Depo. Ex. 345

DOS 5

Dos 5 Project Review
February 11, 1991

PRESENTATION OVERIVEW

TABLE OF CONTENTS

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Dos 5 Project Review
February 11, 1991

1.   Summary:

The current RTM date for MS-DOS 5 is 4/5/91. We are very confident we can meet this date and consequently are scheduling a 6/11/91 announce because:

> 1) The development team has bought into the 4/5/91 date
> 2) The bug count is under a 100 and the trend is positive.
> 3) All retail and OEM documentation pieces have been released or are in the process of a few final changes.

We are also finalizing the schedule for the ROM DOS addendum with its additional features such as Advanced Power Management and file transfer. RTM for the ROM addendum is 8/91.

Through the ESP program and through special contact with key OEMs like IBM and Compaq we have been providing OEMs with code and docs since before January. As a result, not only are all key OEMs committed to MS-DOS 5, but most are committed to shipping the day of announce. We still have to work closely with the OEMs to ensure this does happen and is well-coordinated.

Feedback from the beta program, resellers and corporate accounts has been very positive. In a survey of a segment of beta participants, almost all said they would buy the Upgrade and recommend to a colleague. A few corporate accounts have already expressed a strong interest in the product. For example, Ameritech is already soliciting reseller bids for over 12,000 units. Resellers and Distributors are very excited about the Upgrade. Spearheaded by the 300,000 Egghead order, we will have opening orders of over half a million units.

Marketing strategy, positioning and key messages are defined and are now being implemented. The breadth of tactics range from corporate seminars in every district office to enthusiast press advertising, to in-store displays to numerous early press visits. We are also re-working our launch event concepts and will be presenting that to you in a couple of weeks.

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2

2.   Dates/Schedule

Key Points:

1.	Final Test Entry	3/15/91
2.	Release to Manufacturing	4/5/91
3.	Announce	6/11/91
4.	ROM Addendum	3 CY Qtr 91

Details:

Committed Golden OAK to IBM by 5/6/91; Spanish, Italian, Portuguese and German by 7/6/91

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3.   Bug Status

```
┌─────────────────────────────────────────────────────────────────┐
│                      PROJECT BUG HISTORY                          │
└─────────────────────────────────────────────────────────────────┘
```

	Severity 1	2	3	4	Total
Resolution					
FIXED	517	804	1426	91	2838
DUPLICATE	41	66	91	9	207
BY DESIGN	23	109	252	41	425
NOT REPRO	107	158	119	10	394
WON'T FIX	96	219	198	23	536
POSTPONED	33	110	310	287	740
Total	817	1466	2396	461	5140

```
┌─────────────────────────────────────────────────────────────────┐
│                      RECENT BUG HISTORY                           │
└─────────────────────────────────────────────────────────────────┘
```

Week Ending	Active	Opened	Resolved	
1/11/91	196	77	108	
1/20/91	173	168	155	
1/25/91	134	245	405	(cleared DOC backlog)
2/1/91	112	148	231	
2/8/91	95	202	251	

The ACTIVE bug backlog for DOS 5 has fluctuated during the last several months (Oct. 31st = 252, Nov. 30 = 161, Dec. 31 = 184). Recent progress in reducing bug backlog can be attributed to increase in both fixing and postponing.

Since 1/1/91, 200+ bugs have been resolved as POSTPONED and another 75+ have been resolved as WON'T FIX.

```
┌─────────────────────────────────────────────────────────────────┐
│                      CURRENT ACTIVE BUGS                          │
└─────────────────────────────────────────────────────────────────┘
```

Severity			
1	2	3	Total
33	43	15	91

Of the 91 current active bugs, 30 have some external dependency (15 awaiting OEM/third party hardware, 7 beta customer follow-up, 4 QBasic problems, and 4 XXCAL follow-up).

Based on current progress that the DOS 5 team is making at
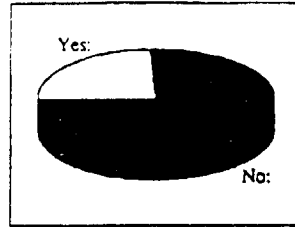resolving the ACTIVE bugs, we expect to be at zero bugs at the end of February.

4.   Beta Feedback

Is your computer on a network?

