

PLAINTIFF'S EXHIBIT 963 Comes v. Microsoft

Date: Thu, 19 Sep 91 17:56:04 PDT

As of 6:10PM, we are at 101 bugs resolved today.

This is the third day in a row that we've resolved >100 bugs. Congrats team! this is fantastic. keep up the good work!

From brentk Thu Sep 19 18:41:02 1991
To: tomle
Cc: dosdev kcrvs vanguard
Subject: End of day report
Date: Thu Sep 19 18:39:27 PDT 1991

1) Bugs
Running Windows 3.0a Enhanced under DrDOS I get "Insufficient Memory" when going to a DOS prompt and using EM386.SYS as an UMB provider. If I boot DOS 5 from floppy and use DOS 5's EM386.EXE as an UMB provider in virtually the same configuration, I can start a couple DOS prompts before I get insufficient memory. As best I can tell there isn't that much of a difference in the memory footprints between the DrDOS and DOS 5. I put my configs in \\pyrex\user\brentk\drdos and \msdos, if anyone wants to look at them. My machine only has 640K + 1280K extended.

Win3.1 will not install over DrDOS. Get "Untrapped protected mode exception" or "Incompatible XMS manager..." depending on configuration (UMBs, no UMBS).

2) Dislikes
DrDOS Editor sucks!

They can't run Windows in Standard mode with UMBS. If you look closely at what the /WINSTD switch does, you'll find it basically turns off UMBS! DOS5's EM386 can't do this either, at least until it's replaced with the one from Win3.1.

3) Likes
I liked their method of conditionally loading device drivers in the config.sys by putting a "?" in front of the driver.

From tomyka Thu Sep 19 18:44:04 1991
To: tomle
Cc: brentk dosdev jefflo vanguard
Subject: DR-DOS 6.0 Testing(9/19)
Date: Thu Sep 19 18:42:27 PDT 1991

0) DR DOS 6 and MS DOS 5 Free Memory Comparison

On a PS/2 502 (286), with the following equivalent CONFIG.SYS:

MS-DOS 5 DR-DOS 6
BUFFERS=30 HIBUFFERS=30
FILES=10 FILES=10
LASTDRIVE=E LASTDRIVE=E
DOS=HIGH HIDOS=ON
DEVICE=HIMEM.SYS DEVICE=HIDOS.SYS /B=FFFF
Free conventional memory: 637,376 bytes 634,928 bytes

Winner: MS-DOS by 2,448 bytes.

On memory management feature of DR DOS is that unoccupied HMA is available for HILOAD, i.e. device drivers and TSRs are loaded first into available HMA and then into UMB. Therefore on a 286 system, you can HILOAD. With HIBUFFERS=30, free HMA= 2,960 bytes; HIBUFFERS=15, free HMA = 10,880 bytes; HIBUFFERS=8, free HMA = 14,576 bytes. This is a pretty neat feature.

On a DTK 386 3mb system, with the following equivalent CONFIG.SYS:

MS-DOS 5 DR-DOS 6
BUFFERS=30 HIBUFFERS=30

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PLAINTIFF'S EXHIBIT 480 A. No. Z:96CV645B

FILES=10  
LASTDRIVE=E  
DOS=HIGH,UMB  
DEVICE=HIMEM.SYS  
DEVICE=EMM386 NOEMS

FILES=10  
LASTDRIVE=E  
HIDOS=ON  
DEVICE=EMM386 /F=NONE /K=AUTO /B=AUTO

Free conventional memory:  
629,904 bytes                      642,464 bytes

Available UMB space:  
95 KB                              136 KB

Available HMA space:  
N/A                                2 K (10K, 14K depending on buffer #)

DR DOS beats us on a 386 system by 12,560 bytes conventional; their EMM386 is a combined XMS provider and expanded memory manager. I don't understand why MS DOS only gives 95Kb UMB; maybe I need to include some region on emm386 line.

1) Please include All bugs in DR-DOS that are not in MS-DOS.  
from Intel TESTEMM test suite Boundary test:  
Allocating more (expanded memory) pages than available in system  
EMM did not return the expected result (returned 12 instead of 9A).

DTK 386 cold boot/hang problem:  
After installing DR 6 on this machine, cold boot always result in  
"Cannot load file. Press a key to retry." When press a key, the  
machine will boot fine. Warm boot always work without his problem.  
Also there's intermitent hang after exiting EDITOR. It hung on me twice  
today. Haven't seen these problems happen on another machine.

Warm boot with HIDOS.SYS installed  
gives "Warning: Adress line A20 already enabled."

2) Anything you did not like about DR-DOS.

DR DOS reports version as 3.31; no lie table and programs won't run.

Their EDITOR looks antique (compared to ours); haven't used WORDSTAR for  
ages.

Install/Setup seems to like putting "MEMMAX -U -L" in AUTOEXEC.BAT,  
disabling UMB and low memory (first 64K of conventional). That's pretty  
dumb.

3) Anything you like about DR-DOS that we should add to future MS-DOS  
versions

DR MEM program output looks sharp; layout is clearer and offers more  
info than ours.

DOSBOOK online help looks pretty fancy and helpful.

DR SETUP lets user tune system after installation. This concept is good  
but their implementation is not useful enough.

4) Any general comments.

I hate to say I find more stuff I like than I don't like, but that's  
looks like it, at least for today's testing. Let's find some big bugs  
tomorrow.

##### 559  
From jefflo Thu Sep 19 18:45:06 1991  
To: tomle  
Cc: brentk dosdev vanguard  
Subject: DR DOS Testing (9/19): Networks  
Date: Thu Sep 19 18:20:48 PDT 1991

##### 560  
From georgef Thu Sep 19 18:47:32 1991  
To: dosdev vanguard

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Subject: DR notes  
Date: Thu, 19 Sep 91 18:46:09 PDT

I have not participated in the DR testing, but I do have a couple comments:

1. Their v5.0 reported v3.31 from the INT 21h, ax=3000h call. Does v6.0 do this also?
2. One of the PC Mag guys (Dvorak?) mentioned DR-DOS 6.0 in his inside track column. However, he was talking about the DR-DOS 6.0 that DRI promised a year ago (p-mode, multitasking, etc), not the one they just released. It's going to be embarrassing for DRI when people find that 6.0 is not all that an impressive change.

-gf

*Privileged material redacted*

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