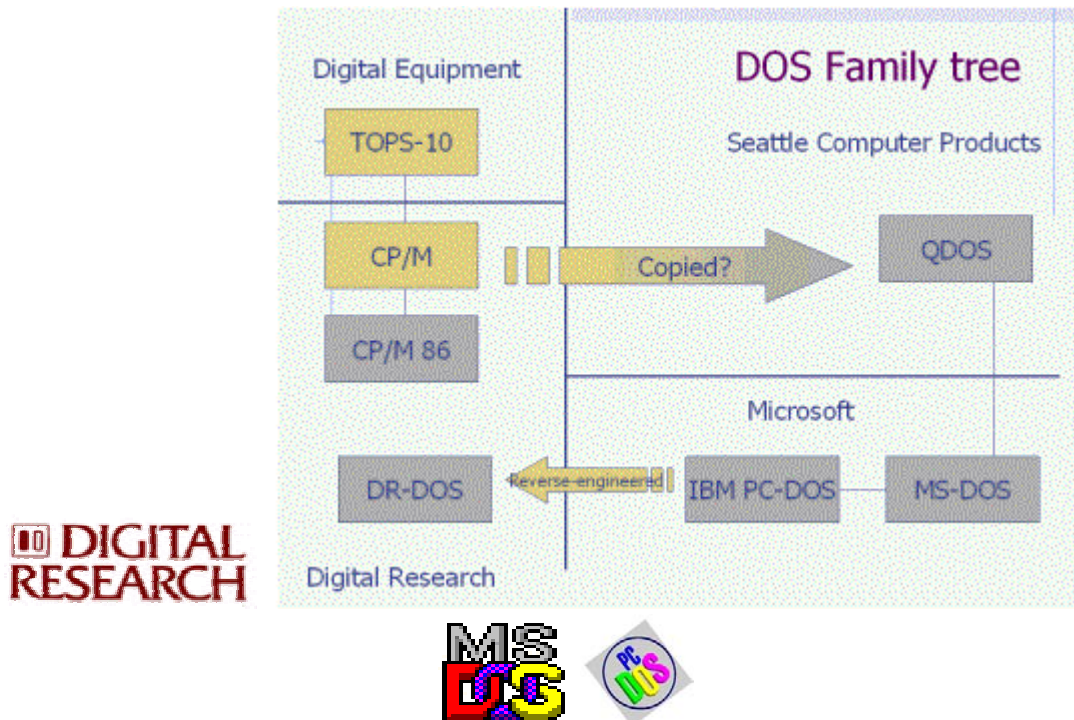


# An Early History of MS-DOS

<http://www.oldstuff.myagora.net/powerload/early.htm>



Known variously as Seattle Computer **86-DOS**, IBM Personal Computer DOS (**PC-DOS**), Zenith **Z-DOS**, and **MS-DOS - 86-DOS** was developed by Seattle Computer Products for its 8086-based computer system. The **MS-DOS** history is intertwined with the general development of software for 8086-based computers.

In May 1979, Seattle Computer made the first prototype of its 8086 microprocessor card for the S-100 bus. There were brief discussions with Digital Research about using one of Seattle Computer's prototypes to aid in developing **CP/M-86**, which was to be ready "soon." Although Seattle Computer was considering using **CP/M-86** when it became available (expected no later than the end of 1979), there were only two working prototypes of the 8086 processor card, and it was felt that both were needed in house. Therefore, there wasn't one free for Digital Research.

Microsoft had already started a strong 8086 software-development program. The firm was ready to try the 8086 version of Stand-Alone Disk BASIC, which is a version of its BASIC interpreter with a built-in operating system. During the last two weeks of May 1979, this BASIC was made completely functional using the hardware that Seattle Computer provided for Microsoft. Seattle Computer Products displayed the complete package (8086 running disk BASIC) in New York the first week of June at the 1979 National Computer Conference. (This was the first-ever public display of an 8086 BASIC and of an 8086 processor card for the S-100 bus.)

Seattle Computer shipped its first 8086 cards in November 1979, with Stand-Alone Disk BASIC based on Digital Researches **CP/M** as the only software to run on it. The months rolled by, and **CP/M-86** was nowhere in sight. Finally, in April 1980, Seattle decided to create its own DOS. This decision resulted just as much from concern about **CP/M's** shortcomings as from the urgent need for a general-purpose operating system. As to what was **QDOS** a new operating system or a adaptation of **CP/M** is hard to say, It is more certain to say that **CP/M 86** had a lot more in common with **QDOS** than **CP/M** had. To what level of cooperation there was between Digital Research and Seattle Computer or if the code was copied will never be resolved.

The first versions of the operating system, called **QDOS 0.10**, were shipped in August 1980. **QDOS** stood for **Quick and Dirty Operating System** because it was thrown together in such a hurry (two man-months), but it worked surprisingly well. It had all the basic utilities for assembly-language development except an editor. One week later, Seattle Computer had created an operating system with an editor, an absurdity known as EDLIN (editor of lines). A primitive line-oriented system, it was supposed to last less than six months. (Unfortunately, it has lasted much longer than that as part **MS-DOS**.)

In the last few days of 1980, a new version of the **DOS** was released, now known as **86-DOS 0.3**. Seattle Computer passed this new version on to Microsoft, which had bought non-exclusive rights to market **86-DOS** and had one customer for it at the time. Also about this time, Digital Research released the first copies of **CP/M-86**. In April 1981, Seattle Computer Products released **86-DOS 1.00**, which was very similar to the versions of **MS-DOS** that are widely distributed today.

In July 1981, Microsoft bought all rights to the **DOS** from Seattle Computer, and the name **MS-DOS** was adopted. Shortly afterward, IBM announced the Personal Computer (PC), using as its operating system what was essentially Seattle Computer's **86-DOS 1.14**. Microsoft has been continuously improving the **DOS**, providing version 1.24 to IBM (as IBM's **PC-DOS 1.1**) with **MS-DOS 1.25** as the first general release to all **MS-DOS** customers in March 1982.

