

From: Ben Waldman  
Sent: Thursday, April 23, 1998 3:07 AM  
To: Eric Rudder  
Subject: FW: Summary of meeting with Steve Jobs



Oops, forgot to include you

—Original Message—

From: Ben Waldman  
Sent: Thursday, April 23, 1998 2:35 AM  
To: Bill Gates; Paul Maritz; Bob Muglia (Exchange); Jon DeVaan; Greg Maffei; Rich Tong; Dennis Tevin  
Cc: Jodi Granston; Richard Craddock; Don Bradford; Rick Powell; Jim Murphy  
Subject: Summary of meeting with Steve Jobs

**SHORT VERSION:**

Yesterday, I and several others met with Steve Jobs and others at Apple for about 3 1/2 hours, primarily discussing two issues:

- 1) Apple's new OS plans, and Steve's desire to get MS's public endorsement at Apple's May developer conference
- 2) Apple's plans for ClarisWorks, including their plan to bundle it on their new consumer machine, our views of this, and ways to mitigate our concerns.

The bottom line is that

1) Based on what we've heard so far, I think their OS plan (effectively killing Rhapsody, and making MacOS a pre-emptive multitasking OS w/protected memory) is exactly the right thing for them to do, and, pending some more detailed information, I think we should endorse this and announce plans to develop Office and IE for it. My biggest concern is getting the appropriate tools support, since there will likely be a change in runtime model and exe format. As to whether we want to get something back for this endorsement, I think that we can get a few minor issues dealt with, but I don't think that we will get something major out of them for an endorsement. I discuss several ideas below. Unless there are any strong concerns, I'd like to go ahead and get back to Steve early next week.

2) Apple will bundle ClarisWorks (renamed "AppleWorks") on their new sub-\$1000 machines, but, honestly, I don't see how they have much choice, given the inclusion of Works products on Intel machines targeted at the same market. They claim they don't want to be competing with us on Office, and so won't advertise the product, and will agree to include "upgrade to Office" incentives of our choosing with the machines, including coupons, a 3 MB QuickTime moving promoting Office, etc. Again, I will discuss several ideas below.

3) Steve is waiting to hear a proposal from us on close internet collaboration in exchange for our QuickTime support.

4) Apple's NC plans have been shelved for now (Steve claims this is for marketing, not technical, reasons, citing a lack of understanding of how to sell servers, clients, and software -- let the Intel guys pioneer this, he says).

5) I think they've heard my concerns about their lack of enthusiasm for IE, and I hope to see improvements here.

Ideas on what to ask for:

- 1) Commit to ship an IE for their new OS on day one, in exchange for very vocal support for IE as well as steps to encourage increased usage.
- 2) While accepting their need to ship ClarisWorks on their consumer machine, limit ClarisWorks' impact on our business by
  - a) working to ensure Office attach on these machines, by including Office upgrade incentives on machine, or working with resellers to achieve similar goals. JodiGr is driving this.
  - b) seek to reduce Apple's development and marketing efforts on ClarisWorks

I don't think we should link endorsement of this new OS to further support of MS's direction on the Internet (other than Mac IE).

Thx  
BenW

**LONG VERSION:**

Last week Steve Jobs invited me to come to Apple to meet with him and others to discuss Apple's new OS plans, which he plans to unveil at the Apple developer conference next month.

**Apple attendees:**

Steve Jobs, Chairman and CEO  
Avie Tevanian, Sr. VP. Engineering -- avie@apple.com (heads all product dev, works for Steve)  
Phil Schiller, VP. of worldwide product marketing -- schiller@apple.com (heads marketing worldwide, works for Steve)  
Steve Naroff, Dir., Mac Runtime and Tools -- snaroff@apple.com (also responsible for all of Apple's Java work)  
Bertrand Serlet, Sr. Dir., Platform Tech. -- bertrand\_serlet@apple.com

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Ken Bereskin, Dir., Mac OS Technologies product marketing -- bereskin@apple.com (a fool)  
Scott Forstall, Mgr. Applications Frameworks -- forstall@apple.com  
Jim Batson, QuickTime Architect -- jim@apple.com  
Mike Kellner, Lead Engineer, Advanced Mac Toolbox -- mkellner@apple.com  
Rick Holzli, Mgr., Microsoft Partnership -- holzli@apple.com

**Microsoft MacBU attendees:**

BenW  
Dick Craddock, Product Unit Manager, Mac Internet Product Unit  
Jodi Granston, Mac Office marketing lead  
Jim Murphy, a development lead on Mac Office (filling in for Rick Powell, Mac Office Development Manager)

Apple is effectively cancelling Rhapsody, and focusing on "modernizing" the MacOS, by placing it on top of a Mach 3.0 kernel, having apps run in separate, protected address spaces and be pre-emptively multi-tasked, and eliminating fixed-size memory partitions. Though old-apps continue to run, in order to gain the benefits of the new system (pre-emption, protected address spaces, etc.), apps need to be modified (to a far smaller extent than Rhapsody, since this is still MacOS), and recompiled for a new runtime architecture and executable format. They are referring this as MacOS X ("Mac OS 10").