Yes:	62
No:	192

Difficulty of installation of DOS 5 and Network

Easy				Difficult
1	2	3	4	5
12	7	6	1	1
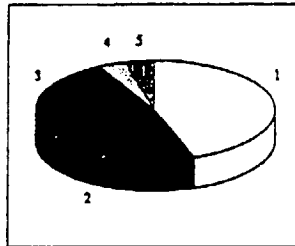
Tried loading TSR and Drivers high

Yes:	98
No:	76
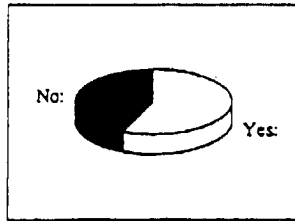
Difficulty of loading TSR and Drivers High

Easy				Difficult
1	2	3	4	5
33	29	17	12	4
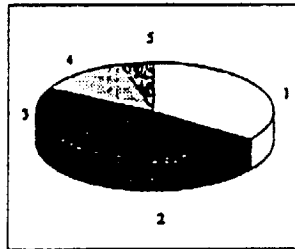
Used task switcher in the DOS shell

| Yes: | 104 |
| No: | 147 |
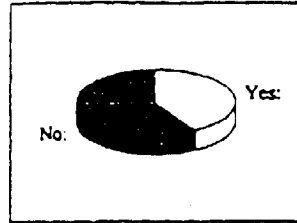
Would you buy a copy of DOS 5 if you didn't get free for beta testing?
Assume it would be priced under $100

| Yes: | 212 |
| No: | 28 |
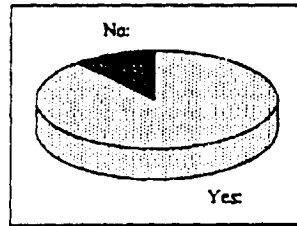
If you were buying a new PC, would you specifically ask that it come with DOS 5

| Yes: | 242 |
| No: | 10 |

Would you tell a friend who owns a PC to go out and get the
DOS 5 upgrade?

| Yes: | 242 |
| No: | 10 |

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6

5.   Compuserve Summary

Key Points:

Basically very favorable with a few 'rabble rousers'
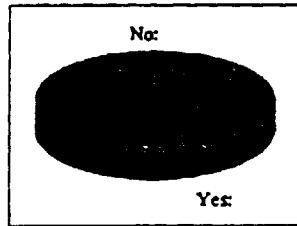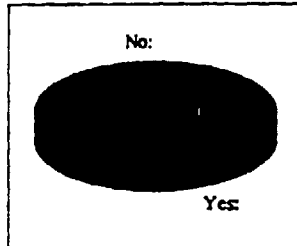
Details:

UMB/emm386

No optimization
documentation
win3 standard mode doesn't work
no direct load at specific address

Bootable RUP
DOS Switcher

Don't understand where apps get swapped
Must use shell

Networks

getting right redir (from Beta III)

No dos util to rename directory
Suggestions from CIS incorporated

WINA20 driver location
Server table

Selected Quotes:

Hey Brent, this is great. Sign me up for future beta testing and future
fora here. Most fun I've had since DOS 1.1 upgrade...<grin>.

_____

When a person does a beta test for a product such as DOS 5.0 most people only hear about
the things that go wrong because that is what a beta test is all about. I would like to tell
about my pleasurable adventure using DOS 5.0 up to this point.

<much about his adventure...>

_____

What I like best about it is that it will, for the upgrade price, provide typical users greater
power without requiring them to climb a steep, slippery learning curve.

For an identical reason, I was an early advocate of Excel, first on the Mac, then on the PC
for I felt it gave users more power and in that case, in an easier to use interface than 123 or
SuperCalc. I have been shilling Excel for MS now for years and have never had a user
complaint. Unless something goes really awry, I'll do the same for DOS 5 as opposed to
4.X where my recommendation is to stay away.

_____

I never saw any reason to upgrade either myself or my customers to 4.X, so have very little
experience in that environment. Likewise in any version, large partitions require some
memory penalty due to (if used) drivers needed for translation. DOS 5.0 solves lots of
stuff.

Hurrah!

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7

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February 11, 1991

Microsoft is the best. All the time consumed here is well worth it. I've never spent so much time having this kind of fun. Tinkering here and there, yes, but not with an OS. Thanks, too for the opportunity. I am, like others, looking forward to the opportunity to see future beta OS's...

