**From:** Alan J Holzman [Alan_J_Holzman@ccm.jf.intel.com]
**Sent:** Friday, April 19, 1996 2:56 PM
**To:** Mike_Richmond@ccm.jf.intel.com; Greg_F_Eastman@ccm.jf.intel.com; Frank_T_Ehrig@ccm.sc.intel.com; Burt_Perry@ccm.jf.intel.com; Barbara_Dawson@ccm.jf.intel.com; Sandra_Morris@ccm.jf.intel.com; Patrick_P_Gelsinger@ccm.jf.intel.com; Craig_Kinnie@ccm.jf.intel.com; aholzman@ibeam.jf.intel.com; mcg@ibeam.jf.intel.com
**Subject:** MS/Intel Java Meeting Minutes - 4/18/96

Text item:

Trip Report from Alan Holzman & Burt Perry :

MS / Intel Java Meeting 4/18/96
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Attendees
Bob Muglia, VP Tools Microsoft
John Ludwig, VP Interfaces Microsoft
Jon Thomason, Program Mgr Microsoft
Mike Tatongy, Project Lead - Java Microsoft
Alan Holzman, Strategic Partners Intel
Burt Perry, Eng Program Mgr Intel
Greg Eastman, VM Project Lead Intel
Frank Ehrig, SSTM Mgr Intel

ú MS will take part in the Sun 4/30 announcement of Java OS platforms
ú MS VM built from spec, no Sun code
ú MS has changed native interfaces. Not compliant w/ Sun's current native interface at the binary level :

ú As part of rewriting the Java VM, MS has completely changed the internal object model to accommodate COM. We think they have not told Sun and this may be an issue for Sun as well as us if Intel and MS give a single optimized IA Java RT back to Sun. The current method for calling native methods in the MS Java VM is different and not compatible with Sun's. MS will provide include files that allow you to bridge between the two at the source code level but not at the binary level.

ú MS believe their VM is 2X faster than Netscape
ú Discuss w/ Clary . how can we work w/ Microsoft ?
ú Get Sun permission
ú Tell Clary to call Muglia on us working together if there is a problem with Clary agreeing to it
ú Get a letter from Clary giving us permission to work together

ú MS has not done interpreter optimizations and is very interested in working together to produce a single reference implementation for IA Java on Windows.
ú The IE 3.0 timeframe of June is not possible for integration of Intel & MS VMs, but IE 4.0 in fall is IE 3.0 will have new MS VM in it though.
ú IE 4.0 (as part of Nashville) is right target to combine MS & Intel VM work
ú Muglia/Ludwig want exclusive access to IA's VM work :
ú Ludwig does NOT want us to give Netscape our VM work
ú Netscape access to VM is VERY touchy w/ MS !!!
ú Ludwig wants us to work through Microsoft, not go to Netscape unless we were unhappy with MS cooperation (or lack thereof). Let Ludwig know we're unhappy BEFORE we go to Netscape

ú Issue: If we work with MS, they want us to start with their new code. Technically this is not a problem but when we jointly give Sun the code, they will be astonished because it will be totally different

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than their source base and will have no shared code with any other implementation. Rather, it will be Microsoft's architecture. How will Sun feel about this and our participation in this (Wintel all over again?).

ú A Java JIT will be standard in the OS from MS. Will always be there, make decisions on what to JIT and why
    ú Borland doing the same with Netscape!

ú Class Libraries
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MS has integrated COM as inherent part of Java VM so they want all classes to simply be COM interfaces. Plan to develop cross platform (Windows, Mac, UNIX) class libraries (built in native code, not Java) for: Media and graphics, Data building / data access, forms

ú MS is considering a UNIX client for IE
ú Software AG is/WILL port COM & DCOM to all UNIX platforms
ú MS assuming that class libraries will be anti-MS coming from Sun no matter what!

    ú thus, get ISVs & developers to write to MS class libraries
    ú Get anti-MS developers by porting COM to the MAC etc.

ú Forms class libraries were THE most important to MS
ú Can we work together on defining Java Class libraries "outside" of the Sun Class Library definitions ???
ú Muglia wants to work with us on defining media classes that work directly with COM

BOTTOM LINE:
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They want developers writing to their APIs not Sun's Java APIs and strongly want us to rethink what we are doing. They want to work with us to define media class libraries that we are happy with. Ludwig will give us a date for their Media Class Interface Specs on Monday 4/22 after he meets with the engineers.

Key ARs :
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1. AHolzman/BDawson - get Clary letter on MS & Intel working together on VM (combine work).

2. AHolzman/BDawson - Investigate - How do Intel/MS work together on defining Class Libs .Look at our Sun Media NDA and see if there are legal issues that prevent us from working with MS. Do we want to work with MS on these?

Attached document placed in: /tmp_mnt/ffs/f/mcg/attach/java/micros~1.doc on Sat Apr 20 13:21:40 PDT 1996