

DOS CONNECTION

Connect to the original makers of DOS

Vol 1 No 1

Welcome!

This is the first issue of DOS Connection, a newsletter for our OEM Account Managers. We want to provide you with the latest information about DOS 5. If you have any comments or suggestions about you'd like to see covered, contact Sergio Pineda at 65509 or email at sergiop.

Schedule Update

DOS 5 OEM

DOS 5 to Canyon Park: 04/05/91

Final OAK to OEMs: 4/12/91

DOS 5 Documentation Schedule

Docs to OEMs on ESP: 1/18/91

(except Ch. 12, 13, Getting Started)

Ch. 12, 13, Getting Started: TBD

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Announce Date: 11 June 1991

Product Support for DOS 5

As a reminder to you and to our OEMs, support for DOS 5 will come in two ways:

- o existing OEM On-Line Support
- o support for DOS 5 Upgrade customers

OEM

Our commitment to support OEMs is as strong as ever. Their support is via our existing on-line agreement. We do expect OEMs to continue to support their installed base. However, an OEM's customer has the option to call our 900 number at a cost of \$2/minute for support.

FYI: Upgrade Customers

For our upgrade customers, we will offer support for 90 days via a 206 number. After 90 days, customers must call our 900 support number at a cost of \$2/minute. If customers do not have access to a 900 number then they must call a special number and the cost is \$20/call. Manuals will be serialized and we will ask for that number prior to supporting the user.

Counterfeiters Beware!

For DOS 5, we are investing heavily to stem the flow of DOS into illegal channels. For the both the OEM package product and the DOS 5 Upgrade we designed a hologram which will be affixed to the spine of the box. In addition, we are affixing a second hologram to the spine of the user's guide that will show the user the cut on the spine of the box. This

Competition

We are happy to announce that DRI has yet to pose a significant threat with any of our OEMs in the US! Thanks to YOU for your efforts!

A few tips on how we can sell aggressively against DRI:

o Leadership

We will establish a standard in the area of Power Management & Flash Memory

o Reliability

DOS 5 is being tested at over 7,000 sites worldwide

o Available Documentation

MS-DOS is the most widely documented OS- everyone knows MS-DOS

o OEM & ISV Commitment

All major OEMs and ISVs use MS-DOS as the platform for testing hardware & developing new applications

o Best DOS to run on a 386-based PC

MS-DOS uses less memory than DR-DOS

Features not available in DR-DOS 5:

- o Task Switcher
- o Support for 2.88 MB floppy disks (these drives will ship on new machines after MS-DOS 5 is announced)
- o Undelete (from Central Point Software)
- o Unformat (from Central Point Software)
- o Mouse-useable full-screen editor
- o Command-line macro capability
- o Setver and a configurable "lie table"
- o QBasic (Quick Basic 4.5 interpreter)
- o Dir command sorting capability

Will DR-DOS work with Windows 3.0?

Yes, but it is not easy. Users cannot run Win 3 easily over DR-DOS when upgrading from MS-DOS. One user on CompuServe talked about having to rebuild his Config.Sys and Autoexec.Bat after installing Win 3 over DR-DOS to restore his system to the state prior to upgrading.

The moral: Win 3 and DR-DOS 5 can be a painful experience...

How much memory does DR-DOS 5 use compared to MS-DOS 5 on a Deskpro 386?

Between 0-640K:

<u>MS-DOS</u>	<u>DR-DOS</u>
24.8K	14.8K

Between 0-1MB:

<u>MS-DOS</u>	<u>DR-DOS</u>
24.8K	71.4K

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The number that is more relevant is memory between 0-1MB. DR-DOS loads their EMM drivers, Command.Com and buffers into the area reserved for UMB support. Thus a user has *less* memory available on his 386 to load network drivers, TSRs and device drivers high than with MS-DOS 5. MS-DOS will make an enduser's PC look better than with DR-DOS.