Digital Research later came back into the **DOS** market with **DR-DOS** claiming it to be based on **CP/M 86** and their own **DOS** code, and by others as a reverse engineered copy of IBM **PC-DOS**. Certainly **DR-DOS** uses the IBMDOS.SYS kernel naming style! And **GEM** a Graphical User Interface at about the same time as Microsoft were developing Windows.

## **DOS Timeline ~ Part One ~ 1980 to 1993**

A History of Microsoft MS-DOS and Windows (and its main competitors) on the 8086 Processor family

[The Origins of MS-DOS](#) ~ Articles by Tim Paterson, original author of DOS

NOTE - Other (minor) versions of DOS & Windows exist, This list is based on major versions plus items observed or reported

Updates other than NT Service Packs are available via the [PowerLoad Resource Pages](#)

*Note - Any changes listed continue on to later versions:*

| Month     | Year        | Version            | Major Changes or Remarks  |
|-----------|-------------|--------------------|---|
| December  | 1980        | <b>QDOS</b>        | Microsoft buys non-exclusive rights to market Pattersons <b>Quick &amp; Dirty Operating System</b> from Seattle Computer Products (Developed as 86-DOS)<br><b>(Which is a clone of Digital Researches CP/M in virtually every respect)</b>  |
| July      | 1981        | <b>86-DOS</b>      | Microsoft buys all rights to 86-DOS from Seattle Computer Products, and the name MS-DOS is adopted for Microsoft's purposes <b>and IBM PC-DOS for shipment with IBM PCs (For Computers with the Intel 8086 Processor)</b>   |
| <b>Q3</b> | <b>1981</b> | <b>CP/M 86</b>     | <b>Digital Research release CP/M 86 for the Intel 8086 Processer</b>  |
| Mid       | 1981        | <i>PC-DOS 1.0</i>  | <i>Pre-Release PC-DOS produced for IBM Personal Computers (IBM PC) Supported 16K of RAM, ~ Single-sided 5.25" 160Kb Floppy Disk</i>   |
| August    | 1982        | <b>PC-DOS 1.1</b>  | OEM PC-DOS for IBM Corporation. (First Release Version)   |
| September | 1982        | <b>MS-DOS 1.25</b> | OEM Version for Zenith Computer Corporation.. (Also known as Z-DOS) This added support for Double-Sided 5.25" 320Kb Floppy Disks. Previously the disk had to be turned over to use the other side   |
| <b>Q4</b> | <b>1982</b> | <b>CP/M Plus</b>   | <b>Digital Research release CP/M Plus for the Intel 8086 Processer</b>  |
| March     | 1983        | <b>MS-DOS 2.0</b>  | OEM Version For Zenith - This added support for IBM's 10 MB Hard Disk, Directories and Double-Density 5.25" Floppy Disks with capacities of 360 Kb  |
| March     | 1983        | <b>PC-DOS 2.0</b>  | OEM PC-DOS for IBM Corporation. - Released to support the IBM XT  |
| March     | 1983        | <b>MS-DOS GUI</b>  | Microsoft first announces it intention to create a GUI ( <b>G</b> raphical <b>U</b> ser <b>I</b> nterface) for its existing MS-DOS Operating System. Microsoft also introduces its first mouse, "The Microsoft Mouse", including card and software, for US\$200. A major tool in its <b>GUI</b> Development Program. ( <b>Windows is Born</b> ) |
| November  | 1983        | <b>MS-DOS 2.01</b> | OEM Version for Wang Computer Corporation.  |
| November  | 1983        | <b>PC-DOS 2.1</b>  | OEM PC-DOS for IBM Corporation. - Released  |

|                  |             |                                     |  |
|------------------|-------------|-------------------------------------|--|
|                  |             |                                     | to support IBM PCjr PC   |
| November         | 1983        | <b>Microsoft Windows for MS-DOS</b> | Microsoft formally announces Windows 1.0, but does not have a working copy! <b>Microsoft shows Windows to IBM, but IBM is not interested in such an unfinished product.</b>  |
| <b>November</b>  | <b>1983</b> | Digital Research                    | <b>Meanwhile, Digital Research debuts its GEM GUI for the IBM PC at Fall COMDEX 1983, and also debuts its first multiuser and multitasking version of CP/M, Concurrent CP/M (MP/M) for the Intel-based IBM PC.</b>   |
| December         | 1983        | MS-DOS 2.11                         | OEM Version for AT&T, Bull & Sony. - Support for foreign and extended characters was added.  |
| Notes            | >>>>        | <b>"DOS Menu"</b>                   | There were also a number of Retail/Freeware Menu or Shell Programs becoming available for DOS to help the novice user and shield him from the 'raw' command line! Prompting Microsoft to speed up its GUI development work!  |
| Early            | 1984        | MS-DOS 2.25                         | OEM Version for Unknown Computer Manufacture. (Possibly Zenith)  |
| September        | 1984        | <b>MS-DOS 3.0</b>                   | OEM Version for Various Manufactures.- Support for High-Density 1.2 MB Floppy Disks and 32 MB Hard Disks was added. - No extended partitions.  |
| September        | 1994        | PC-DOS 3.0                          | OEM PC-DOS for IBM Corporation   |
| November         | 1984        | MS-DOS 3.1                          | OEM Version for Various Manufactures. Network support was added.   |
| >                | 1985        | DOSPlus 1.0                         | <b>Digital Research release DOSPlus 1.0 as a follow on from CP/M Plus</b>  |
| <b>March</b>     | <b>1985</b> | <b>Dr GEM 1.1</b>                   | <b>A small number of Computer Manufactures start to bundle 'GEM' DOS Manager by Digital Research (Who also published DR-DOS) It stands for Graphical Environment Manager</b><br><a href="#">Details &amp; History</a>  |
| <b>September</b> | <b>1985</b> | <b>Dr GEM 1.2</b>                   | <b>Digital Research release 'retail' GEM version 1.2</b>   |
| November         | 1985        | <b>Microsoft Windows 1.01</b>       | Microsoft announces the Retail shipment of Microsoft Windows, a GUI which extends the features of the DOS operating system. Windows provides users with the ability to work with several programs at the same time and easily switch between them without having to quit and restart individual applications. (Retail Price was US\$99)<br><a href="#">Screenshots</a> |
| December         | 1985        | PC-DOS 3.2                          | OEM PC-DOS for IBM Corporation. ~ Support for 3.5" LD 720Kb Floppy Disks   |
| >                | 1986        | DOSPlus 2.0                         | <b>Digital Research release DOSPlus 2.0 - Fore-runner to DrDOS</b>   |