I've worked on several development teams (including my own) and with several houses as a beta site. Unlike Bob, I feel this is a stable product. True, there are features I'd like added, but then if we used my
wish list (or anybody else's) as a criteria, there would never be a product finished.

(reply from `bob`)
Don't mistake me here. Microsoft has done a TREMENDOUS job on DOS 5, and I would use it full time even if the current beta WERE the final release.

6.   OEM Update

Goal(s):
*   All OEMs shipping and evangelizing DOS 5 at announce date.

Key Points:

Signed and will ship at announce	The following OEMs have verbal agreements on DOS 5:	The following OEMs are in negotiations with DOS 5:
IBM	Unisys	Vobis
Zenith	Commodore	Tulip
Toshiba	Dell**	Siemens-Nixdorf
AST	Northgate**	Hantarex
Epson	Atari	G2
Samsung	Packard Bell	Victor
Data General	Amstrad	Comtec
Tandem	Ataio	Ultra Comp
CompuAdd	Investronica	Texas Instruments
Wyse	IPC	Zeos
Memorex-Telex		Wang
Tandy		ATT
Acer		AST**
NEC		Tandon**
Robotron Ascota		Tandy**
Robotron Burom		Luiski
SMS		ALR
Phoenix		
Positive		
Arche		
Gateway 2000		
USIT		

*   Data from OEM account managers, OEM reports or from the OEMs directly
* * Per account manager, will ship at announce

Key Details:
(More provided in the Appendix)

Compaq
*   Due to 3 month testing cycle, they will ship when the product has met their requirements.

Vobis
*   MS Gmbh has reached verbal agreement on a per processor agreement for 200K pcs per year.
          Vobis will continue shipping DRI for now

AST
*   Wants power management driver to use with their new laptop - want to be first to market with
          power management support. We have agreed to provide them with APM spec by the end of Feb.
          and it appears that DRI is no longer a threat.

ALR
*   RichardF and MelvinH are attempting to open dialogue here

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7.   ESP Program

Goals:
*   Ensure the OEMs have what they need to ship early

Key Points:

        OEMs traditionally have done no work until MS hits release to manufacture
        OEMs do not believe we will only fix bugs now

        Process
        ESP OAK builds occur weekly
            Verified weekly by SSBU

        OAK Updates shipped to OEMs every two weeks
            Includes Bug fix list and Doc update with Change bars

        IBM and Compaq are receiving source drops along with ESP OAK

        OEMs divided in Tier I and II OEMs
            Tier I gets dedicated support - These are our early ship targets
            Tier II Limited support available

    Details:
        13 Tier I OEMs
        56 Tier II OEMs

        ESP Shipments to date
            Initial ship 1/21/91
            Second Drop 2/04/91

Participants:

Tier I	Tier II		
IBM	3COM	Achel	AMD
Compaq	AEG Olympic	Aquarius	Arche
Acer	AT&T	Autocompuer	CAF Computer
AST	Chaplet	Atari	Chips & Tech
Epson	Commodore	Compuadd	Copam
Gateway	Data General	Data Media	Datatech
NEC	DEC	DELL	Emerson
Nokia	Everex	Grid	HP
Oliveti	Intel	Intel UK	Intel-J
Tandy	Intermec	Itos	Kicksoft
Toshiba	Lyi-Chang	Matsushita	Memorex
Unisys	Mitac	Modern Computer	NCR
Zenith	Northgate	Packard Bell	Peacock
	Phoenix	Plus & Plus	Quanta
	Sampo	Samsung	Schneider
	Siemens-Nixdorf	SMT-Goupil	Tandem
	Tandon	Tatung	Tulip
	Twinhead	Vobis	Wang
	Western Digital	Win Labs	Wyse
	Zistech		

8.	Documentation

Product	Documentation	Status	Size	Comments
OEM	User's Guide and Reference	Released to OEM (see comments)	635 pages	OEM files (with Shell) released 2/8, W/O Shell TBD
Upgrade	User's Guide and Reference	Released to Printer	660 pages	To Printer TBD (printer sched)
OEM	Getting Started	Final Edit	25 pages	OEM files release 2/15
Upgrade	Getting Started	Final Edit	60 pages	To print 3/11 (pending network resolution)
OEM and Upgrade	Shell Help	Done	159 kbytes	
OEM and Upgrade	Command Help	Done	integrated	
OEM and Upgrade	Readmes	In progress	24k (now)	More material coming in daily
Press	Programmer's Reference	In progress	375 pages	To print 4/11

