From: Mark Ryland [markry]
Sent: Tuesday, September 28, 1993 6:22 PM
To: Bob Muglia; Jim Allchin
Cc: Bob Gomulkiewicz; Paul Leach; Richard Tong; Tony Williams
Subject: Update, Rod Hodgman/Digital 9/28

I spoke with Rod for awhile today. I told him that frustration and impatience was mounting on our side. I asked if there was a way to get something signed by Friday. Otherwise, we might have to go start work on porting our stuff with a 3d party and perhaps resynchronize with them at a later date. I told him we really didn't want to do that but we just couldn't keep waiting.

He said that the only way he could see to get it signed by Friday "possibly" was to put some very clear language in the MOU saying it wasn't a binding contract, etc., because otherwise legal review alone would take him well into next week. I said fine, we were thinking along those lines anyway. He said he would send me language he had used recently as part of an LOI and gotten it pushed through in 48 hours (I received his language and have incorporated it in the draft attached to this message. He has Paulma signing for us, let me know if that's appropriate.)

He said with the additional language he will work hard to get our MOU signed by Larry Walker, VP of Networking (Walker reports to Strecker), by Friday. He's not sure logistically if the right people are in town, etc., but he'd shoot for it. I said great, let's do everything we can to get it done by Friday. I offered to fly out if nec., etc. (he didn't seem to think that would help).

We then began talking about the possible shape of the announcement. We agreed that it should be done a few weeks before Comdex if possible. A demo was essential, everything else (OEMs co-announcing, ISVs, etc.) would be important but a "missing" OEM or ISV or two would not be critical. I told him that if they could get OSF to say that this was a very good thing that would be great. He said, what about OMG? I said I thought that would be fine so long as we got a chance to review what they said in advance and they didn't use it as an opportunity to plug CORBA. (Naturally, Digital will still be talking CORBA in this timeframe so it follows that OMG would want to say something. Again, we just need to control what they say.) I told him that our general stance is that OSF is our mutual friend, OMG we are not so certain about.

Near the end of the conversation he mentioned that they are having a huge set of product announcements at the Palmer level, with live video feeds around the country, on Oct. 12. We played with the idea of getting Billg there to do this announcement. But I said the downside was that it might look proprietary with no other partners there plus it doesn't look like a joint announcement and there are lots of distractions. He thought that they needed to at least announce the future MS announcement as they would be doing all kinds of "client/server architecture" talking with incredible overlap with the MS deal, and they wouldn't want to change their story a few weeks later. I said we would think about that, I thought it might work if they simply announced that within the next 6-8 weeks they would have some important annoucements in the area of distributed object computing.

What do you think: should we let them mention Microsoft in a short, cryptic announcement on Oct. 12? Or keep completely silent until the real announcement. Or let them announce with out mentioning the Microsoft name (people will guess). One advantage of a pre-announcement is that we could do the same (Tony at Seybold, for example) to create some early FUD before the big announcement.

I'll talk to Rod again tomorrow and update you.

-- Mark

decagre8.doc

MS-PCA 2603096

**HIGHLY
CONFIDENTIAL**

Memorandum of Understanding
Between Digital Equipment Corporation and Microsoft Corporation
Regarding Object Software System Integration
September __, 1993

By way of this Memorandum of Understanding ("MOU"), Digital Equipment Corporation ("Digital") and Microsoft Corporation ("Microsoft") acknowledge their intent to negotiate agreements as outlined below.

The parties agree that this MOU is a non-binding statement of their intent to conduct further negotiations and does not create a binding agreement between parties in any respect or create any liability for either party. Such a binding agreement will arise only when all material terms have been set forth in a definitive written agreement executed by the authorized representatives of both parties. Either party may terminate negotiations at any time without further liability.

I.   Background: Objects from the Desktop to the Enterprise

Corporate and government customers of Digital ~~Equipment Corporation ("Digital")~~ and Microsoft ~~Corporation ("Microsoft")~~ need to build enterprise-wide distributed computing systems. Moreover, customers are increasingly demanding an object-oriented approach to distributed application development. By combining their respective strengths, Digital and Microsoft (collectively, the "parties") can provide a uniquely rich and complete set of solutions for distributed object-oriented computing.