What is the difference between the OEM product & DOS 5 Upgrade?

From an end-user and ISV perspective, the products are identical. The Upgrade preserves OEM added-value of previous versions of DOS. The installation program of the OEM product is intended for new systems and the installation program for the upgrade is intended for existing systems.

OEM Installation Program

For *new systems* the install program performs the following:

- o Automatically creates Config.Sys & Autoexec.bat files
- o Automatically detects if DOS can load high
- o Creates DOS directory and copies DOS files here unless specified differently by the user

For *existing systems*, the install program:

- o Does not re-fdisk/reformat hard disk
- o Creates simple Config & Autoexec files & renames existing to Config.old & Autoexec.old
- o Copies DOS files into default directory

Upgrade Installation Program

The installation program for the Upgrade is nearly identical to the OEM product. The program designed for an upgrade performs the following tasks:

- o Automatically updates the Config.Sys to load DOS high
- o Copies updated drivers in DOS directory: Ramdrive, Smartdrive, Himem & EMM386
- o Creates an uninstall directory to restore previous version of DOS in an existing system

Updated Drivers

The Upgrade contains some updated networking and disk partition drivers. We are not authorized to distribute these drivers to OEMs. If OEMs wish to include these drivers in their own DOS Upgrade they can contact the providers directly:

- Novell - Andy Cox (801)429-3243
Ontrack Computer-Jeff Rumsey (612)937-1107
Storage Dimension - Jim Canter (408)879-0300

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Is the DOS 5 Upgrade Technology licensed to OEMs?

No. There are many reasons for this. Some are that customers would like to obtain one version of DOS to run on multiple PC environments. In addition there are parts of the Upgrade installation program which contain 3rd party source code which we do not have the rights to distribute. OEMs can contact these parties direct for the utilities.

Our OEMs *should not* be led to believe that they are getting an "inferior" product. As a matter of fact they will also receive the ROM addendum to DOS 5 which includes: file transfer, power management driver and other utilities for diskless machines.

How can we assist our OEMs to push DOS 5?

The DOS Marketing team will produce a sales guide which highlights the major features and benefits of DOS 5. The primary objective of the piece is to sell DOS 5. The guide will have the following components:

- o DOS 5 - the best dos ever
- o features and benefits
- o DOS 5 Q&As

The target audience for the sales guide will our OEMs' sales force: Compaq, Zenith, Tandy, etc. We want our OEMs pushing DOS 5 with their newest machines rather than leaving the choice up to the customer.

Your comments regarding other information that we might include is greatly appreciated.

Availability: May 1991

MS-DOS ROM 5.0

Is alive and slowly coming into view.... Presently the specification is being completed and we hope to have it available ASAP.

For DOS 5, we will have one OAK: the piece for disk-based DOS and rom-based DOS. Thus any OEM licensing DOS 5 will receive both pieces.

ROM DOS 5.0 will include the following utilities NOT included initially in the DOS 5 OAK: file transfer, power management driver, and a rom disk emulator.

Spec Availability: 01 March
For internal use only - Availability: August 1991

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DOS CONNECTION

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Vol 1 No 2

Welcome!

This issue of *DOS Connection* will focus solely on DRI. Given the amount of press DR-DOS is receiving along with inaccurate information that is being published about MS-DOS 5, we need to inform you how we stack up against DR-DOS. If you have any comments, please contact Sergio Pineda at 65509 or email at sergiop.