9.	International Upgrade

Key Points:
   Supported locally at each sub
   Target beta participation was 2000 international sites
   Current participation is at 2192 and growing
   Beta Population is diverse
   HCTs have lagged
   Go-No go will be made 3/15/91

Details:
   International Bug Status

Severity	Count
1	1
2	4
3	1
4	0

   HCT Results
      Received 23 out of 320
      Deadline for HCT 2/25/91

   Beta Survey Results
      Survey begins 2/12/91

   Process to Completion
      Go/No-go decision based on 1)HCT results, 2) Customer Feedback, 3)Bug reports, 4)Survey, 5) Installation

   Milestones:
      Product Decision Date.................3/15/91
      Localized versions available..........TBD

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10.   Marketing Strategy

DOS 5 - The only version of DOS worth owning
DOS 5's success will depend on a strong start. It will be crucial to combine quick and building penetration via OEMs and the MS-DOS 5 Upgrade in order to establish version 5 as the new DOS standard.

Keys to success:

1. Overwhelming support from OEMs at launch
2. Build pre-release excitement
3. Push towards early corporate adoption. Get on company standard's lists AND get widespread penetration.
4. Successful penetration of Power Users, Influential End Users and Corporate MIS/DP markets. These are the key targets because they most easily can understand the benefits of DOS 5.0 and because these people will be the "recommenders".
5. Make the MS-DOS 5 Upgrade a "no-brainer" impulse sale at retail. This will be a great supplement to the recommendations of Power Users and/or keep the inexperienced users from getting too caught up in the technical details. The natural thing to do is to upgrade your OS...
6. A dynamic exciting PR announcement event
7. Aggressive sustaining marketing effort to support retail upgrade availability
8. People have to have a great experience with the product

11.   Business Objectives

1. Do not ship this product until we are as confident as we can be that it is bug free. This is the single most important objective for DOS 5.0 and the RUP
2. All key OEMs shipping DOS 5 at launch
3. Establish Microsoft as the industry standard supplier of MS-DOS upgrades
4. Ship 450,000 units of the MS-DOS Upgrade in the first 120 days. FY91 forecast is also 450,000 units
5. 100 Key corporate account wins in the first year
   - Defined as over 500 units installed
6. Obtain distribution in at least 4,000 outlets in 120 days
7. Get more than 50% of users to register
8. Help build a successful DOS RUP program internationally
   - Defined by programs in France and Germany
   - Defined by providing a one time training conference from Redmond

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12.   Product

Goal(s):
*   Help ensure users have a great experience with the product

Key Tactics:
1.   "The MS-DOS 5 Five minute workout"
       -    we are also evangelizing OEMs to distribute this piece
2.   Worked with User Ed to revise documentation copy to provide a "Roadmap" so that different levels of users would know where to begin; changed the name of the "installation guide" to "Getting Started"
3.   Worked with user ed and dos war team to integrate networks.txt into the "Getting Started" guide and to fine tune/simplify the instructions for loading drivers in upper memory.

13.   Messages

Name:
*   The RUP will always be called the "MS-DOS 5 Upgrade"

Positioning:
*   DOS 5.0 - the only version worth owning

Key support points:
*   More memory
*   The best DOS to use with Windows
*   "Takes the Mystery out of DOS"
*   Safe
*   Easy to install

14.   Price

* $99.95
*   MLP - $79.95
       -    Additional manuals $20.

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15.   Corporate Marketing

Goal(s):
- Promote quick and widespread evaluation and adoption
- Overcome inertia and fear of upgrading
- Identify high potential accounts and target aggressively
- Success defined by getting 100 top corporate accounts to install 500 or more
    units

Key Tactics:

Final corporate plan in development. Tactics already planned or being implemented:

1.   1500 corporate beta sites
2.   Pre-release corporate seminars
3.   Participate in Microsoft Support Coordinators Program
4.   Transition Team expert (tbh)
5.   Work closely with key corporate resellers (MS Upgrade days)
6.   Intra-company user groups
7.   MS-DOS 5 Upgrade MLP
    -    Also putting together plan to deal with large account sales where the corporate
        account does not want to deal with a very large number (say >1,000) licenses.

