From: Mark Ryland [markry]
Sent: Friday, September 17, 1993 2:12 PM
To: Bob Gomulkiewicz; Tony Williams
Subject: FW: Comments on MoA draft #4

Latest round with Digital, comments welcome.

-- Mark

From: Mark Ryland
To: 'Mark Bramhall'; 'Rod Hodgman'
Cc: Jim Allchin; Paul Leach
Subject: RE: Comments on MoA draft #4
Date: Friday, September 17, 1993 1:03PM

New version attached at the end with revisions marks showing changes. In addition, here are our responses.

> In the background section, 2nd paragraph, "...and by shear volume." should be
> "...and by sheer volume."

Done.

> Same paragraph, OpenVMS has no space between the Open and VMS. The same change
> applies to all other occurrences.

Done.

> In the agreement section, #1, your changes to balance the agreement is 99%
> there. Digital's commitment is now to "any [other] CORBA or COM-related
> distributed object products." The Microsoft sentence should be changed to have
> the equivalent statement, viz, "Microsoft will use Object RPC for COM-related
> distributed object invocation in future products." The editing is to add
> "COM-related" just before "distributed" and to strike the "PC" between "future"
> and "products." This commits both companies to Object RPC in CORBA or
> COM-related products (with the CORBA part not affecting you as Microsoft has no
> such product desires). If Microsoft wants to exclude hand-helds or similar then
> that's OK but the exclusion needs to apply to both companies.

Done. All we are trying to do (on both sides I think) is prevent "random" divergence from the protocol.

> In #2 "the" should be added in "...and naming) as part of the ObjectBroker
> product...".

Done.

> We need to add the part about agreement length. We propose something like the
> agreement applying for three years after which the agreement continues from
> year to year by mutual agreement of the parties.

Done, new section at the end.

> We agree that adding legal verbage around portable code and taking back
> portability fixes would be cumbersome. We do wish to ensure Microsoft knows
> that it could easily cause Digital to not be able to meet the agreement by
> supplying code that was not portable, including but not limited to, use of
> Windows-only features, etc. The more portable across system and OS the faster
> to market for the entire solution.

We agree that it would be a good thing for us to minimize anything random. We'll certainly work to acheive that and take back changes from you that improve things. On the other hand, we'll use local OS features if there's a big win from that, as you will to. I think this will all work out in a reasonable way.

> We also need to come to understanding about the licensing of the
> "documentation, source code, and other resources." We certainly expect a
> license that ensures Digital uses the materials for the designated purpose
> (building a COM-based Object RPC distributed object system). Our expectations

> were set by Jim Allchin in the August meeting in Redmond that this license
> would be a zero-fee, no royality license. We will be covering many, many and
> lower volume platforms. The payback to Microsoft is in establishing OLE, COM,
> and Object RPC across the marketplace.

Fine. Let me address this in a couple of ways.

1. In terms of the document, we have added language in the sentences you reference that make the stuff we license you royalty-free, but at the same time clearly limit its scope to the stated purposes. We don't expect and certainly don't want you to do go off and use this for something unrelated, or license it to others, etc.

2. Outside the document -- we just want to be clear that it is incredibly important to us that you remain compatible with our protocol (which you have input on) and with COM/OLE. I think market forces and your own intelligence will lead you to the same conclusion, but from our perspective it would be unacceptable if we got 2/3s of the way down this road and after reasonable negotiation we couldn't agree on some additions you wanted and you then added them anyway! The market will punish us both unmercifully if we produce "OLE/COM" products that are not completely compatible. It will be super-important for us to remain in sync and we will do everything we reasonably can to remain so and expect you do to the same. That is the key licensing issue for us, not money. But again, I hope and expect I'm preaching to the choir!

> In #5, we again agree that legal verbage around commitments in submitting to
> OMG would be hard to write. But we again point out that our success in the
> marketplace will be measured on our "openness" as well as technical excellence
> and dealing with OMG is a large part of that. In summary we expect a good
> relationship with Microsoft in backing Digital proposals regardless of
> contractual guarantees.

We agree. This is important and we will work out the best arrangement for both companies.

> In #6, strike the "try to" from the middle of "...third party will cooperate
> with Digital and use the ObjectBroker product to achieve distributed..."

This is actually a very tough issue for us. Here are some of the potential problems:

1. What if the 3d party GUI stuff is moving to a platform that you "plan" to support but you're not there yet? or you are not sufficiently far along that your code can be used by a 3d party? or if the 3d party waits for your code to be functional it will mess up its delivery plans and schedule?

2. God forbid, but what if your product is so lousy on a given platform that the 3d party (and us) consider performance unacceptable, or there are other things that are terribly wrong and ISVs like Lotus turn up their noses, hurting us all. What then? The GUI stuff is sufficiently important in its own right that we need an escape valve for it. You would still have the right to resell (and support and integrate) the resulting product, of course.

3. What about non-Digital OEM platforms? suppose SNI or any other hardware vendor really gets behind this initiative and decides to provide distributed COM as part of their Unix offering? In that case wouldn't it be acceptable and even perhaps necessary for a 3d party doing the GUI stuff to use the "native" version, even if you sell ObjectBuilder on that platform as well? (I've added a sentence in the draft do deal with this case because it struck us as important and something we shouldn't have any ambiguity about.).

So this is a hard case for us. I've diddled with the language a little bit, let me know what you think.

> Sorry about "ObjectBuilder" -- It was my fingers typing something my brain
> never said. There's no ObjectBuilder. There's only ObjectBroker.

Ok.

Other changes:

1. On advice of our lawyer, who has now glanced at this :-), I changed the title from "Memorandum of Agreement" to "Memorandum of Understanding." This is about as legal as we're gonna get and I don't think either side's lawyers would accept something this informal as a contract.

2. Added confidentially section at the end as well.

3. Added "RPC" in para 3 just for clarity of what we'd be interoperable with.

4. Changed "OLE 2.0" to "OLE 2.x" throughout the doc to reflect that fact that we will be shipping minor updates regularly.

We're getting down to a few sticky points and a telephone call or conference call may be in order. But we're very excited and optimistic that we can reach agreement and move forward rapidly. I look forward to hearing from you.

-- Mark

decagre5.doc

Memorandum of Understanding~~Agreement~~

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

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.x0 specification will be the leading object system on the desktop and by sheear 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.x0) 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.x0-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 ~~PC~~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 ~~to~~ 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 ~~to~~ 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 (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.x0, 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~~agreement~~.

6. *Development of GUI OLE 2.x0 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.x0 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.x0-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, any such third party will cooperate with Digital and make best efforts~~try~~ to use the ObjectBroker product to ship a product with~~achieve~~ distributed OLE capabilities. To the extent that OLE 2.x0 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 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.x0 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.

Signed this ___ day of September, 1993.