Product Features in DR-DOS 5 not available in MS-DOS 5

- File Password protection
- Config.Sys commands: chain, echo, ?
- Ability to load drivers and TSRs into Upper Memory on NEAT or LEAP-set based 80286 PCs

Product Features in MS-DOS 5 not available in DR-DOS 5

- Task Switcher
- Support for 2.88 MB floppy disks (these drives will ship on new machines after MS-DOS 5 is announced)
- Undelete (from Central Point Software)
- Unformat (from Central Point Software)
- Mouse-useable full-screen editor
- Command-line macro capability
- Setver and a configurable "lie table"
- QBasic (Quick Basic 4.5 interpreter)
- Dir command sorting capability

Features available in DR-DOS which will be available with MS-DOS ROM 5

- File transfer
- ROM Disk Emulator
- Power Management Driver

MS-DOS 5 & the Press

- Comments by the press suggesting that DOS 5 is incompatible with application software are simply not true!!
- XXCAL, an independent lab with a reputable name in the industry, tested MS-DOS 5 with 318 applications ranging from memory management to accounting programs and DOS 5 passed all the tests!!
- Please be aware that when DOS 5 is released that it will be scrutinized highly by the press - this is a key reason why we tested DOS 5 at over 7000 sites, spent a significant amount to have it tested by XXCAL & invested in

Compatibility

- To date, DR-DOS 5 users have reported problems on Compuserve with the following applications:
 - QEMM
 - Lantastic
 - Super PC Kwik
 - Windows 3.0
 - Lan Manager
 - Power Disk
 - Stacker
- In addition, Artisoft, the maker of Lantastic, has told endusers that they do not support DR-DOS 5 (I spoke with Artisoft directly on this and they told me the same thing)
- Any degree of incompatibility is enough to create fear, uncertainty & doubt among endusers when it comes time to buy new systems - *this suggests that PC OEMs will take on a big risk if they ship DR-DOS with their systems*

Independent Testing of DR-DOS

- We plan to use XXCAL to conduct a thorough test of DR-DOS 5 using the following:
 - Networking software: LanMan, Novell & Lantastic
 - 6 PC platforms
 - 34 applications - both DOS & Windows apps
- Objective: To verify compatibility with third party hardware & software in a networked environment
- XXCAL has already conducted these tests with DOS 5 and we didn't encounter any problems!!
- We will soon have an apples-apples comparison between DOS 5 and DR-DOS 5
- The testing should take about 2-3 weeks

Use of Upper Memory

DR-DOS 5 does not use the same implementation MS-DOS uses to load DOS into high memory. DR-DOS uses the following scheme:

- DR-DOS loads EMM drivers, Command.Com and buffers into Upper Memory & *not* into High Memory as done by DOS 5
- Loading critical pieces of DOS into Upper Memory reduces the amount of upper memory available to an enduser to load TSRs, device drivers & network drivers
- The approach taken by DRI to load DR-DOS high is actually *less efficient* than our

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What does a less efficient approach imply for endusers?

- Less memory available on 80386 systems
Memory used on a Deskpro 386 between 0-1 MB:

MS-DOS

24.8K

DR-DOS

71.4K

Memory Footprint

- Given that 286- & 386-based PCs now have access to extended memory (memory above 1MB) it is very important that users now evaluate the available free memory from 0-1MB rather than 0-640K.
- We need to reinforce this message:
MS-DOS 5 is the BESTDOS for 286 & 386-based PCs.

DR-DOS 5 Release Note

- DRI released some notes explaining how to get DR-DOS 5 to work with Windows, & memory management software like QEMM.
- DRI's distribution of the note has been handled very poorly: the release note is not available with the product and unless a user has an account on CompuServe, the user probably doesn't even know it exists.
- Initial observations of the release note suggest that installing DR-DOS and running either Windows or a memory manager is *not straightforward*-we will evaluate the note more thoroughly and provide a more detailed report later.

What does this mean to an enduser?

- Unless a user is a power user, (s)he could easily become very frustrated with DR-DOS

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DOS CONNECTION

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Vol 1 No 3

Welcome!

This issue of *DOS Connection* will summarize the DRI Competitive Analysis I distributed to senior management. The newsletter will provide you with an overview of DRI's strategy, target markets, as well results from a compatibility test an independent lab performed with DR-DOS 5.0. If you have any comments, please contact me at 65509 or email SergioP.