Considering:
- MIS eval/migration kit
- White paper
- Other seeding programs

Key wins:
- Ameritech has already put out a RFP for 12,000 units

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14

16.   Product Support

Goal(s):
* Happy customers
  - cover 80% of peak demand
* Reasonable costs
  - keep PSS costs at 6% of revenue

Key Tactics:
1. 24-hour automated support on 206 (Robot)
2. 90-day 206 number for MS-DOS 5 Upgrade only. Will enforce RUP vs. OEM and, if necessary, 90-day window using serialized manuals.
3. 900 number for post 90-day RUPs and OEMs. $2/minute. Credit card, flat fee ($20) alternative for accounts with blocked 900#s.
4. Have done extensive modeling varying calls/unit and run rate to analyze staffing needs. Will have to make our best educated guess.
5. Currently looking at hiring about 40 pss technicians
6. PSS prepared to implement 90 day tracking and "quick registration" system if warranted.

17.   Manufacturing & Anti-counterfeiting

Goals:
* Make RUP and OEM counterfeit-resistant
* Reduce cogs
* Successfully manage the product build

Key Tactics:
1. Round, MS-DOS hologram.
2. Small Microsoft hologram on spine of manual showing through die-cut.
3. 6-color box.
4. Total cost of anti-counterfeiting mechanisms: .40/unit
5. Anti-counterfeit dealer education program
6. Anti-counterfeit publicity
7. Change license agreement to eliminate two parts. Savings: .25/unit
8. Hold at six 5.25 and three 3.5 disks
9. Minimize in-pack pieces
   - Two manuals
   - Reg card
   - "The MS-DOS 5 Five minute workout"
   - License (will go on inside front cover of manual)
10. Close coordination with domestic and international mfg., USSMD and OEM to ensure correct initial build

18.   Advertising

Goal(s):
*   Introduce DOS 5
*   Generate awareness of key features and benefits
*   Stimulate purchase at retail of the MS-DOS 5 Upgrade

Key Tactics:
1.   Enthusiast press advertising targeting power users and MIS/DP
2.   "Heavy-up" three/four month campaign
3.   Follow-up sustaining effort

19.   Registration

Goal(s)
*   Cost-effectively increase registration rate

Key Tactics
1.   Registration sweepstakes that other products may plug into easily. A single top prize of $5,000
2.   Controlled registration test to test different registration forms and incentives

20.   Direct Response

Goal(s)
*   Determine profitability of selling direct
*   Determine effectiveness of direct mail in generating pull/retail traffic
*   Measure effectiveness of different advertising vehicles

Tactics:
1.   Ads will sport a dual call to action that is "see your dealer" or call MS at 1-800-dos-5555.
2.   Direct mail test of approximately 300,000 pieces
3.   Test Lists:
        *   in-house reg bases
        *   database and spreadsheet mags
        *   LAN mags, programming mags, and graphics mags
        *   General DP/MIS mags, general PC publications, and ISV
                lists where possible
4.   Offer: $99.95, $99.95 + Flight Sim incentive, $99.95 + Running MS-DOS
5.   Follow-up phone survey

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21.   Resellers

Goal(s)
- Obtain distribution in 4,000 outlets in 60 days
- Aggressive marketing by resellers to build momentum quickly
- Incremental display and facings in-store
  - Counter top, end cap or stacked product on floor
- Push by outbound and corporate software resellers

Tactics:

1. Dos Dollars
    - Targeted resellers receive $2 per unit bought during the first 60 days.
    - Selected resellers and distributors to receive special funds
2. Working closely with major resellers and distributors. Egghead's 300,000 unit order is signed. Ingram/MicroD looking at 80,000 to 120,000 units.
3. Resellers and dealers will be able to book orders for the MS-DOS Upgrade 30 days in advance.
4. Product to be shipped to the channel so that, like Windows, it is available at launch.
5. Dos marketing meeting with and planning with key accounts
6. Bold packaging that attracts attention and builds the MS-DOS 5 Upgrade name.
7. Product to be shipped in six-pack displayer
8. Fast facts cards and data sheets available
9. "Breakthrough" In-store merchandising materials

