BillG

Notes Competition

To:	Mike Maples, Steve Ballmer, Tom Evslin, Pete Higgins, Darryl Rubin, Laura Jennings, Jeff Weems, Roger Heinen, Jim Allchin, David Goodhand, Steven Sinofsky
From:	Bill Gates
Date:	10/11/93
cc:	Jeff Raikes, John Neilson, Richard Tait, Dawn Trudeau, Adam Bosworth, Russ Siegleman, Bernard Vergnes
Subject:	Notes Competition

I think there is a high level of awareness of the danger that the increasing adoption of Lotus Notes poses to Microsoft. Among the memos that discusses this is a recent one by Richard Tait entitled "What is Microsoft's response to Notes?" Notes is a very nice bulletin board system with a very flexible viewer and perceived end-user programmability. It is being promoted far beyond its true strengths, but there is a very strong demand for the kind of flexible bulletin boarding it provides.

Basically until we ship all of the following: EMS (along with the updated SFS and gateways), Chicago (with Capone), and EForms 2.0, we will not have a very good response to Notes. We can not easily disguise our lack of a concise and coherent product strategy. Once these products are shipping, however, our solution will be far superior for someone who in not already working with Notes in almost every case. I do not think there is a broad awareness of how these products can and will work together and how powerful they are for solving a number of critical scenarios. We will start rolling these products out internally in January, and if it goes well we it will help our productivity a great deal.

I repeat—in less than a year we will have a far superior solution for most users. This is not known internally or externally. Today we should be demonstrating, explaining, and evangelizing this momentous development.

There has been some confusion around whether our workgroup solution revolved around EMS or Access or Cairo or what. It is now clear we will not have replication, one of the key technical requirements, in Access until the end of 1994. We will be able to have replication in both SFS and EMS in the Chicago ship time frame. Capone was allowed to keep its relatively rich feature set, which will give us powerful and competitive end-user viewing. We have also defined a path for migration from EMS to Cairo that makes me comfortable promoting EMS related solutions very aggressively. It is also clear that EForms 2.0 can be enhanced to make programmable forms easy to develop. Our United Way contribution form is an early example of this power.

We need to organize the following efforts:

1. *Hardcore review:* Review of EMS and SFS scalability and capacity. What is the CPU load of hundreds of people having public folders open as messages are arriving? What is the CPU load of the various viewing options? How many users can EMS and SFS reasonably maintain per server? Owner: Tom Evslin should make sure we do this. I do not believe previous efforts along these lines have gone into enough depth.

2. *Product Specifications:* The following are product specifications that are critical to the success of using EMS/SFS, VB, Capone, and EForms to compete against Notes.

   a) EMS: Simple packaging and installation. Aggressive pricing. Owner: Tom Evslin.

   b) SFS: Include public folder replication, which gives us a low end answer to Notes. Owner: Tom Evslin.

   c) EForms 2.0: A number of enhancements are required including a wizard to make forms design very simple and a generic connector from a MAPI store to a Jet/Access database (and vice versa). We will have to have more than one person working on EForms 2.0 to get the required features.

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Sample forms and lots of documentation are an important part of this effort. We should also try to make the controls done as part of this available as OLE controls for the C++ developer and perhaps add some C++ Wizards. We require a nice demo, written in VB similar to the Hermes demo, of how this will work as soon as possible to start promoting our approach. Owner: Mike Maples needs to help Tom Evslin figure out how to get more resources onto EForms 2.0 and VB integration. Roger Heinen will try to get C++ support for this effort and will assist in the leveraging of VB expertise.

It is critical that designing a simple form from EForms 2.0 not involve writing any code, changing any .INI files, or using non-graphical tools. All they should do is pick controls, set their properties and drop the form into a public folder. It is also critical that connecting a folder to a database not require any effort other than specifying the name of the folder and the name of the ODBC database. For the offline case, we will need to do some additional work to provide an generic agent than can monitor a public folder and process the incoming database-bound messages.