|            |      |                      |   |
|------------|------|----------------------|---|
| >          | 1986 | <b>Dr GEM</b>        | Amstrad & KayPro bundle 'GEM' software with MS-DOS 3.1  |
| April      | 1986 | <b>MS-DOS 3.2</b>    | <b>First Retail Release of MS-DOS</b> ~ Support for 3.5" LD 720Kb Floppy Disks  |
| August     | 1986 | Windows 1.03         | Microsofts second release, - MS-DOS version 3.2 support added   |
| January    | 1987 | Windows DDL Volume 1 | Microsoft Windows Device Driver Library Volume 1<br>Additional support for display devices, printers, and pointing devices added  |
| April      | 1987 | <b>OS/2</b>          | Microsoft announces <b>MicroSoft Operating System/2</b> (MS OS/2) a new personal computer operating system. It has been designed and developed specifically to harness the capabilities of personal computers based upon the Intel 80286 and 80386 microprocessors. This is the first product to be announced as a result of the Joint Development Agreement between IBM and Microsoft announced in August 1985. - <i>Intended Replacement for MS-DOS</i> |
| April      | 1987 | Windows 1.04         | - IBM Personal System/2 support added   |
| April      | 1987 | MS-DOS 3.21          | OEM Version for Kaypro & Zenith Computer Corporations. (And others)   |
| April      | 1987 | <b>MS-DOS 3.3</b>    | MS-DOS 3.3 introduces support for more than one logical drive per hard disk. Logical drives are treated as completely separate disks under MS-DOS, even though they may occupy the same physical hard disk. Plus 3.5" HD 1.44MB Floppy Disk Support + Real Time Support for the 'new' CMOS clock  |
| April      | 1987 | PC-DOS 3.3           | OEM PC-DOS for IBM Corporation. Added support for PS/2 Computers  |
| April      | 1987 | <b>MS OS/2 - 1.0</b> | Microsoft & IBM OS/2 Version 1.0 Released<br><a href="#">Click here for OS/2 History, Sub-Versions and Resources</a>  |
| <b>Mid</b> | 1987 | DOSPlus 2.1          | <b>Digital Research release DOSPlus 2.1 - Last release before DrDOS 3.31</b>  |
| October    | 1987 | MS LAN Manager       | Microsoft releases LAN Manager, ( <b>L</b> ocal <b>A</b> rea <b>N</b> etwork) a LAN operating system add-on that runs on both MS-DOS and OS/2.  |

|          |      |                     |   |
|----------|------|---------------------|---|
| November | 1987 | <b>Windows 2.0</b>  | Microsoft releases Microsoft Windows 2.03 (Retail Packaging however may show it as Windows 2.0) offering compatibility with existing Windows applications and a new visual appearance compatible with Microsoft OS/2 Presentation Manager. In addition to the new visual appearance, it uses a system of overlapping windows, rather than tiled windows. Windows 2.03 also includes significant performance enhancements and improved support for expanded memory hardware. <a href="#">Screenshots</a> |
| >        | 1988 | Windows/286         | <b>Version 2.03</b> ~ When Windows/386 was released, Microsoft renamed Windows 2.03 to Windows/286 (For the Intel 286) for version consistency, And labelled all further production accordingly. However it was not replaced by Windows/386, As both versions were aimed at different processors. Therefore Version 2.03 can be found labelled under both descriptions.   |
| February | 1988 | MS-DOS 3.3Plus      | Extended MS-DOS for Selected OEMs   |
| March    | 1988 | MS-DOS 3.3T         | Modified MS-DOS 3.3 for Tandy (Radio Shack) Computers as TandyDOS   |
| April    | 1988 | MS-DOS 3.31         | Extended Version for Various OEM Manufactures.  |
| May >    | 1988 | DrDOS 3.3x          | <b>Digital Research release DrDOS 3.31</b> (No version 3.0 recorded) <b>followed by a series of OEM versions. 3.32, 3.33, 3.34, 3.35, 3.40, 3.41 &amp; 3.42</b> Some releases include a version of GEM Desktop (Called ViewMAX)   |
| July     | 1988 | <b>MS-DOS 4.0</b>   | This version provided XMS support, support for partitions on hard disks up to 2.10 GB and a graphical shell. ~ <i>It also contained a large number of bugs and many programs refused to run on it.</i>  |
| July     | 1988 | PC-DOS 4.0          | OEM PC-DOS for IBM Corporation. (IBM buy rights to future versions of PC-DOS)   |
| August   | 1988 | Windows/286         | <b>Version 2.10</b> ~ Intel 286 Optimised Edition   |
| August   | 1988 | Windows/386         | <b>Version 2.10</b> ~ Intel 386 Optimised Edition (Introduces HIMEM.SYS Driver)   |
| October  | 1988 | <b>MS OS/2 1.10</b> | Microsoft and IBM announce the delivery of the jointly developed Operating System/2 (OS/2) 1.1 with Presentation Manager. Presentation Manager is the graphical user interface (GUI) for the OS/2 operating system. This is the second major release of the Standard Edition of OS/2. ( <b>LAN version also released</b> )  |
| November | 1988 | MS-DOS 4.01         | Major Bug Fix for MS-DOS 4.0 (Core Files al-  |

