GOVERNMENT EXHIBIT 519
PENGAD-Bayonne, N.J.

From: Tod Nielsen
Sent: Tuesday, January 07, 1997 5:23 PM
To: Brad Silverberg; Ben Slivka; John Ludwig; Brad Chase; Bob Muglia; Charles Fitzgerald; Cornelius Willis; David Cole
Subject: FW: (TechWire) Microsoft Backing Off Java Legal Wording

As we try and refine our API strategy and key messages to developers, this article contained some quotes that I thought were provoking:

"About three weeks ago, **management told us to de-install the Microsoft Visual J++ Interactive Development Environment,"** said Larry Hagerty, senior systems engineer at GTE Data Services Inc., Temple Terrace, Fla.

"Our C++ programmers love that environment because it is so similar to the Visual C++ environment they know, but management feels that Microsoft has too many non-standard extensions."

Management's fear, according to Hagerty, is the enticing power of the Microsoft environment. "When developers get **close to a deadline, there may be an irresistible temptation to take shortcuts [using the Microsoft environment] that will end up in the application becoming Windows-specific."**

This article got me thinking. At a high level Microsoft's strengths can be summarized as follows:

- *Technical superiority.* We have a reputation of building the best technology. Maybe not at first, but in the end you can always bet MS will deliver the best products.
- *Easiest and most productive.* Our products and technologies usually have all the necessary stuff that makes getting work done faster. We have the wizards, the IDE, the apis, the sneaky hacks, etc. that when the time pressure hits, will bail a developer out of a jam and allow him to meet a deadline. It may not always be "pure", but developers know they can deliver with Microsoft
- *Developer Loyalty.* Because of the point above, we have a tremendously loyal following of real, in the trenches, developers that depend on us to be successful. Sure, the MIS manager may not like Microsoft, but the MIS manager is not the one that has to get the new payroll module completed by tomorrow morning and handed off to the accounting department. In the real world, deadlines are met with Microsoft.

What can we do to leverage our strengths in this current competitive environment? Off the top of my head, here are some messages and things we can to do that should help propel us into a position of strength and leadership, and get us out of the reactive state we sometimes find ourselves in. I think we should step up to the plate and be hard core about the following:

- ***A reasonable Cross Platform position.*** We need to do two things here. First, we need to be crystal clear on what technology will be cross platform and what won't. If we are ambiguous, we are going to lose credibility and get slammed. I would love to have a document I can pass out called the Active Client APIs. In it, we would define the apis for every technology we are seriously committed to making cross platform, and the dates these will be available for each operating system. Second, we need come out of the closet and stop being ashamed of being best on Windows. The day we need to panic, is the day when an application written to a Mac Java VM (or NC) can do everything that a native Windows application can do. We are not there yet, and God forbid that any of us ever live to see that day. When I talk to developers today, cross platform is not their top priority. Sure it would be nice, but real developers that deliver software to real customers want to do everything they can to build the best application quickly. If their app can also run on a Mac, great. But they aren't going to throw away their entire investment in Windows and move to a less robust platform, just because they can run their app on a Mac. Developers need to hear from us that they can create more robust and functional applications more quickly for Windows, then they will for any other operating system or platform. All of our technologies and innovations will be optimized for Windows. Of course, we will provide some technologies that will run on multiple operating systems, but Windows is our focus. Developers win with Windows. Some little talked about facts: almost 90% of the developer population is writing for Windows today, 81% of these are targeting Win 32. (Note: these numbers have increased from last year, where only 74% of developers were targeting Windows. I know that you are probably gagging in disbelief at this, please see the following URL for the complete study - \\moa\ddmktg\Public\RESEARCH\developer market review.ppt) The bottom line is that we have already won the majority of developers to target Windows. Instead of spending excess energies porting all of our technologies to other operating systems, let's focus on adding more "fuel" to Windows. Our cross

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platform offerings should be the lowest common denominator, we shouldn't try and make our cross platform offerings equal to our Windows assets. We own the developers today. Lets not lose them. Let's help them come out of the closet to rally with us and proclaim that the best applications can be written to the Microsoft Active platform.

- ***"The big easy".*** We should make sure that every product group is focused on making it *irresistible* to fully exploit the Active Platform. Developers who are dead set against using our technologies at the beginning of a project, will be begging for the latest NT service pack the night before the project is due. Purity is not the name of the game, making our customers successful is. We should invest in every wizard, short cut, usability feature, etc. that helps make developers more productive. I would love to see a world of 10 million developers addicted to Microsoft. Even though the press, their families, and their bosses may say that it is "lame" to support Microsoft, every developer will know and believe that their kids are going to college due to the successful project they completed on time with Microsoft.

- ***Leadership with Developers.*** We need to prove to the world that no other company spends more time, money, and resources listening to and meeting the needs of developers. No other company provides the infrastructure and opportunity for them to succeed. The Internet is not about Freedom, or Purity, or socialism. The Internet is about ***opportunity*** for developers and corporations to exploit the vision that Microsoft was built upon "a computer on every desk and in every home". The Internet allows the developer community to have distribution and impact like they have never had before. They can build a web application, and the entire world can instantly access it. Any deadline can be met with Microsoft as your partner. Microsoft doesn't care about religious battles over languages, or apis, "not invented here" arguments. We will do whatever it takes to make sure developers can be successful. In the end, developers have to deliver in order to stay in business. Microsoft is about keeping developers in business.