We should make sure that Capone supports views as much like Notes as possible. In particular the top level view where you look at a 2-d grid of folder names with the number of total messages and unread messages are displayed would be quite dramatic. In some areas we will fall short of the built in Notes viewing and storing capabilities: field-level security, computed fields (simple things like showing a first name last name pair properly require this, and complex things like totals), and calculated display customization (any display of numeric data or color coding really require this capability). Each of these should be reviewed to see if there is any way to include it. We will, however, fall short at least a few areas and for that we need to either write programs that work directly on the MAPI store data including the directory or we need easy ways to move the data into real databases and spreadsheets. We should not write additional viewing technology, but focus our efforts on leveraging the reporting and viewing capabilities of Access and VB.

We will have an ODBC driver for the messages in a single public folder, with full read/write capability (though sub-optimal) and the directory with limited write capability. This driver is an important part of our solution. It is unclear to me when it makes sense to move the data to a real database versus working with it in the MAPI store. It is unclear to me whether we should just enhance the ODBC data bound controls in VB and C to include nice grid viewing, like VB Assist and the associated Sheridan controls, or whether we should also write controls that bind to MAPI stores without going through the ODBC driver. Ideally we should be leveraging the unified data access API, DAO, but the timing is not right.

We had an effort in Access to do workgroup samples where the workgroup shares a common database. This is excellent. However we should look at moving these sample over to EForms 2.0 where it is appropriate. We should only require Access where the viewing requirements are demanding. We should determine which of these scenarios works when Access is connected directly to the EMS storage.

We will also be doing work in our Office applications to be good Notes clients. One approach we should take is to leverage the work being done in WGA at providing a MAPI to Notes API gateway. Thus our applications can bypass writing directly to the Notes API and just use MAPI. The applications need to identify and articulate what Notes features they wish to leverage. We should then be sure our MAPI support is sufficient. For example, we should have a more extensible field exchange mechanism than Lotus does today. Lotus applications are smarter about being launched from Notes. For example by using clever default verbs, Freelance automatically starts up in presentation mode when launched from Notes, rather than in edit mode. We should also make sure that any scenario where our applications are involved in Notes, we do a better job at interacting with Capone and EMS. Owner: Tom Evslin will insure that our MAPI to Notes support is available, and Desktop Applications will provide the data on Notes integration.

Steven Sinofsky will produce a memo (attached) going into more detail on product features that are missing for most effect competition with Notes including ease of use. This memo will focus on leveraging Visual Basic as much as possible and providing Wizard support for several key scenarios including conference creation, data access connections, and off-line replication. Owner: Steven Sinofsky.

3. *ISV evangelism*: Notes is quite a poor platform to build on, though consultants like it because of the high prices they can charge. Our approach is actually quite a nice platform to build on. We should get serious about attracting Workflow ISVs including giving them money. There is talk of a "fantasy team" but is there anything more to this than just a "fantasy"? If we want to have people have things done we should be started now. We need to pick the ISVs that will give us credibility in areas like document library and workflow. There must be an ISV who has built workflow as an extension to VB. DRG and WGA need to get together and decide exactly how to get the right focus. I would be willing to spend extra money to make this happen. Owner: Tom Evslin will coordinate WGA marketing with DRG.

4. *Marketing*: WGA is charged with leading the attack on Notes. We should fund a high level of activity. We should completely reconsider our product naming and packaging and pricing. EMS may be an OK name but it is not grand enough to explain that this is a communication and information server with several key benefits:

   a) enterprise mail and Notes

   b) programming with rich, standard tools

   c) costs less money

   d) scales better and cheaper (hopefully, see item 1 above).

   Owner: Tom Evslin should propose an aggressive approach for this.

In evaluating this effort, I see the following advantages for Lotus and Microsoft. We should have a very clearly articulated list of these for the sales force to communicate when using the VB demo I propose.

Lotus Advantages:

1. Cross-platform for client and server. Mac development tools don't ship until late 1994 early 1995 but we can provide some solutions ourselves and work with 3rd parties in the interim.
2. Richer end user viewing including computed fields and formatting.
3. Security at the column level.
4. Digital signatures.
5. Content indexing/full text search.
6. Installed base.
7. Are there others that I am missing?

Microsoft Advantages:

1. Better/central administration and scaling (major advantage).
2. Combined "enterprise" Mail and Notes!
3. Programmable forms using standard programming tools.
4. Integrated into Windows Shell!
5. Less expensive.

Unclear Winner:

1. Scalability? (should be MS)
2. ISV support? (should be MS)