

This mail doesn't touch on Trident things like databinding, caching which may have a different road map.