The parties expect that Microsoft's Component Object Model ("COM") as defined in the Object Linking and Embedding ("OLE") 2.x specification will be the leading object system on the desktop and by sheer volume. Mass-market ISVs in the PC industry will follow the lead of major PC application vendors such as Microsoft and Lotus (both of which are totally committed to OLE 2.x) and use COM as their object system for Windows/MS-DOS, Windows NT, and Macintosh OS. Use of COM by corporate developers, however, could be restricted by its lack of interoperability with non-Windows environments such as Digital's OpenVMS and the important flavors of UNIX.

Digital has significant strengths in the areas of distributed computing, object oriented computing, and enterprise solutions. First, Digital has been a leader in distributed computing and, in particular, in DCE technology. Second, Digital currently supplies OMG CORBA-compliant object technology via its ObjectBroker product on an impressive variety of UNIX platforms in addition to OpenVMS. ObjectBroker already has a number of advanced capabilities such as attribute based object brokering and multiple method mapping. Third, Digital's traditional strength in mission-critical systems and its new emphasis on integration and consulting services will keep it in the forefront of solving customers' enterprise computing requirements.

By uniting their strengths in desktops, servers, enterprise systems, and consulting, Digital and Microsoft can provide the most compelling set of desktop and server object technologies

available in the industry. The parties can do that by combining the availability of mass-market OLE 2.x-style object applications (and accompanying COM expertise among PC ISVs) and the future COM-centric version of Windows NT (Cairo) with new versions of the ObjectBroker distributed object system for IS professionals on a wide variety of platforms. Also, given Digital's Alpha PC strategy and fundamental commitment to Windows NT on both desktop and departmental server, the advent of Cairo (Windows NT 4.0) will accelerate the mutual commitments and interdependencies of Digital and Microsoft in both operating systems and object technology.

In sum, customers will be able to use the compatible pieces of object technology supplied by Digital and Microsoft to stitch together their heterogeneous enterprise systems with a common object technology. And they will not be alone: Digital's integration and consulting services can be a crucial glue component that enables the joint object strategy to hang together.

II. Agreement Regarding an Object Protocol and COM-Compatible Object Services

1. *Use of a Common Object Protocol.* Digital and Microsoft agree to use in their respective object-oriented applications environments a set of extensions developed by Microsoft for the Cairo system that add object-oriented capabilities to DCE RPC (this protocol and related RPC extensions are referred to hereafter as "Object RPC"). Microsoft will use Object RPC for COM-related distributed object invocation in future products. Digital will have input into the features and specifications of this protocol as it matures. As soon as feasible, Digital will migrate to use Object RPC as the communications protocol in ObjectBroker (whether running in OLE/COM-compatible mode or CORBA mode, see below) or any other CORBA or COM-related distributed object products that it develops. Microsoft will grant royalty-free licenses (other terms to be agreed on by the parties) to documentation, source code, and other resources for the purpose of expediting the process of Digital's move to Object RPC.

2. *Use of COM as a Common Object Model.* Microsoft agrees to use COM and upward compatible future versions of COM as its distributed object technology in Cairo, Chicago, Windows 3.x, and the Macintosh OS (commitment to delivery of distributed object capabilities on Chicago, Windows 3.x, and the Mac is subject to further investigation by Microsoft). Digital agrees to provide all COM-compatible distributed object services (such as object creation, activation, and naming) as part of the ObjectBroker product on all supported ObjectBroker platforms. As part of ObjectBroker, Digital will provide the tools necessary to enable its customers to create COM objects on all supported platforms. Microsoft will grant royalty-free licenses (other terms to be agreed on by the parties) to documentation, source code, and other resources for the purpose of expediting the incorporation of COM-compatible technology into ObjectBroker.

3. *Use of an Open Protocol.* The protocols used by Object RPC (which remains wire-compatible with existing DCE RPC applications so long as the object features are not used) will be made public in the future to underline its "openness." The date will be mutually agreed upon but no later than the release of Cairo and the COM/Object RPC ObjectBroker (both currently planned for early 1995).

4. *Participation of Other Vendors.* While a Digital and Microsoft partnership on object technology presents a formidable alliance, it is crucial that this venture not be seen by customers and analysts as a "closed" or "proprietary" strategy. Therefore, the parties agree to seek endorsement of their common object strategy by key OEMs and ISVs committed to OLE 2.x, such as Siemens-Nixdorf, Olivetti, Bull, ICL/Fujitsu, Intergraph Corporation, Lotus, AutoDesk, Interleaf and others. In exchange for this endorsement these OEMs and ISVs may be informally consulted about the development of the common strategy and may receive early access to specifications, protocols, and products that implement the common strategy.

