From: Bob Kruger
Sent: Wednesday, April 09, 1997 3:34 PM
To: Bill Gates; Paul Maritz; Jim Allchin (Exchange); Brad Silverberg; Rich Tong; Jonathan Roberts; Bob Herbold; Joachim Kempin; Nathan Myhrvold; Craig Mundie
Cc: Marshall Brumer; Aaron Contorer; Moshe Dunie; Jay Torborg; Cameron Myhrvold; Bengt Akerlind; John Ludwig; 'Bob Muglia'; David Vaskevitch; Carl Stork (Exchange); Rick Rashid; Mike Porter
Subject: RE: Intel - Grove meeting: DMI Issue

On the subject of DMI, we try to be neutral or very mildly negative (citing recognized deficiencies). We don't want to come across as supportive of DMI because it would make our WMI/WBEM migration job that much harder. Right now, few products actually support DMI (in spite of Intel's claims).

We agreed on a plan with Intel for them to have DMI support in NT5 and Memphis. This is tied in through WBEM. My team will support Intel in their work. In fact, we've offered repeatedly (phone, email, letter) to have them send engineers to work with the core WBEM developers. No one is here yet.

At the same time, Intel is confusing people with DMI, WBEM, and a Tivoli initiative called "Multiplatform Manager" (MPM). We have tried on a number of occasions to have them send the message that MPM is perhaps okay for integration with Tivoli products, but that it is not an evolutionary step toward WBEM. We so far have agreed to disagree on this issue. However, even in this case, we are being polite by articulating the message that "WBEM is the direction for the well-managed environment but acknowledge that DMI has some measure of benefit today and will move forward to WBEM; MPM, on the other hand, is purely a Tivoli product integration technology.

It is not in our best interest to be overly negative on DMI, SNMP, or other management technologies. Instead, we take the high road describing additional capabilities needed by customers and industry, and describing how WBEM delivers what the other technologies do not. We conclude such conversation with how Windows NT5 and Memphis (and SMS) will use WBEM technology -- all without being rude to DMI, LanDesk, or Intel.

Finally, I met with the head of the DMTF (an Intel person) a couple of weeks ago and suggested some ways for us to be more closely aligned based on the DMTF's new focus on CIM (i.e. the WBEM schema) as opposed to just DMI. This was viewed very positively. It might even lead to further WBEM standardization in the DMTF rather than going to the IETF and/or The Open Group.

-bobkr

-----Original Message-----
From: Bill Gates
Sent: Wednesday, April 09, 1997 1:28 PM
To: Paul Maritz; Jim Allchin (Exchange); Brad Silverberg; Rich Tong; Jonathan Roberts; Bob Herbold; Joachim Kempin; Nathan Myhrvold; Craig Mundie
Cc: Marshall Brumer; Aaron Contorer; Moshe Dunie; Jay Torborg; Cameron Myhrvold; Bengt Akerlind; John Ludwig; Bob Kruger; Bob Muglia; David Vaskevitch; Carl Stork (Exchange); Rick Rashid; Mike Porter
Subject: Intel - Grove meeting

I had a good meeting with Andy on Tuesday night.

Intel is going to be very aggressive with low chip prices and advancing performance faster than they had planned to. For good customers they will have Pentium-200 at $70 this year (without MMX) and even faster with MMX next year. Pentium II will be introduced at 233mhz,266mhz,300mhz. Andy demonstrated PentiumII running at 466Mhz as part of his Compaq Innovate speech. He also demonstrated a Netpc showing a JAVA benchmark and manageability using Intel software.

Intel's mix:	Q4'97	1H'98
PentiumII	19%	47%
Pentium Pro	6%	2%
PentiumMMX	65%	41%

PENGAD-Bayonne, N.J.
GOVERNMENT EXHIBIT
617

Pentium 10% 0%

Intel feels their "dual independent bus" approach will allow them to scale the clock speed and keep getting good performance. They think AMD's approach of using the only socket7 interface will mean that AMD won't get good performance with higher clock speed.

Andy and I agreed the top priority for improving how we work together is to have a total common view of graphics - Direct3D, OGL, Talisman, MMX2 etc.. Until Paul's recent meeting with Albert Intel had given up on working with us. Andy will make sure they do their best to engage with us. Intel has massive resources in this area as do we. Intel loves graphics because it uses the general purpose CPU very well. Nathan - we need to make sure our new "multimedia" strategy involves Intel as a partner.

I told Andy we gelt bad about the Memphis schedule delays. His main concern is getting AGP machines to ship this year. I said that if they could come up with a way of doing AGP on Windows95 with a VxD we would make sure we looked it over to make sure it didn't break things or prevent a Memphis upgrade. I don't know if Intel will be able to do this but they will try and we can't veto it since AGP is in our interest as well.

I told Andy our goal was to make Spring machines by releasing October 15. He asked if we would decouple IE 4 from Memphis and I said we had decided not to do that. He asked what if IE 4 delays so that you wil machines. I said our best solution then might be to deliver IE 4 "over the web" by having people download a "patch" file against the beta which would be present but not usable without the enabling "patches". I agreed with Andy that getting Memphis onto spring machines is very important.

