# Usage share of operating systems

The usage share of operating systems is the percentage of computing devices that run each operating system (OS) at any particular time. All such figures are necessarily estimates because data about operating system share is difficult to obtain. There are few reliable primary sources and no agreed methodologies for its collection. Operating systems are used in numerous device types, from embedded devices without a screen through to supercomputers.

Global Desktop Operating System Market Share
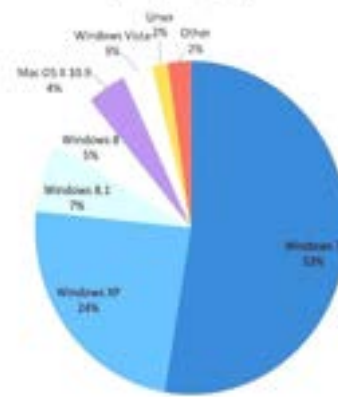
Usenet newsgroup

A Usenet newsgroup is a repository usually within the Usenet system, for messages posted from users in different locations using the Internet. They are discussion groups and are not devoted to publishing news. Newsgroups are technically distinct from, but functionally similar to, discussion forums on the World Wide Web. Newsreader software is used to read the content of newsgroups.

User (computing)

A user is a person who utilizes a computer or network service.

User interface

In the industrial design field of human?computer interaction, a user interface (UI) is the space where interactions between humans and machines occur. The goal of this interaction is to allow effective operation and control of the machine from the human end, while the machine simultaneously feeds back information that aids the operators' decision-making process. Examples of this broad concept of user interfaces include the interactive aspects of computer operating systems, hand tools, heavy machinery operator controls and process controls. The design considerations applicable when creating user interfaces are related to, or involve such disciplines as, ergonomics and psychology.
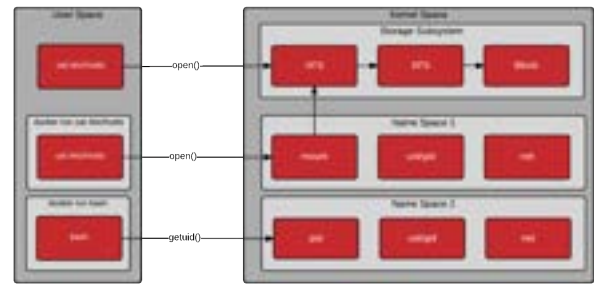
User mode

A modern computer operating system usually segregates virtual memory into user space and kernel space. Primarily, this separation serves to provide memory protection and hardware protection from malicious or errant software behaviour.
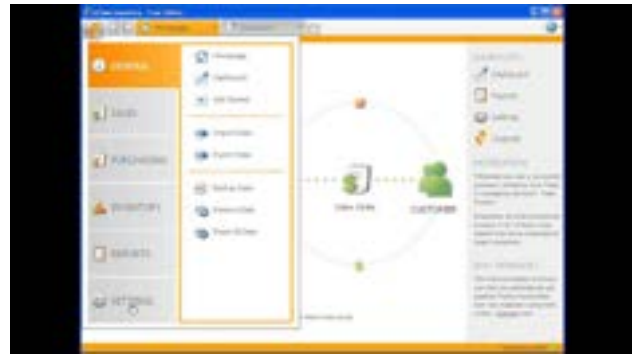
User space

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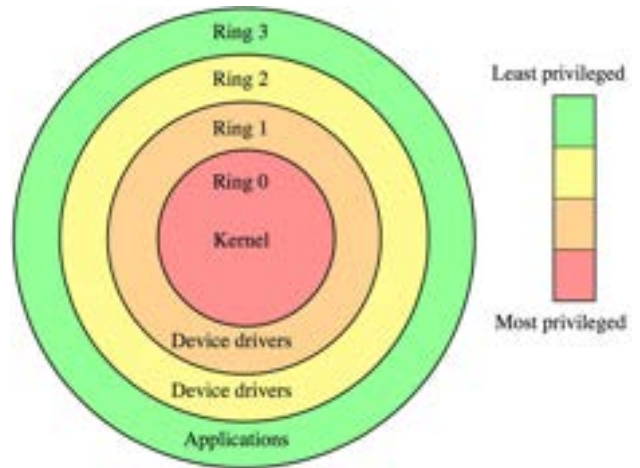
VAX