|              |             |                    |   |
|--------------|-------------|--------------------|---|
|              |             |                    | <i>most completely rewritten)</i>   |
| November     | 1988        | PC-DOS 4.01        | Major Bug Fix for PC-DOS 4.0  |
| December     | 1988        | DrDOS 4.41         | <b>Digital Research release DrDOS 4.41</b> (No Version 4.0 released!)   |
| March        | 1989        | Windows/286        | <b>Version 2.11</b> ~ Intel 286 Optimised Edition   |
| March        | 1989        | Windows/386        | <b>Version 2.11</b> ~ Intel 386 Optimised Edition   |
| April        | 1989        | MS-DOS 4.01a       | Minor update to MS-DOS 4.01 to include better support as Larger Hard Drives become available. A File Update is also released to support MS-DOS 4.01   |
| <b>April</b> | <b>1989</b> | <b>Dr GEM 3.13</b> | <b>Last retail release of GEM by Digital Research</b>   |
| April        | 1989        | MS OS/2 - 1.10EE   | Microsoft and IBM OS/2 1.10 <b>Extended Edition</b> released, with LAN Manager.   |
| June         | 1989        | IBM OS/2 - 1.20    | IBM OS/2 1.20 released.   |
| May          | 1990        | Windows 3.0        | Microsoft announces the immediate, worldwide availability of Microsoft Windows 3.0, This version offers dramatic performance increases for Windows applications, advances in ease of use and aesthetic appeal, and straightforward integration into corporate computing environments Network Drivers also made available. <a href="#">Screenshots</a> <b>IBM start to offer Windows 3.0 as a PS/2 Option</b>  |
| <b>May</b>   | <b>1990</b> | DrDOS 5.0          | <b>Digital Research release DrDOS 5.0</b> - First Retail Version  |
| September    | 1990        |                    | <b>IBM and Microsoft agree to end their development relationship.</b>   |
| April        | 1991        | IBM OS/2 - 1.30    | IBM OS/2 1.30 released.   |
| October      | 1991        | Windows 3.0a       | Maintenance Release of Windows 3.0 focusing on specific problems  |
| April        | 1991        | MS-DOS 5.0         | This was a major upgrade. It allowed parts of DOS to load itself in the high memory area and certain device drivers and TSRs to run in the unused parts of the upper memory area between 640K and 1024K. This version also added support for IBM's new 2.88 MB floppy disks. An improved BASIC interpreter and text editor were included, as was a disk cache, an undelete utility and a Hard Disk partition-table backup program . After the problems with MS-DOS 4, it also provided a utility to make programs think they were running on a different version of MS-DOS.(SETVER) ~ Restores confidence in DOS after v4.x disaster. |
| <b>June</b>  | <b>1991</b> | DrDOS 6.0          | <b>Digital Research release DrDOS 6.0</b> Adds disk   |

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|-----------|------|--|--|
|           |      |  | compression, disk optimizer, etc.  |
| June      | 1991 | PC-DOS 5.0   | IBM PC-DOS 5.0   |
| June      | 1991 | MS-DOS 5UG   | MS-DOS 5.0 Upgrade Edition for all earlier versions (First Upgrade Version)  |
| October   | 1991 | Windows 3.0 with Multimedia Extensions Version 1.0 | OEM Windows 3.0 with <b>MultiMedia</b> Extensions v1.0. This version of Windows was probably a standard version of Windows 3.0a and Microsoft Multimedia Extensions Version 1.0 being released as an OEM Multimedia CD-ROM only.<br><b>IBM list Windows 3.0 MM as an option for PS/2 Computers</b>                         |
| Notes     | 1991 | Tandy Modular Windows                              | Tandy Modular Windows was an OEM Special GUI for Tandy Corp.'s Video Information System (VIS) Multimedia Player. It was essentially a Windows 3.0 Core Program, But without any Microsoft Desktop Accessories, Drivers, or a number of other features. (Not to be confused with Windows 3.0 MultiMedia)                    |
| Q3        | 1991 | Windows NT Program                                 | <b>New Technology Development Program - NT</b> Operating System was first intended to be based on OS/2 Technology but was later changed to Windows   |
| Q4        | 1991 | MS-DOS 5.0a  | This was a minor update for MS-DOS 5.0 which dealt with possibly catastrophic problems with UNDELETE and CHKDSK. A File Update is also released  |
| Q4        | 1991 | MS-DOS 5aUG  | Replaces MS-DOS 5.0 Upgrade (Details as for MS-DOS 5.0a)   |
| February  | 1992 | PC-DOS 5.0.1                                       | PC-DOS 5.0 Rev 1 (Possibly an update for same reason as MS-DOS 5.0a)   |
| April     | 1992 | Windows 3.1  | Microsoft ships Microsoft Windows 3.1 with over 1,000 enhancements. The new version created unprecedented user demand with over one million advance orders placed worldwide. ~ 386 Enhanced Mode with minimum 4MB RAM - Operates in Standard Mode with 2MBs - Added support for TrueType Fonts <a href="#">Screenshots</a> |
| April     | 1992 | Win 3.1UG  | Windows 3.1 Upgrade for Windows 3.0 Users. (Full Version marked Upgrade!)  |
| June      | 1992 | IBM OS/2 - 2.0                                     | IBM OS/2 version 2.0 released. (Microsoft withdraws support for OS/2)  |
| September | 1992 | PC-DOS 5.0.2                                       | PC-DOS 5.0 Rev 2 - To correct errors with Windows 3.1 (EMM386.EXE)   |



|         |      |                                       |   |
|---------|------|---------------------------------------|---|
| October | 1992 | Windows for Workgroups 3.1 (WfWG 3.1) | Microsoft announces the worldwide availability of Microsoft <b>Windows for WorkGroups</b> 3.1 (WfWG) which integrates networking and workgroup functionality directly into Windows 3.1. The product allows common activities of sending electronic mail, scheduling group meetings, sharing files and printers, managing calendars, and working together on groups projects. It can provide networking capabilities on its own, or it can be used as a client on an existing local area network. <a href="#">Screenshots</a> ( <i>Unlike NT, WfWG is still a MS-DOS GUI</i> ) |
| October | 1992 | WfWG31AD                              | Windows for Workgroups 3.1 Add-On for MS-DOS Users  |
| October | 1992 | WfWG31AW                              | WfWG 3.1 Add-On for Windows Users - This package is for machines that already have Windows version 3.1 installed. It upgrades Windows by adding those files required for the new features of WfWG 3.1 (Uses Compliance Checking)  |
| Q4      | 1992 | WindowsNT BETA                        | <b>Windows New Technology</b> - First BETA Testing of Windows NT ~ Microsofts first true 32bit Operating System.  |
| March   | 1993 | MS-DOS 6.0                            | This was a catch-up with Novell's DR-DOS 6. It added a disk-compression utility called Double-Space, a basic anti-virus program and a disk defragmenter. It also finally included a MOVE command, an improved backup program, MSBACKUP and multiple boot configurations. Memory management was also improved by the addition of MEMMAKER. A number of older utilities, such as JOIN and RECOVER were removed. However DOSSHELL was still included.  |
| March   | 1993 | MS-DOS6UG                             | MS-DOS 6.0 Upgrade Edition for all earlier versions from 3.3 onwards.   |
| March   | 1993 | 6.0 Supplemental                      | Microsoft released a Supplemental Update of Earlier Files removed from v6.0   |
| May     | 1993 | Windows for PEN Computing 3.1         | Microsofts first attempt at a GUI for Palm and Organiser type small computers. It used a cut down version of MS-DOS 6.0 & Windows 3.1 with a PEN Driver Set.  |
| Note    | 1993 | Dr PalmDOS                            | <b>Digital Research base their PalmDOS on CP/M with GEM ViewMAX</b>   |
| June    | 1993 | PC-DOS 6.1                            | IBM starts to number PC-DOS in series with MS-DOS   |
| Q3      | 1993 | NovellDOS 7.0                         | <b>DrDOS sold to Novell who release it as NovellDOS 7.0 with NetWare</b>  |

