To: FORTUNE.WC-MAIL.Dave Miller, PRV-MAIL5.Richard Jones
From: Dave Cutler
CC:
Subject: Novell-Microsoft success story
Date   Sunday, November 20, 1994 9:54 AM

One of the Windows 95 core development team was doing testing with our Lanalyzer for
Windows product and proactively reported the following bugs. They were fixed within
12 hours by our one remaining Lanalyzer for Windows engineer, also resulting in 41K
less memory used with Windows 3.1. Details follow:

>>> Ben Hendrick 11/17/94 03:32pm >>> NOVELL
Microsoft was debugging a problem and noticed the following misuse of
V86MMGR_Set_Mapping_Info call from VCAFT.386 VxD and wanted to make sure
you guys got this information. Here is the EMAIL from the Windows 95 developer at
Microsoft.

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Novell was making the V86MMGR_Set_Mapping_Info call incorrectly. If you look at
their code, it does the following:

```
pushad
mov al, 0
mov ah, 0
VxDCall V86MMGR_Set_Mapping_Info
popad
```

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The documentation for V86MMGR_Set_Mapping_Info says that it takes *five* input
parameters:

AL =3D Minimum number of pages (4K) required for copy buffer
AH =3D Maximum number of pages (4K) desired for copy buffer
BL =3D Minimum number of pages required for private global mapping region
BH =3D Minimum number of pages required for shared global mapping region
CL =3D Maximum number of pages desired for global page mapping region

Apparently BL, BH and CL aren=92t being set to anything, so they end up passing in
garbage. Under Windows 3.1, they were would pass: BH =3D 10h, BL =3D 0, CL 3D
random. So this caused LANalyzer to cause your DOS boxes to shrink by 10h°4K =3D
64.

Under Windows '95, they pass: BH=3D1, BL=3D58h, CL =3D random. So this caused
LANalyzer to cause your DOS boxes to shrink by 59h*4K =3D 356K.

The bad value they pass is EBX =3D System VM handle and ECX =3D their own DDB

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address. I now detect incoming value and ignore the call. This keeps the machine alive and doesn't seem to harm LANalyzer either.

>>> Colin Dixon 11/18/94 09:59am >>> NOVELL
Many thanks for this feedback. We'll be looking at this immediately. Of course, the really interesting thing is that MS are using LZFW and trying it on Chicago. I know we haven't tried it. Perhaps now we had better.
Colin

>>> Mike Margozzi 11/18/94 11:33am >>> NOVELL
There were 3 parameters missing from the call in VCAFT and 1 missing in VTXRX.386. VCAFT is the Virtual Driver for the DI.COM TSR, and VTXRX.386 is the Virtual Driver for the APPLE.EXE TSR.

New versions of the files are attached below. Please let me know MS response(Did it work?) It freed up 41K for me in Win31.

Also please try to find out what Win95 configuration allows us to run LZFW.

Mike Margozzi

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