So, given my preaching above, what are some specific next steps we can take:

- Ship trident asap for Windows. When and if we get it to the mac great. But let's focus all of our energies on getting an awesome trident out for Windows immediately. A radical thought could be to consider not ever moving trident to the Mac? Maybe we just have MSHTML for the mac and unix, and Trident is the Win32 solution? Probably too radical, but something to discuss.
- Develop the list of 5 new operating system / platform features that will addict developers to Windows and make them successful. Examples could include:
  - Intelligent caching of ActiveX controls and java applets - automatic clean-up of registry for controls that seldom are used.
  - Authenticode for scripting.
- Cross-platform control converter/utility - we need to make it easier for control developers to at least deliver a subset of functionality on other platforms. We should work to minimize the amount of work each individual developer must do to recompile their ActiveX control for another platform like the Mac.
- Java leadership. Let's stop the religious debate. We should support whatever Sun deems as pure. We will also extend it as appropriate to make developers more successful. Things we can do to demonstrate this include:
  - Make it easy for a Java developer to create true ActiveX Controls that can live inside any OLE Container, be it IE, Office, Lotus Notes, etc.
  - Flood the market the with additional Java classes that add huge value over IFC and Java classes coming out JavaSoft.
  - Push our event model for Java to take wind out of JavaBeans.
  - Announce full support of JDK 1.1, and commit to a phased implementation. Of course we will still extend and innovate as appropriate. But we need to be credible when we say we support the core "standard java"
  - Push to get a truly RAD/WYSIWYG set of Java development tools for our specific VM extensions. There should some awesome tools from us and from 3rd party ISVs.
  - Push to get our Java on Win 16 out of the door.
  - Push to get Java VM on the server out the door in an incremental release of IIS. (3.01?)

—Original Message—
From: Dawn Zeh
Sent: Monday, January 06, 1997 11:12 AM
To: IPTD News
Subject: (TechWire) Microsoft Backing Off Java Legal Wording

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Summary: TechWire reports that Microsoft is rewording its Java SDK licensing agreement to allay user fears that their applications will be legally bound to run exclusively on the Microsoft's Java Virtual Machine. The license change, which Microsoft officials described as a legal technicality, comes at a time when some large user organizations have balked at developing Java-based applications using Microsoft's programming tools out of fear that doing so would lock them into

Windows. This would defeat the purpose of developing platform-independent Web programs in Java.

Microsoft has denied that wording in its license agreement -- stating that the application to be developed is intended "for use with Microsoft Virtual Machine for Java" -- means it must run solely on its VM.

You can access TechWire at http://www.techweb.com/wire/

News from your Library -

Microsoft Backing Off Java Legal Wording
(01/05/97; 1:50 p.m. EST)
By Martin Marshall, CommunicationsWeek

Redmond, Washington -- Microsoft is rewording its Java SDK licensing agreement to allay user fears that their applications will be legally bound to run exclusively on the Microsoft's Java Virtual Machine.

The license change, which Microsoft officials described as a legal technicality, comes at a time when some large user organizations have balked at developing Java-based applications using Microsoft's programming tools out of fear that doing so would lock them into Windows. This would defeat the purpose of developing platform-independent Web programs in Java.

Although several organizations have expressed concern about cross-platform interoperability, the latest fear comes from those who believe they would be violating Microsoft's license agreement if their Java applications were distributed across non-Windows computing environments.

Microsoft has denied that wording in its license agreement -- stating that the application to be developed is intended "for use with Microsoft Virtual Machine for Java" -- means it must run solely on its VM.

"There is no intent to preclude people from running on other VMs," said Charles Fitzgerald, Microsoft program manager for Internet client and collaboration software.

"I agree the license language is not clear and we're going to make it more clear so that there is no confusion on the part of developers," he added, though he could not provide updated wording or a specific time for delivery.

At issue is the cross-platform usage of the "vanilla" Java code produced using Microsoft's Java SDK and Visual J++ Java development environments. Microsoft officials said the "vanilla" version meets all of JavaSoft's tests for 100 percent pure Java code and, despite the disputed wording, such applications can be deployed on virtual machines on other platforms and on other Windows-based virtual machines.

While that may be so, several shops apparently are not convinced.

One Fortune 1000 Java developer said the current license wording caused his company to back away from using Microsoft's Java programming environments. He said that once his company's lawyers saw the license restrictions, they told him to use a different Java VM.

In Microsoft's view, the use of programs developed with its Java SDK and Visual J++ environments offers opportunities for developers to enhance their applications by tying in existing ActiveX components.

"There are a bunch of interfaces that are specific to the Microsoft VM, including the debug and invocation interfaces, the native code interfaces and the JIT [Just-In-Time compiler] interfaces," said Microsoft's Fitzgerald. "These are not relevant to any other VM."

The ability to tie in ActiveX components such as Windows-specific C++ objects, despite the benefits, has some corporate developers concerned about maintaining the "write-once, run-anywhere" metaphor.

"About three weeks ago, management told us to de-install the Microsoft Visual J++ Interactive Development Environment," said Larry Hagerty, senior systems engineer at GTE Data Services Inc., Temple Terrace, Fla.

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GTE Data Services is currently involved in several cross-platform Java programming efforts. The most notable is the U.S. Department of Health, Education and Welfare's Medicare Transaction System, a huge, Web-based distributed database application that will handle all Medicare transactions by the end of the decade.

Even shops that do a great deal of ActiveX work are trying to keep their Java applications pure. "All of our Java applets are plain vanilla," said Jim Flynn, general manager of New York City-based @Work Technologies Inc., a Web application consultancy.

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