5. *Relationship to OMG CORBA.* Digital is free to try to provide a mapping between the OMG CORBA 1.1 IDL and the joint extended RPC IDL (with tools that convert between the two where possible) and any other type of COM-to-OMG mapping that it decides to pursue. Digital is also free to provide full support for OMG standards as an alternative non-COM-compatible mode for users of ObjectBroker, although Digital will use Object RPC in that case both for technical simplicity and also for reinforcing the unified strategic message by using a single "open" communications protocol. Finally, Digital and Microsoft may later agree to submit some or all of the Object RPC and COM technologies to the OMG in response to an RFP if that appears to be in their mutual interests. However, in no case will new developments in the work of OMG or Digital's relationship to OMG (including, without limitation, the refusal of OMG to adopt COM and Object RPC after submission by Digital and Microsoft) interfere with its commitment to provide COM-compatible object technology on a variety of platforms as outlined in this memorandum of understanding.

6. *Development of GUI OLE 2.x Components by a Third Party.* The joint Digital-Microsoft strategy is focused on creating an infrastructure of COM-based non-GUI objects on non-Windows platforms via the ObjectBroker product. This technology will typically be used to "wrap" legacy code with an object layer to facilitate use from the desktop as well as, over time, to write new server code that exports object interfaces. In a related effort, Microsoft is seeking a development partner interested in providing the GUI components of the OLE 2.x compound document and application integration architecture on high-volume UNIX and other platforms. Several likely candidates have been identified and are currently under scrutiny. This technology would be used by ISVs such as Lotus to provide OLE 2.x-based desktop applications for UNIX and OS/2 and is a key aspect of getting ISV cooperation in a joint object strategy announcement. To the extent that the platforms supported by this effort overlap with ObjectBroker platforms, Digital and Microsoft will use best efforts to ensure the third party can use the ObjectBroker product to supply the COM-based non-GUI distributed OLE capabilities. To the extent that OLE 2.x work is done on platforms not supported by Microsoft or Digital (such as UNIX versions and/or platforms not supported by ObjectBroker), any such third party would be free to develop the COM and non-GUI components of distributed OLE as well. However, Digital will have a right of first refusal to build the non-GUI distributed OLE components for any such platform provided it will do so in a timely fashion. In addition, any such third party will have the option of using COM capabilities provided by a system OEM as part of its operating system and networking product. In all cases, Digital will have the right to re-license and support the resulting third party GUI product under terms agreeable to the third party, Microsoft, and Digital.

7. *Announcement of Joint Object Strategy, Open Protocol, OLE 2.x Cross-Platform Support, and Distributed OLE.* The parties recognize that a large part of the short-term benefits from

this agreement can flow from positive press and public relations upon its announcement. Therefore, they will work together diligently to determine the best time, place, and manner for the joint announcement. A key part of this effort will be to get other vendors (OEMs and ISVs) as well as customers to participate in the announcement and to say positive things about the joint Microsoft/Digital strategy. Another key aspect will be to have a demonstrable distributed object system, even if primitive, that shows software components on a Windows NT system invoking services from objects running on Digital platform and vice versa using COM and the joint protocol. Ideally, other OEMs' systems and ISVs' code should be shown in these scenarios as well. In sum, the parties will work together closely to ensure maximum benefit from the announcement. The announcement will be made no later than Fall Comdex, 1993.

III. Other Terms

Duration. This memorandum of understanding will remain in effect for three years from the date of its inception. Thereafter, the parties will have the right to agree to one year extensions on a year-by-year basis.

Confidentially. The existence of this memorandum and its terms are subject to the Reciprocal Non-Disclosure and Confidentiality Agreement between the parties.

If this Memorandum of Understanding adequately reflects the mutual current views with respect to the plans of Digital and Microsoft, please so indicate by signing below.

Signed this __ day of September, 1993.

Larry Walker
Vice President
Networks Engineering Group
Digital Equipment Corporation

Paul Maritz
Senior Vice President
Systems Division
Microsoft Corporation