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|----------|------|---|--|
| July     | 1993 | WindowsNT 3.1                           | Windows NT - Designed for Business & Networking Use - Not dependent on MS-DOS - Uses its own NTFS Bootstrap to install. (Released on 3.5" Disks) <a href="http://planetx.com/linebackn/guis/nt31.html">Screenshots from http://planetx.com/linebackn/guis/nt31.html</a>  |
| >        | >    | Windows NT Service Packs                | After the release of NT 3.1 Microsoft began a series of <b>Service Pack Releases</b> , which included Updates, Patches as well as New or Updated Network Drivers. The Last known Service Pack for Windows NT 3.1 was SP-3 (Dated October 1994)   |
| November | 1993 | MS-DOS 6.2                              | Extra security was built into DoubleSpace following complaints of data loss. A new disk checker, SCANDISK, was also introduced, as well as improvements to DISKCOPY and SmartDrive (DOSSHELL was removed to the Supplemental Disk Set)   |
| November | 1993 | MS-DOS62UG                              | MS-DOS 6.2 Upgrade Edition for all earlier versions from 3.3 onwards.  |
| November | 1993 | MS-DOS62SU                              | MS-DOS 6.2 Step-Up for 6.0 Users Only (MS-DOS Step-Up differs from Upgrade in that it is limited to earlier 6x versions only and contains file updates not complete copies of application files other than IO.SYS & MSDOS.SYS)   |
| November | 1993 | 6.2 Supplemental                        | Microsoft released a Supplemental Update of Earlier Files removed from v 6.2 <i>Including DOSSHELL which was removed from 6.2 &amp; later versions.</i>  |
| December | 1993 | Windows for Workgroups 3.11 (WfWG 3.11) | WfWG 3.11 contains the complete software package for machines that do not have Windows Operating System version 3.0 or 3.1. It contains all the WfWG software, including Windows 3.1 functionality, file sharing, printer sharing, network dynamic data exchange (DDE), Microsoft Mail, Microsoft Schedule+, Microsoft At Work PC Fax, Remote Access Services, 32-bit file and disk access, and advanced security. <a href="#">Screenshots</a> |
| December | 1993 | WfWG311AD                               | WfWG 3.11 Add-On for MS-DOS Users.   |
| December | 1993 | WfWG311AW                               | WfWG 3.11 Add-On for Windows Users -This package is for machines that already have Windows or WfWG version 3.1 installed. It upgrades Windows or WfWG 3.1 by adding those files required for the new features of WfWG 3.11.  |
| December | 1993 | MSClient 3.0                            | Microsoft Client for MS-DOS version 3.0 (Network Add-On for MS-DOS)  |
| December | 1993 | Windows 3.11                            | With WfWG Compatible Core Files, SVGA & updated drivers <a href="#">Screenshots</a> Windows 3.11 was never marketed as such, It is a Service Release of Windows 3.1 only - The only way to check you have it was to click the 'About' Box  |

|          |      |               |   |
|----------|------|---------------|---|
| December | 1993 | Win31 Updates | Microsoft also made available 2 updates for Windows 3.1 to bring it upto Windows 3.11 standard ~ 3.11 Core Files and SVGA Driver Updates. |
| December | 1993 | PC-DOS 6.3    | Replaces PC-DOS 6.1   |

## DOS Timeline ~ Part Two - 1994 On-wards

### A History of Microsoft MS-DOS and Windows (and main competitors) on the 8086 Processer family

NOTE - Other (minor) versions of DOS & Windows exist, This list is based on major versions plus items observed or reported

Updates other than NT Service Packs are available via the [PowerLoad Resource Pages](#)

*Note - Any changes listed continue on to later versions:*



| Month | Year | Version                | Major Changes or Remarks  |
|-------|------|------------------------|---|
| Q1    | 1994 | MS-DOS BETA 1 7.0      | Work starts on a Enhanced version of MS-DOS for 32bit Windows. At first based on MS-DOS 6.2 with DoubleSpace but later changed due to legal action.   |
| March | 1994 | MS-DOS 6.21            | Following legal action by Stac Electronics, Microsoft released this interim version which had DoubleSpace removed <i>This was an interim limited release of MS-DOS until replacement of DoubleSpace ~ Otherwise identical in function to MS-DOS 6.2</i> |
| March | 1994 | MS-DOS621UG            | MS-DOS 6.21 Upgrade Edition for all earlier versions (No Step-Up Released)  |
| March | 1994 | 6.21 Supplemental      | Microsoft released a Supplemental Update of Earler Files removed from v6.21   |
| March | 1994 | Win32s for Windows 3.1 | Win32s is a set of runtime libraries for Windows 3.1, which enable users to run most Windows NT 32-bit applications on Windows 3.1, without the extensive hardware requirements of Windows NT.  |
| April | 1994 | MS-DOS 6.22            | Microsoft licenced a disk-compression package called DoubleDisk from VertiSoft Systems and renamed it DriveSpace, which was included in this version. <i>(Other than disk-compression there is no differance to MS-DOS 6.2)</i>                         |
| April | 1994 | MS-DOS622UG            | MS-DOS 6.22 Upgrade Edition for all earlier versions from 3.3 onwards.  |
| April | 1994 | MS-                    | MS-DOS 6.22 Step-Up for 6.0, 6.2, 6.21 Users Only   |