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22.   PR

Goals:
- Great reviews that communicate our key messages - we want everyone (but us) saying that DOS 5 is the new standard
- Effective positioning vis-a-vis Dr. DOS (create FUD)
- Lots of coverage. Enthusiast press is the number one priority. Business press is an important second priority.
- Communicate 5 key messages and positioning; also communicate our customer orientation
- Dynamic customer oriented launch slated for June 11 - Currently proposing an "unevent".
  Goals for the launch:
  1.   Build excitement and momentum
  2.   Establish DOS 5 as the new standard
  3.   Communicate breadth and depth of OEM support
  4.   Use the event as a mechanism to help make OEMs feel some DOS 5 ownership and commitment
  5.   Reinforce our number one commitment to the OEM channel
  6.   Demonstrate wide-spread third party support and compatibility
  7.   Show customer and adoption
  8.   Announce the MS-DOS 5 Upgrade

Key tactics:
  1.   Press tours
  2.   A thorough reviewers guide
  3.   Get beyond the PC press
  4.   User Group tours, including intra-company user groups
  5.   Counterfeit PR plan

23.   Research

Goal(s)
- Qualitative and Quantitative understanding of key target customers
- Develop info to help create message strategy
- Obtain info to monitor pre and post DOS 5 announce messages

Key Tactics
- Focus groups completed
- Quantitative usage and attitude research of power users planned

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18

24.   Network Software

Key Points:

1.   Out of the box solution for LanMan, MS-NET, and Novell

2.   Most major networks already have DOS 5.0 compatible versions

3.   All other major networks will have DOS 5.0 compatible versions before announce

Details:

Company	Product	Versions Compatible with MS-DOS 5.0	File(s) on MS-DOS 5.0 Upgrade Distribution Diskettes?
Artisoft	Lantastic	3.02 and later	None needed
Banyan	Vines	4.0 and later	no
DCA	10-Net	4.0 and later	none needed
DEC	PCSA	3.x	none needed
	Pathworks	3.x	none needed
HP	Office Works	all	yes
	LAN Manager	all	yes
IBM	PC LAN	1.3 and later*	Partial
	DOS LAN Requestor	1.2 and later*	Partial
Microsoft	MS-Net	all	yes
	LAN Manager	all	yes
NCR	PC LAN	all	yes
	LAN Manager	all	yes
Novell	NetWare	2.1 and later	yes
Olivetti	Olinet-LAN	all	yes
	Olinet-LM	all	yes
Sitka	TOPS	all	none needed
3Com	3+Share	1.6 and later ·	yes
	3+Open	1.1 and later	yes
Ungermann-Bass	Net/One PC	2.0 and later	yes
	Net/One LM	1.1 and later	yes

*   IBM PCLP and DOS LAN Requestor have some loss of functionality (3270 and print screen)
     when upgraded with LAN Manager 2.0 files from DOS upgrade. IBM has promised to have
     fully DOS 5.0 compatible versions by 3/31/91.

     Both IBM PCLP and DOS LAN Requestor refuse to install on MS-DOS (they are looking for the
     IBM system files). IBM has committed to fix this for DOS LAN Requestor. Still awaiting IBM
     decision on IBM PCLP.

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19

25. 3-rd Party Software in DOS 5.0 (Upgrade only)

Key Points:

1. Novell

2. Hard disk drivers for Storage Dimensions and On Track

3. Code from IOMEGA and Plus Development is included in Setup.

4. Central Point Software (Undelete, Mirror, Unformat; also some CPS code has been included within Format)

5. Fastlynx File Transfer Software tentatively planned for ROM addendum OAK (license not yet signed). Will not be in packaged product or upgrade.

Details:

Setup will detect incompatible 3-rd party partitions (Storage Dimensions, Ontrack, etc.) and tell the user they need to install the new driver prior to running Setup. After installing the driver, they then run SETUP/U, which bypasses the check.

For IOMEGA and Plus, setup knows how to deal with most of these automatically. For the ones it cannot handle, it displays a dialog telling the user to contact the company for the new driver.