I mentioned three event where we need Intel support: May 20th, June6th and a fall event focused on ADSL. I was VERY surprised to hear that Andy thinks Intel doesn't know about May 20. We agreed Rich Tong and John Miner should talk about this right away. We need Intel's support for this event. I explained that June 6th is a new thing and Jonathan Roberts is the contact person. Andy is available in the Bay Area that day if we want him to be part of the event although he will just be coming back from the east coast. On ADSL I said I thought Craig Mundie was talking to Frank Gill to make sure we helped each other push this forward.

Andy asked about WebTV and our whole Windows CE data broadcast strategy Andy wondered how we make money on a sub-$300 device. I explained that our goal is to get the email user and use the "customer portal" asset to make money. He said Intel has no way of making money at this level although some people in the company are pushing for them to be involved. He asked why they shouldn't view WindowsCE as being as bad as JAVA. I said the difference is that Windows CE will not be allowed to compete with the PC whereas JAVAOS is focused on replacing the PC. I did not talk to Andy about Windows terminal since our plans there are just coming together.

Andy mentioned that Ellison will show Intel servers and clients in a Japan event that Steve Nochsheim will participate in. I explained our view of NC=Not Compatible in the 3 different ways and said our reaction to this will be "Even Intel based hardware can be used in a non-compatible way". Its not clear to me what "request" we are making to Intel to make sure the Windows/PC message is their primary message.

Andy is very big on Intel getting credit for things. We went through the episode of their code-layout optimization work. I understand this has been resolved. [We need to have Office use these techniques when it first installs!!]

We talked about Netshow/Netmeeting/Proshare. Intel is confused by all of our product names and multimedia layers. Andy asked if Netmeeting was related to IE or Windows and he didn't know about Netshow. I told Andy they should help a lot of with Personal Netshow/meeting using the scrunch technology since it shows off performance very well.

Intel is glad to talk to us about JAVA. They asked why we are doing AFC for Solaris and wondered what our reaction would have been if they did this. Intel feels we have not explained where "JAVA on Windows" is better and different than the generic Java story. Andy asked where we were drawing the line and deviating on run time issues and I said we were not well organized on this yet. Intel would be glad to work with us but we haven't given them an opportunity. Andy has offered to have a special meeting to discuss JAVA - he offered this about a month ago. He thinks we would be wise to have this meeting before they get going on a JAVA strategy. I think we need to do this meeting with Intel in the next month. Paul would have to be there but I would not have to be.

We talked about manageability. Andy was asked what we are shipping today that competes with DMI. I said nothing. He wondered why we had a group being so negative on DMI then. He says neither of us make much money in this area so why do we end up attacking each other over it. I said that even though we don't share code we both seem committed to WBEM and DMTF schema solutions. Andy's view was that if we had mature management we would have found a way to help each other a long time ago instead of getting customers confused and duplicating work. He said Intel is glad to say nice things about WMI if it becomes as real as DMI is.

We talked about Merced. Intel is happy with the support they are getting. They are looking at early 99 for production volume now starting with their .18 micron process. Katmai - the x86 chip and Merced ship about the same time - they show Merced as being 4 times faster. Even the .18 micron x86 chip Willamette in the year 2000 doesn't match Merced in 99. The issue of whether we go to full 64bit did not come up. I personally hope we go straight to 64bit although Intel is worried we will be late if we do. I think DEC and Intel would both be glad to put people on this effort. The question of supporting the 36bit physical memory capability of Deschutes (and Klamath?) did not come up. I am confused about where we stand on this. I don't understand how hard it is to support this with SQL server.

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Andy showed me an Optimus (Poland PC manufacturer) where the PC is branded the "Microsoft Business PC". They feel this is an example of Microsoft taking too much credit. I said I would ask Joachim to look into it since we only did this with select machines that have hundreds of dollars of applications on them. I told Andy that in the future issue like this should be raised by Dennis Carter with Bob Herbold. Joachim - please let Bob know the story on this so he can follow up with Dennis.

I mentioned to Andy that Intel needs to get more engaged with Microsoft research since that is where the workthat will really exploit future processors will come from. I said we have briefed them as part of an Intel planning process but it wasn't a broad Intel group and it wasn't a dialog. Andy said he would be excited to have Craig Barrett come up and meet with the research group and go through our agenda. Craig is the #2 person at Intel and we should issue an invite to him and make it a great event. We want Intel to be impressed with our reseach work and to pitch in on some elements rather than duplicating everything we are doing. We should be totally open with them about our plans and optimism.

I mentioned our enthusiasm for getting SGI over to Intel. Andy said they think they are doing their best but if we have concrete ideas on anything more they can do they are open to it.

I asked Andy about ther investments in things like AVID. He says it includes a commitment for Avid to focus on NT. Vadez still manages these efforts.

I told Andy we might come along and ask Intel to take a look at all the factors that make the PC frustrating to make sure we have a strong outside view of this. He said he would be glad to do it if we have a plan of some kind. I think we should pursue this in the Windows group somehow.
I did not bring up IP protection ideas that involve the processor. I am embarassed that we don't have a clear set of requests in this area. Nathan - I am expecting something from you on this at some point. The Pentium II does have a feature to PATCH the microcode which is wild. I need to understand this better. Its very secret.