|           |      |                     |  |
|-----------|------|---------------------|--|
|           |      | DOS6.22SU           |  |
| April     | 1994 | 6.22 Supplimental   | Microsoft released a Supplemental Update of Earler Files removed from v6.22  |
| May       | 1994 | MS-DOS BETA 2 7.0   | Second BETA of WindowsDOS now based on DriveSpace Technology.  |
| September | 1994 | Chicago             | Microsoft announces that Microsoft Windows 95 is the official name for the next version of Windows, code-named "Chicago." This name was chosen to make it easier for customers to identify the most current version of Microsoft Windows. It is a fully integrated 32-bit operating system replacing Windows 3.11, Windows for Workgroups 3.11, and MS-DOS as the mainstream desktop operating system.<br>Windows 4.0 (95) uses a version of MS-DOS to 'Bootup' (MS-DOS 7.0) |
| September | 1994 | WindowsNT 3.5       | Windows New Technology 3.5   |
| >         | >    | NT Service Packs    | No recorded Service Pack was published for NT 3.5  |
| November  | 1994 | OS/2 Warp 3.0       | IBM OS/2 Warp 3.0 released   |
| August    | 1995 | Windows 95 OEM      | OEM (Pre-Installed) 32bit Processing - Long Filename Support & other major improvments over Windows 3.x (Still uses original FAT16) DriveSpace Included Windows 95 supports two new partition types (0E and 0F) to support the logical block addressing (LBA) INT13h extensions as specified in the Windows 95 Driver Development Kit (DDK).~ Includes Internet Explorer 1.0   |
| August    | 1995 | Windows 95          | Retail Windows 95 for Computers without MS-DOS (or earler MS-DOS Version) <a href="http://planetx.com/linebackn/guis/win95.html">Screenshots from http://planetx.com/linebackn/guis/win95.html</a>   |
| August    | 1995 | Integral MS-DOS 7.0 | MS-DOS 7.0 (Also called WindowsDOS) is an integral part of Windows 95.<br><b>(It and later versions are NOT available as a Stand-Alone OS)</b><br>It provides support for Long Filenames only when Windows is running, but removes a large number of other utilities, some of which are on the Windows 95 CD versions in the \other\oldmsdos directory. (Reports itself as Windows 95)   |
| August    | 1995 | Win95UG             | Windows 95 Upgrade for Previous Versions of Windows  |
| August    | 1995 | Educational Pack    | Discounted Combined Win95 & NT4.0 for Teachers & Students Only.  |
| August    | 1995 | Win95 Plus-Pack     | Extras for Win95 such as DriveSpace 3, MS Themes and 3D Pinball Game   |

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| August    | 1995 | Win95 CD-ROM Extras & Updates | Microsoft release Extra Applications found on 95 CD for Floppy Disk Users. (This MS page has changed now to the equivalent of 'WindowsUpdate')   |
| September | 1995 | Win95 - DOS 7.0 Supplimental  | Microsoft release a Supplimental Update of MS-DOS 6.22 Files removed from Win95 Called OLDDOS.EXE ~ Microsoft still find it difficult to 'Kill' DOS  |
| September | 1995 | WindowsNT 3.51                | Updated Release of NT 3.5 with additional network drivers<br><a href="http://pla-netx.com/linebackn/guis/nt351.html">Screenshots from http://pla-netx.com/linebackn/guis/nt351.html</a>  |
| >         | >    | NT Service-Packs              | The Last Service Pack for Windows NT 3.51 was SP- 5 (Dated October 1996)   |
| >         | 1995 | Nashville                     | Windows 95 OSR (OEM Service Release) Update Program  |
| >         | 1995 | Cairo                         | Windows NT (4.0) 'Future Technology' BETA Program. (Also reported as Detroit)  |
| >         | 1995 | Pegasus                       | Windows CE (Compact Edition) Development Program - Based on Windows 95 and designed for the Handheld PC (H/PC) and Portable PC (P/PC) also known as Personal Digital Assistants (PDA) ~ <i>The Windows CE series is included to complete the Windows Range.</i>                    |
| February  | 1996 | Windows 95A                   | OSR 1.0 (As with later sub-versions of OSRs - Pre-Installed) IE 2.0 Included.  |
| February  | 1996 | Win95 SP1                     | Service Pack 1 for Windows 95 (95A Upgrade) This was the only Windows 9x Service Pack, After this MS placed further updates on internet <a href="#">'WindowsUpdate' Web Site.</a>  |
| August    | 1996 | WindowsNT 4.0                 | Microsofts (Cairo) 32bit Multi-Tasking Operating System. Available in Server, Desktop and Upgrade Versions. (Development continues for Option & Enterprise) <a href="http://pla-netx.com/linebackn/guis/nt4.html">Screenshots from http://pla-netx.com/linebackn/guis/nt4.html</a> |
| >         | >    | NT Service-Packs              | The Latest Service Pack for NT 4.0 is SP - 6a (Dated December 1999)  |
| August    | 1996 | OS/2 Warp 4.0                 | IBM OS/2 Warp 4.0 released   |
| September | 1996 | Windows 95B                   | OSR 2.0 (Mainly a Floppy Disk Release) - Windows 95 OSR 2 onwards support two new partition types (0B and 0C) to support the FAT32 file system. Maximum partition size now 2 TeraBytes (TB) But still 2.1 GBs if is FAT16 selected.  |
| September | 1996 | Windows 95B CD                | OSR 2.1 with added USB Support (CD-ROM Versions Only) IE 3.0 Included.   |
| September | 1996 | Integral MS-DOS 7.10          | Updated MS-DOS 7.10 is an integral part of OSR 2 and later versions of Windows. The main change is support for FAT 32, a more efficient and robust way of storing Data on Large Hard Disks. ('Large Disk Support' is an Option in FDISK)   |
| November  | 1996 | WindowsCE 1.0                 | <b>Pegasus</b> ~ All versions of Windows CE are OEM releases only.   |
| Late      | 1996 | Windows                       | Windows NT 5.0 Development Program. <a href="#">Windows NT</a>   |