DRI's Strategy

DRI's strategy is to offer DR-DOS as the low-cost alternative to MS-DOS. DRI is focusing primarily on one product: DR-DOS.

DR-DOS Installed Base

IDC estimates that in 1990, DR-DOS has an installed base of 5M users. We believe that is an aggressive estimate and believe the number to be more like 4.1M. The breakdown of DR-DOS by channel:

	US	International
OEM	6%	30%
Retail	11%	53%

Clearly DRI has been more successful selling DR-DOS abroad than in the US.

DR-DOS Target Markets

DR-DOS is targeted at OEMs selling primarily into the mass merchant channel. Selling into this channel requires offering DR-DOS at very low prices to enable OEMs to minimize their COGS and remain competitive. In 1991, this channel will account for 12% of all systems sold in the US. In 1994 this channel will account for 17% of all systems shipped, second only the Dealer channel. The OEMs selling into this channel include: Packard Bell, Commodore, Laser Computer, Epson, IBM, Phillips and Others. DRI is going after the "Others" as this group accounted in 1990 for 240,000 or 25% of all units sold through this channel.

Public Relations

From a PR perspective, DRI is perceived as the underdog. The recent article in *Infoworld* characterizes the type of press that DR-DOS 5 has received: DR-DOS 5 is now an alternative to MS-DOS. In the recent review of MS-DOS 5 by *Infoworld*, we received a compatibility rating of Very Good while DR-DOS received a

How should we sell against DRI?

Compatibility

- We must emphasize that MS-DOS 5 was tested at over 7000 sites worldwide. NSTL has demonstrated the fact that DR-DOS was not thoroughly tested with applications running in a networked environment.
- For OEMs committed to shipping Windows, only we can ensure 100% compatibility with future versions of DOS and Windows.
- Now that Novell is in the picture, it is even more important we communicate to PC OEMs the importance of MS-DOS as the standard operating system which ISVs and corporate accounts will use to measure against a Novell/DR-DOS solution.

OEM and Customer Support

- We have over 130 OEMs committed to ship MS-DOS 5 on new systems
- We have sold over 1M copies of the MS-DOS 5 Upgrade since we announced on June 11
- We will have MS-DOS 5 available in over 20 languages by October 1991

MS Driving Standards

Power Management

- MS and Intel developed a standard interface between DOS and the ROM BIOS for Power Management. PC OEMs designing new systems can now take full advantage of this interface to ensure compatibility between the ROM BIOS and DOS with regard to power management.
- We should position the spec as one more indicator that Microsoft is taking the lead in setting standards in the power management arena.
- Defining the specification is sustainable because only Microsoft, the developer of the standard operating system used on over 70M PCs, works with CPU vendors, System BIOS vendors and ISVs to define a standard solution today and in the future for supporting power management in the PC environment.

Solid State Media

- MS is active in the PCMCIA organization to define how SRAM and Flash memory cards will be supported to ensure that applications are compatible with this media.

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What does Novell/DRI imply?

- A possible scenario is that Novell might just give away DR-DOS to Novell's corporate customers. Novell could continue selling its networking software and position DR-DOS as the OS which ensures 100% compatibility with Novell networks. The challenge for Microsoft is to stay one step ahead of a future "Novell DOS" and thus keep corporate customers from adopting DR-DOS.
- Ensuring that we remain one step ahead of Novell DOS is to work even more closely with our PC OEMs to understand future requirements and their direction.
- At a minimum, we must be wary of the fact that Novell could easily target key PC OEMs and offer their Novell DOS over MS-DOS. In order for Novell to be viewed as a key player in the DOS market, they need the support of PC OEMs. It is thus absolutely essential that from the DOS/Windows perspective, we understand the direction that OEMs are pursuing
- It is possible that Novell will sell off any of DRI's marginally profitable opportunities. Novell will focus on what it knows best: networking software and it will focus on providing customers with a systems solution: network software and operating system as a single solution.

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