Of course, this won't be positioned as Rhapsody cancellation -- they'll say that you'll still have OpenStep/Yellow Box, and be able to run it on Windows, and on MacOS, except that will be one year later, and that Apple will do the "right thing" and preserve peoples' investment in MacOS, while still providing an advanced UI runtime for people who want it (and it will still be accessible from Java). While Rhapsody required developers to do a lot of work to get pre-emption and protection, in this scenario, Apple does "95% of the work." Later, however, in a smaller group, I asked Steve point blank if he'd ever believed in Rhapsody, and he said "no," adding something about his duty being to NeXT shareholders. (After that, we briefly discussed Amelio, and his book, and Steve said that Amelio "had fucked up everything he did, except hire Fred Anderson as CFO." He said that if you looked at all of this year's California graduating high school classes, anyone in the top 10% could have run Apple better than Amelio. I told him that I was amazed at 1) Amelio blaming his subordinates for problems and 2) his "appreciation" that BillG was "nice enough" to stay for a technical discussion held by subordinates after he and Gil had talked about general details).

We discussed technical specifics, and then they demoed ClarisWorks running on this machine.

**Specifics:**

- Underlying OS is the Mach 3.0 kernel
- It's MacOS, but certain APIs are no longer supported. In some cases, this is because they are trying to remove older APIs that have been supplanted by new ones, and in others, because underlying implementation changes prevent them from supporting low level APIs even though they can still support high level ones (e.g. networking). They are also dropping support for stupid things like publish and subscribe. Their analysis of our apps shows that 90% of the APIs we use are implemented, though after I pointed out that some of the non-supported stuff was important to us, they noted that they could make changes
- Apps need to be recompiled and the exe format is different, meaning that one needs to provide 2 exe-s -- one for MacOS 8, and one for this OS. I told them that it's OK if they change their exe format if this allows them to make important performance improvements -- their whole runtime model today is very stupid, requiring extra indirection, a lot of data fixups at boot time, and forcing them to load all global data at boot. I said that it should work like NT. Avie and his team completely understand this and agree, but apparently, there is religion at lower levels about pure code (he asked if he could quote me on a piece of paper and paste it all over their engineering hallways). The big issue here is that this requires new tools. Metrowerks has already gotten their tools to work, but we either have to move to Metrowerks, or have our tools group rev our toolset (compiler, linker, debugger, lego, etc.)
- They deal with "global state" dependencies in APIs (like QuickDraw) by keeping such state around per thread. Though they still claim that context switching will be fast, RichCrad notes that IE and OE perf are very dependent on efficient thread switching, and today's stuff is so lightweight that any changes may adversely affect perf.
- Memory management APIs don't need to change, unless app wants to use new functionality (but old APIs and old functionality work better than today).
- New APIs for shared memory and synchronization based on Mach 3.0.
- Hardware requirements: all G3 machines, may support 604 chip, but probably not earlier. Target 32 MB, "but by then, 64 MB may be standard anyway."

**Schedule**

- They've been working on this for the last 9 months
- Announce in May 1998
- Final APIs and developer release later this year
- Beta release in January 1998
- Ship in Summer 1999

They demo-ed ClarisWorks 5.0 running (just re-compiled, no source code changes). They also demoed protected address spaces, by having one app trash the system.

Frankly, this is what I always believed that Apple should have done, so it's good to see them doing this. My concerns are:

- Lack of specifics that enable us to understand how much work we need to do (i.e. which APIs not there). We may need to redo a lot of the networking code in IE.
- For Office, we need to touch multiple code bases to get even one app working -- the apps, the Office DLL, VBA, OLE, etc. (ot to mention converters, filters). IE, I think, will be easier.
- Lack of a clear understanding of all the work they need to do, and how far they are on their schedule, so I can independently assess their schedule. It's the 90/10 rule of course.

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- We face similar problems to the 68K --> PowerPC transition, e.g.
  - need to have 2 executables for every app means additional dev work and a lot of additional test work
  - lots of tools issues
  - Tying our schedule to theirs, i.e. I think that we need to target Office 2000 for this OS, not 98, but if we're done before they are, we have fulfillment issues and associated costs.
- What are we going to do about tools -- this will require either an investment in tools on our side, or a move to the Metrowerks compiler, which we cannot do for various reasons, at least for the MacOS 8 exe (PCCode, Lego)

On the plus side, this will help upgrade people from Mac Office 98 to Mac Office 2000. Apple talked about this new OS being an upgrade opportunity for developers, but I told them that I didn't think we could charge (at least not much) existing customers for the same version on a new OS.