|                 |             |                     |  |
|-----------------|-------------|---------------------|--|
|                 |             | <b>NT5</b>          | <a href="#">Background &amp; History</a>   |
| April           | 1997        | <b>PC-DOS 7.0</b>   | <a href="#">PC-DOS 7.0 Revision 0</a> - Update available to Revision 1 (PC-DOS 2000) from IBM  |
| September       | 1997        | <b>NT5 BETA</b>     | <a href="#">Windows NT 5.0 BETA Program</a> . <a href="#">Click here for NT5/2000 Build TimeLine</a>   |
| November        | 1997        | <b>Windows 95C</b>  | OSR 2.5 with Integrated Internet Explorer 4.0 (Improved USB Support) Some issues of 95B/C Install CD-ROMs were 'Bootable' Dependent on BIOS Support.                       |
| November        | 1997        | WindowsCE 2.0       | <b>Mercury</b> ~ Successor to Windows CE 1   |
| <b>November</b> | <b>1997</b> | <b>OpenDOS 7.01</b> | <b>DrDOS sold to Caldera who release it as Caldera OpenDOS 7.01</b>  |
| December        | 1997        | WinNT 4.0<br>OP     | NT 4.0 Option Pack   |
| December        | 1997        | WinNT 4.0<br>Ent    | NT 4.0 Enterprise Version  |
| >               | 1997        | <b>Memphis</b>      | Windows 98 BETA Program  |
| <b>February</b> | <b>1998</b> | <b>DR-DOS 7.02</b>  | <b>Caldera release OpenDOS 7.02 (Then rename it as DR-DOS 7.02)</b>  |
| April           | 1998        | <b>PC-DOS 2000</b>  | <a href="#">PC-DOS 7.0 Revision 1 - Fully Y2K Compliant Update</a>   |
| Q2              | 1998        | WindowsCE 2.01      | <b>Gryphon</b> ~ First Microsoft P/PC OS   |
| June            | 1998        | Windows 98<br>OEM   | OEM (Pre-Installed) With full FAT32 & USB Support and Integrated Internet Explorer 4.0 (Install CD-ROM is now 'Bootable')  |
| June            | 1998        | <b>Windows 98</b>   | Retail Windows 98 for Computers without MS-DOS<br><a href="http://planetx.com/linebackn/guis/win98.html">Screenshots from http://planetx.com/linebackn/guis/win98.html</a> |
| June            | 1998        | Win98 UG            | Windows 98 Upgrade for Previous Versions of Windows  |
| June            | 1998        | Educational Pack    | Discounted Combined Win98 & NT4.0 for Teachers & Students Only.  |
| June            | 1998        | Win98 Plus-Pack     | 'Extras' that could have been included on 98 CD! (Say no more!)  |
| July            | 1998        | WindowsCE 2.1       | <b>Birch</b> ~ P/PC Release  |
| August          | 1998        | <b>NT5 BETA 2</b>   | <b>Windows NT5 Beta 2 (Becomes Windows 2000 Beta 2)</b>  |
| Q3              |             | Win CE 2.11<br>Pro  | <b>Jupiter</b> ~ CE 2.11 Professional ~ H/PC Release   |
| April           | 1999        | Win2000<br>BETA 3   | <b>Windows 2000 Beta 3</b>   |
| Q2              | 1999        | <b>Neptune</b>      | <i>Planned successor to Windows 98 (Cancelled Early 2000) See Whistler</i>   |
| Q2              | 1999        | <b>Odysee</b>       | <i>Planned successor to Windows NT5 (2000) (Cancelled) See Whistler</i>  |

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|-------------|------|---------------------------|---|
| May         | 1999 | Win98 SP1                 | Service Pack 1 for Windows 98 (Major Bug Fixes plus IE 4.01 SP1)  |
| May         | 1999 | Windows 98SE OEM          | OEM (Pre-Installed) Win98 <b>Second Edition</b> - Integrated Internet Explorer 5.0  |
| May         | 1999 | Windows 98SE              | Retail Windows 98SE for Computers without MS-DOS or Windows   |
| May         | 1999 | Win98SE UG                | Windows 98SE Upgrade for Previous Versions of Windows   |
| May         | 1999 | Educational Pack          | Discounted Combined Win98se & NT4.0 (SP-5) for Teachers & Students Only.  |
| July/August | 1999 | Millennium                | <b>Millennium Edition</b> (WinMe) BETA Testing Program<br>Still realies on MS-DOS (No longer supports Real Mode) (MS-DOS 8.0)   |
| August      | 1999 | DR-DOS 7.03               | Caldera release DR-DOS 7.03 then transfer all rights to Lineo, Corp   |
| Q3          | 1999 | WindowsCE 2.11            | Wyvern ~ P/PC release   |
| .>          | 1999 | WinMe BETA                | <a href="#">Click here for the Full Windows Me TimeLine with Build Numbers.</a>   |
| End         | 1999 | DR-DOS 7.04               | Lineo release OEM version as DR-DOS 7.04  |
| Early       | 2000 | DR-DOS 7.05 BETA          | Lineo BETA Test OEM DR-DOS 7.05 but then discontinue DR-DOS development.  |
| Q1          | 2000 | Whistler                  | <i>Planned future merge of Windows 98, Millennium and NT(2000) into 1 OS</i>  |
| February    | 2000 | Windows 2000 Professional | Windows 2000 Professional (NT & Network Users) <b>NO MS-DOS Support</b> Successor to Windows NT 4.0 - Designed for Business Use. Available in Server, Desktop and Upgrade Versions.           |
| >           | >    | NT Service Packs          | The Latest Service Pack for Windows 2000 is SP-2 Dated May 2001   |
| May         | 2000 | WindowsCE 3.0             | For Microsoft's Pocket PC Handheld Devices. A Major Revamp! 2 code-names have been reported = <b>Rapier</b> for P/PC 2000 and <b>Galileo</b> for H/PC 2000                                    |
| August      | 2000 | Windows Me OEM            | OEM (Pre-Installed) For Home Users with Integrated Internet Explorer & Outlook Express 5.5 and MSN Messenger - Gold Release 4.10.3000<br>(ME as in Millennium Edition or Me as in I myself ?) |
| September   | 2000 | Windows Me                | Retail for Computers without MS-DOS or Windows<br><a href="http://planetx.com/linebackn/guis/me.html">Screenshots from http://planetx.com/linebackn/guis/me.html</a>                          |
| September   | 2000 | Integral MS-DOS 8.0       | Major change to MS-DOS 8.0 is the removal of 'Real-Mode' Support. Other than that it is identical to MS-DOS 7.10 (This is done by changes to IO.SYS & COMMAND.COM)                            |
| September   | 2000 | WinMe Step-Up             | Limited Promotional Step-Up Version for Windows 98/98se Users Only  |

