

done under OS/2 because it is a superior development environment. IBM stated that there a 2X to 3X the number of apps available for OS/2 that are available for Windows.

IBM used charts to show that a complete system running OS/2 is \$400 cheaper than Windows. The chart shows the Windows machine with 3MB of RAM and the OS/2 SE machine with 2MB. EE was configured with 4MB. Jon's E-Mail shows the chart.

The attack has begun.

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From bradai Mon Apr 22 12:04:47 1991  
To: bradair  
Cc: adriank beas elind richt sarves  
Subject: IBM's OS/2 show  
Date: Mon Apr 22 12:04:29 1991

> From bobem Mon Apr 22 10:23:36 1991  
To: billg bradai jsmall joachimk joal mikahal makremer paulms steveb stevewc  
Cc: bobem davidt marek toya viktorj  
Subject: IBM's OS/2 show  
Date: Mon Apr 22 10:21:38 1991

Lee does a fancy demo, but behind this curtain is the same Cruiser we know so well. IBM took credit for absolutely everything, but with the exception of a new PM installer and some shell work, everything they showed was operational in the 2.0 code we supplied IBM with last fall.

In particular, the did NOT demonstrate Windows programs running in a window. All Windows demo's were done full screen - after they had booted Win 3 in a VDM. Some specifics:

Install:

They have written a new installer. They appear to have paid some attention to Win 3 in this regard. It is fully graphical (no character screens), and it retains config.sys. They said it finds user programs on the disk and sets up groups. Not clear whether it guides the user thru install of printers, etc. Although it allows setup screen a net, it is not clear if it has a questionless mode.

One really positive thing it has is a tutorial to help with the basics (mouse, etc.). This is something we really need to add for Win 4 and NT.

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On the negative side, they "solved" the config.sys problem by providing an editor which lists each parameter in and edit box. This includes things like 'memman' and 'swappath'. They even included 'files' although this is ignored by 2.0.

Shell:

Interestingly, they support 4 shells: DOS 4, Win 3, OS/2 1.3, and workplace. They didn't show anything but the workplace shell so it's not possible to see if behavior really follows Win 3. Although this will create test problems for them, this is a good idea given the acceptance of Windows.

For the Workplace shell, they showed drag and drop of a text file to a printer icon. They did not show dragging a spreadsheet or a word processor doc to the printer. This will be quite confusing to a user unless they pickup the Win 3.1 reg APIs. Also they did not show their trash can - David says that at the demos the night before, the IBM rep admitted that this function was not working.

This shell is pure SDL, at one point there were about 7 unrelated Windows floating on the screen.

They claim to have added APIs to permit apps to save their state prior to system shutdowns. Again, what about Windows programs?

They will include a bunch of applets with 2.0, including solitaire, a simple word processor, and a card file.

"Better DOS than DOS"

They did a good job of demoing this, but fundamentally there was nothing new. Yes, Cruiser makes DOS apps better than Windows. Yes, Cruiser supports cut and paste between DOS apps. Yes, Cruiser supports hardware devices like 3270, FAX, and scanners. Yes, Cruiser runs graphical DOS apps like Flight Simulator in a Window.

One interesting note, they booted DOS 4 (and a beta copy of DOS 5) in a VDM (nothing new). They ran Norton disk edit. Although they didn't change anything, they certainly implied that you could. This would indicate that they allow DOS programs direct access to the hard disk - something we never did because of system integrity issues.

They included a bunch of memory #'s for DOS 5, Windows, and OS/2 2.0. I'll follow-up with David to see if they're correct.

"Windows better than Windows"

They started Excel 2.1 directly from the workplace shell. They claimed this showed better compatibility with Win 2 programs than Win 3 provides. They didn't mention that the Excel they ran included the Windows

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runtime.

They showed Win 3 and 2.0 side by side. Under 2.0, they started a VDM, booted Win 3, and brought up PageMaker, showing this Windows app side by side with Windows. Win 3 was slightly faster. Lee guessed that Windows apps support would be better integrated before the product ships but was not specific.

I later asked Tommy and Colin if PageMaker was running in standard mode using DPMI, or real mode. They said real mode. Later, when asked the question, Lee said "it isn't running in enhanced because OS/2 doesn't need this, it is either running real or standard. I would guess standard". Tommy was sitting next to him shaking his head yes.

At no point did they do anything with a Windows program running in a Window. At the very end of the demo, they showed a screen with separate Windows for Lotus 2.2, WordPerfect, Excel 2.1, and PageMaker. They didn't do anything with this except activate each window. Interestingly, when the mouse was in either the Excel or PageMaker window, there were two mouse pointers visible. This is an old Crusier bug which occurs when using the mouse in a graphical, Windowed VDM. They have not completed the driver/other work needed to really run Windows programs in a Window.

Windows programs had ATM fonts. I would guess this just means they installed ATM on the copy of Windows running on the 2.0 machine, but I'll follow-up with davidw to make sure.

They ran a DOS program called 'badapp'. It must have written over DOS itself because Windows told the user to reboot. OS/2 of course responded with a character screen saying the app has been terminated. Lee said he'd try to change the char screen to graphical prior to shipment.

32-bit

They didn't push PM. In fact, they only mentioned it in passing. They did ask ISV's to port their 16-bit OS/2 apps to 32-bit. They didn't mention porting Windows applications except in the context of the Micrograph "porting toolkit". They were not specific about what this is but I overheard an IBMer say this was based on WLO (unconfirmed).

They claimed that 16-bit OS/2 apps can be ported to 32-bit in 4-6 weeks.

They compared a macro running on 32-bit REXX to the same macro running on 16-bit REXX on 1.3. The 32-bit version finished 40% faster.

Other

IBM said 2.0 will ship this year at least 20 separate times. It would be very embarrassing for them if it slips.

The demo used 7 separate machines. Lee used this opportunity to say that

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the code has been developed by small, separate teams - increasing efficiency. He didn't mention that it also means it still has not been integrated.

They said Micrografx is implementing a 32-bit PM engine for release with 2.0 THIS YEAR. Separately, I've learned from a consultant we've used to write display drivers (Jeff Newman) that this new graphics engine has a new, 32-bit PM device driver model.

They demand 2.0 running on their new 386ix portable with 2MB of memory. They ran Solitaire and had Lotus 2.2 inactive in a Window. Solitaire looked slow. The only thing significant about this is their resident memory requirement is < 2MB. This is nothing new, but I'll double check with rumbl.

Patriot - Liddle did his usual "only 25% of all possible PC users use PC's" pitch. There were NO specifics - no dates, no product contents, no talk of toolkits. The audience was pretty sleepy.

They said customers have > \$2B invested in OS/2 development and IBM has > \$500M invested.

They are packaging 2.0 in a small box with just a short install document.

#### Summary

Beyond install and shell work, IBM has not done anything fundamentally new with the Cruiser we gave them. They have an incredible amount of work to complete and integrate for a product which they claim will ship this year.

They will be hard pressed to defend their "Windows better than Windows" claim. Running Windows apps full screen is hardly "better than Windows". If they try and push it further they will have a hard time getting it done this year.

However, from a non-technical perspective, we have reason to be concerned. These guys are being rude to us, they are serious about competing with us. I agree with Tony's mail - we have a serious competitor in the OS business. We need to take appropriate business and marketing steps.

Bob

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