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20

26.   Distribution Diskette Space Usage of Net and 3-rd Party Files in Upgrade

File	File Size on Upgrade Distribution Diskettes
LANMAN:	
NET.EXE	5284
NETBEUI.DOS	24002
NETWKSTA (1.0 E)	43611
NETWKSTA (2.0 E)	68925
REDIR (1.0 E)	22297
REDIR (2.0 E)	22555
SETNAME.EXE	3532
Total:	190206
Novell	
IPX.OBJ	14589
NETS.COM	36921
TBMI.COM	6194
Total:	57704
Disk Partitioning:	
DMDRVR.BIN	8087
SSTOR.SYS	27079
XBIOS.OVL	2987
Total:	38153

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21

27.   Memory Usage: LANMAN vs Novell

Key Points:	PS/2 Model 80 (87K UMBs - 71K largest UMB)[1]	Compaq 386/20e (159K UMB - 159K largest UMB)
LANMAN enhanced without UMBs	470K (497K)	464K (492K)
LANMAN Enhanced with UMBs	537K (565K)	577K (607K)
Novell w/o UMBs	550.9K	550.9K
Novell with UMB's	608.1K	608.1K

Details:

Using Etherlink network card.

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[1]   LAN Manager numbers include messenger and Netpopup (default installation). Number in parenthesis is available conventional memory when these services are not loaded.

28.   MS-Dos 5.00 ROM Addendum

Goals:

* Minimize change from MS-Dos 5.00 Disk based
* Provide Functionality attractive to the Laptop Market

Details:

Kernel Executable from ROM
  Boot code; Dos Bios; Dos Kernel; Command Resident will be ROM Executable
  Utilities will run in RAM but are stored in ROM Disk Emulator
  Flexible ROM layouts to minimize ROM Requirements in upper memory address region

Power Management Support
  Committed to simple Idle Detection and CPU Halt method
  APM will be implemented if the APM Specification can be completed in March

ROM Disk Emulator
  Standard mechanism for OEM to hook in a ROMDisk at boot time
  Requires no change to the system BIOS
  Includes tools for building custom images

Multiboot Option
  Allows user to bypass ROM boot
  User Invokes a monitor by pressing an OEM defined key at boot time

File Transfer Utility
  Using the FastLynx code base
  Classic Client/Server mechanism
  Use a device driver so the user sees remote drives as though they were local
  Parallel/Serial modes
  Support for all popular cable configurations (Serial and Parallel)

PCMCIA Memory card driver
  Skeleton driver for low level PCMCIA card access

Flash File System II Driver
  New File system for Flash memory devices
  Can be connected with the PCMCIA driver to create PCMCIA compliant Flash Memory Cards.

ROM Build Tools
  ROM disk emulator builder - Takes a directory of files and converts it into a complete disk
     image ready for burning into ROM.
  ROM fixer - Creates a header table for ROM kernel and does segment fixups in kernel. Output is
     a burnable image containing the DOS kernel.

Milestones:
  Specification/Schedule Completion 2/15/91
  IBM Committal to APM 2/15/91
  APM Final Draft 3/01/91
  Target RTM 8/91

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23

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29.   Appendix

L   Additional OEM data

Tatung
*   Supplies about 80% of systems to Packard Bell
*   We are going after Packard Bell directly because Packard Bell is known to switch suppliers and we do not want Packard Bell selecting a PC supplier that doesn't ship MS-DOS 5 with their systems.
*   Do not have plans to sign them up for a DOS 5 license

HP
*   60 days after DOS 5 announces - HP is very slow to build product and get it into their distribution channels and they have told us that this time cannot be shortened

Wang
*   30 days after announce
*   Wang is currently implementing a new distribution strategy and the changes will affect their ability to ship when we announce

NCR
*   60 days after they receive final OAK
*   NCR is building PCs for the first time in Germany and they plan to ship DOS 5/Win 3.0 with these systems.

II.   Tactics to get OEMs to ship and evangelize at announce:

*   We will develop a plan for all OEMs on a case by case basis. Example: DOS Test team to have special meeting with Compaq Test team (the test teams are already working together) to determine if any of MS testing efforts can be leveraged to decrease Compaq's three month testing cycle.
*   DOS 5 OAK updates sent out every 2 weeks
    -   the latest update was sent out on 04 Feb 1991
*   Aggressive marketing by dos team to MS OEM sales force:
    -   OEM backgrounder
    -   OEM newsletters
    -   DR Dos competitive info - How to sell against them
    -   Support from the DOS team directly where needed
    -   Product training
*   Aggressive marketing by MS to key OEMs directly:
    -   Backgrounders and newsletters touting benefits of dos 5
    -   Product training