|           |      |   |  |
|-----------|------|---|--|
| September | 2000 | WinMe UG  | Windows Millennium Upgrade for Previous Versions of Windows (Not 3.x)  |
| April     | 2001 | WindowsCE<br><b>Talisker</b>  | Microsoft Announces Beta 1 of "Talisker," the Next Version of Windows CE<br><a href="http://www.microsoft.com/PressPass/press/2001/Apr01/04-10TaliskerPR.asp">http://www.microsoft.com/PressPass/press/2001/Apr01/04-10TaliskerPR.asp</a>  |
| >>>>>>    | 2001 |  | <b>Windows XP</b> is the release name for Windows Whistler and was released on October 25 2001 Due to the large number of 'Builds' it has not been possible to keep listing them! - Read - <a href="http://www.winsupersite.com/reviews/windowsxp_gold.asp">http://www.winsupersite.com/reviews/windowsxp_gold.asp</a>           |
| ????????? | 2002 |  | <i>Now that Windows no longer uses a MS-DOS loader or supports it in any way. It is time to close the DOS Timeline. I enjoyed doing it, but now is the time to STOP. For New and Breaking News on Windows and its Future visit <a href="http://www.winsupersite.com/default.asp">http://www.winsupersite.com/default.asp</a></i> |

## A Short History of MS-DOS

Known variously as Seattle Computer 86-DOS, IBM Personal Computer DOS, and Zenith Z-DOS, MS-DOS was developed by Seattle Computer Products for its 8086-based computer system. The MS-DOS history is intertwined with the general development of software for 8086-based computers.

In May 1979, Seattle Computer made the first prototype of its 8086 microprocessor card for the S-100 bus. There were brief discussions with Digital Research about using one of Seattle Computer's prototypes to aid in developing CP/M-86, which was to be ready "soon." Although Seattle Computer was considering using CP/M-86 when it became available (expected no later than the end of 1979), there were only two working prototypes of the 8086 processor card, and it was felt that both were needed in house. Therefore, there wasn't one free for Digital Research.

Microsoft had already started a strong 8086 software-development program. The firm was ready to try the 8086 version of Stand-Alone Disk BASIC, which is a version of its BASIC interpreter with a built-in operating system. During the last two weeks of May 1979, this BASIC was made completely functional using the hardware that Seattle Computer provided for Microsoft. Seattle Computer Products displayed the complete package (8086 running disk BASIC) in New York the first week of June at the 1979 National Computer Conference. (This was the first-ever public display of an 8086 BASIC and of an 8086 processor card for the S-100 bus.)

Seattle Computer shipped its first 8086 cards in November 1979, with Stand-Alone Disk BASIC as the only software to run on it. The months rolled by, and CP/M-86 was nowhere in sight. Finally, in April 1980, Seattle decided to create its own DOS. This decision resulted just as much from concern about CP/M's shortcomings as from the urgent need for a general-purpose operating system.



The first versions of the operating system, called QDOS 0.10, were shipped in August 1980. QDOS stood for Quick and Dirty Operating System because it was thrown together in such a hurry (two man-months), but it worked surprisingly well. It had all the basic utilities for assembly-language development except an editor. One week later, Seattle Computer had created an operating system with an editor, an absurdity known as EDLIN (editor of lines). A primitive line-oriented system, it was supposed to last less than six months. (Unfortunately, it has lasted much longer than that as part MS-DOS.)

In the last few days of 1980, a new version of the DOS was released, now known as 86-DOS version 0.3. Seattle Computer passed this new version on to Microsoft, which had bought non-exclusive rights to market 86-DOS and had one customer for it at the time. Also about this time, Digital Research released the first copies of CP/M-86. In April 1981, Seattle Computer Products released 86-DOS version 1.00, which was very similar to the versions of MS-DOS that are widely distributed today.

In July 1981, Microsoft bought all rights to the DOS from Seattle Computer, and the name MS-DOS was adopted. Shortly afterward, IBM announced the Personal Computer, using as its operating system what was essentially Seattle Computer's 86-DOS 1.14. Microsoft has been continuously improving the DOS, providing version 1.24 to IBM (as IBM's version 1.1) with MS-DOS version 1.25 as the general release to all MS-DOS customers in March 1982. Now version 2.0, released in February 1983, has just been announced with IBM's new XT computer.

## **Origins of MS-DOS**

### **Articles about MS-DOS and Tim Paterson**

[Seattle Times](#) - *Garage warriors: Computer pioneer makes a name on geek TV*, 5/6/02.

[Microsoft MicroNews](#) - *Father of DOS Still Having Fun at Microsoft*, 4/10/98.

[Forbes ASAP](#) - *The Dross of the DOS*, 12/1/97.

[Softalk](#) - *The Roots of DOS*, March, 1983.

### **Articles by Tim Paterson, original author of DOS**

[Encyclopedia of Computers and Computer History](#) (Raul Rojas, editor) - *DOS*, April 2001.

[Byte Magazine](#) - *A Short History of MS-DOS*, June, 1983.

[Byte Magazine](#) - *An Inside Look at MS-DOS*, June, 1983.

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*dustry - and Made Himself the Richest Man in America*. Doubleday, 1993.

Wallace, James, and Jim Erickson. *Hard Drive: Bill Gates and the Making of the Microsoft Empire*. John Wiley & Sons, Inc., 1992.

Duncan, Ray, editor. *The MS-DOS Encyclopedia*. Microsoft Press, 1988.