## 2) ClarisWorks

Sometime this summer, Apple will ship a new machine, CD-ROM, 32 MB RAM, and a 15" monitor (in the education and education markets -- Steve estimates that there are 10 million worldwide numbers). These machines are designed to get people to upgrade. If these machines would be slower and more expensive, Michael Kwatinetz argued the same thing. These vendors have seen (other than the deal in the July-Sep quarter and hope to sell Office directly through their national reseller) available through their national reseller. Apple sells direct to education, w/7000 accounts.

*"Most of the value of Office is in Word"*

machine contains a 1024x768 resolution. Apple will upgrade the home and education markets on last year (double this to get them). This new machine is cannibalization, except to note that it's not for PhotoShop users; analyst of the cannibalization that PC users saw last year). They want to ship 250K units. They expect this machine to be sold directly from them to educ (Apple)

I have been pretty vocal with Apple at the Office competitor, and that we are targeting the education market. When asked about my headcount requests would be for the OS discussion, Steve, Phil, Jodi, and I

I have said that ClarisWorks is THE Office competitor. I'd indirectly, as we target the education market. I have said that I was pretty nervous, and so after the

Apple plans to ship ClarisWorks (renamed) on this machine in order to compete at a low enough price (this is true -- a) we talked about this, and he can't afford to invest the \$ to invest in the thought about whether we could give them Office at a low price on this machine, but we're afraid of cannibalization, and since most of the value of Office is in Word, we couldn't give them just Word at a low enough price).

that they need a productivity solution to offer Office to them at a low price. I talked about this, saying that it's too new, we should do it; b) internally, we

When I pushed them to just ship nothing, they insisted they needed something to compete with Intel machines, and frankly, this makes sense to me. They also argued that we OEM Works on a lot of Intel machines, and that we're not afraid of losing Win Office sales. I said that it was different, because a) ClarisWorks has been positioned against Office on the Mac, by Apple and by press and customers (and this has been successful in a few segments) b) empirical data show us that people with CW are less likely to move to Mac Office, and c) the market at which CW is aimed is a much larger percentage of the overall Mac market than is the case with Works on Windows.

But they insist that they are not aiming to compete with Office. They said they wouldn't advertise ClarisWorks. They said they'd include any upgrade incentive we wanted with the machine, i.e. a coupon or QuickTime movie advertisement (adding that they viewed this as a value add to the machine, not just a favor to us, which is true). They also talked about us doing an Office Lite to ship on this machine, and I rejected this, pointing out that in addition to the dev cost, I thought people with Office Lite were even less likely to move to the real Office than ClarisWorks users (for example, they'd already have the ability to read and partially edit their work documents).

So I think the best option is to acknowledge that they need to ship something on their machine, and figure out how to minimize the effect on us, by working with apple and/or resellers to increase office attach on these machines.

## 3) So what do we do?

Assuming that their OS plans hold up on further scrutiny, I think we need to endorse and target their new OS in order to have a successful Mac Office business.

Some thoughts:

1) Offer them IE for their new OS on day one, in exchange for very vocal support for it, and further steps to encourage use of this over competitors. I actually think they may remove Navigator from the hard disk in this summer's OS release ("Allegro" = Mac OS 8.2). It seems reasonable to ask that they don't ship any other browser that's not MacOS 10 "savvy" with the machine at all.

2) We will seek to increase Office attach on their consumer machines, either by working with resellers, or including incentives with the machine itself. We will need to understand if this machine is cannibalizing other Mac sales (where we are already attaching Office at higher price points), or if it is truly expanding apple's reach to new segments where our penetration is weak. JodiGr is driving this.

3) We could ask them to ship MS Works rather than ClarisWorks, even giving them MS Works for free. I don't think this will work -- we actually still generate revenue from MS Works sales (I need to better understand where that is coming from), and though I

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think that an MS Works user would be more likely to upgrade to Office than a CW user (mainly because MS Works is not as good), I don't think that Apple would go for it, because the product is several years old, with no Internet support/awareness.

4) Get commitment not to bundle CW on any machines other than the consumer machines -- this seems reasonable to me.

5) Ask them not to do ClarisWorks for their new OS -- unlikely they'd agree.

6) Ask for no further development work on ClarisWorks other than a port to the new OS -- maybe.

7) Ask them to end retail sales of ClarisWorks -- hard to see them agreeing to this; more likely is an agreement to include Office upgrade incentives in the ClarisWorks box.

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