VAX (an acronym for Virtual Address eXtension) is a series of computers featuring a 32-bit instruction set architecture (ISA) and virtual memory that was developed and sold by Digital Equipment Corporation (DEC) in the late 20th century. The VAX-11/780, introduced October 25, 1977, was the first of a range of popular and influential computers implementing the VAX ISA. The VAX family was a huge success for DEC ? over 100 models were introduced over the lifetime of the design, with the last members arriving in the early 1990s. The VAX was succeeded by the DEC Alpha, which included several features from VAX machines to make porting from the VAX easier.

VMS Software Inc

OpenVMS, often referred to as just VMS, is a multi-user, multiprocessing and virtual memory-based operating system. It is designed to support time-sharing, batch processing, transaction processing and workstation applications. Customers using OpenVMS include banks and financial services, hospitals and healthcare, telecommunications operators, network information services, and industrial manufacturers. During the 1990s and 2000s, there were approximately half a million VMS systems in operation worldwide.It was first announced by Digital Equipment Corporation (DEC) as VAX/VMS (Virtual Address eXtension/Virtual Memory System) alongside the VAX-11/780 minicomputer in 1977. OpenVMS has subsequently been ported to run on DEC Alpha systems, the Itanium-based HPE Integrity Servers, and select x86-64 hardware and hypervisors. Since 2014, OpenVMS is developed and supported by VMS Software Inc. (VSI). OpenVMS offers high availability through clustering ? the ability to distribute the system over multiple physical machines. This allows clustered applications and data to remain continuously available while operating system software and hardware maintenance and upgrades are performed, or if part of the cluster is destroyed. VMS cluster uptimes of 17 years have been reported.

Very Large Scale Integration

Very large-scale integration (VLSI) is the process of creating an integrated circuit (IC) by combining millions or billions of MOS transistors onto a single chip. VLSI began in the 1970s when MOS integrated circuit (Metal Oxide Semiconductor) chips were developed and then widely adopted, enabling complex semiconductor and telecommunication technologies. The microprocessor and memory chips are VLSI devices.

Video game

A video game is an electronic game that involves interaction with a user interface or input device ? such as a joystick, controller, keyboard or motion sensing device ? to generate visual feedback from a display device, most commonly shown in a video format on a television set, computer monitor, flat-panel display/touchscreen on handheld devices or virtual reality headset, hence the name. However, not all video games are dependent on graphical outputs, for example text adventure games and computer chess can be played through teletype printers. Most modern video games are audiovisual, with audio complement delivered through speakers or headphones, and sometimes also with other types of sensory feedbacks (e.g. haptic technology that provides tactile sensations), and some video games also allow microphone and/or webcam inputs for in-game chatting and livestreaming.

Virtual file system

A virtual file system (VFS) or virtual filesystem switch is an abstract layer on top of a more concrete file system. The purpose of a VFS is to allow client applications to access different types of concrete file systems in a uniform way. A VFS can, for example, be used to access local and network storage devices transparently without the client application noticing the difference. It can be used to bridge the differences in Windows, classic Mac OS/macOS and Unix filesystems, so that applications can access files on local file systems of those types without having to know what type of file system they are accessing.

Virtual machine

In computing, a virtual machine (VM) is the virtualization/emulation of a computer system. Virtual machines are based on computer architectures and provide functionality of a physical computer. Their implementations may involve specialized hardware, software, or a combination.

Virtual memory

In computing, virtual memory, or virtual storage is a memory management technique that provides an "idealized abstraction of the storage resources that are actually available on a given machine" which "creates the illusion to users of a very large (main) memory".The computer's operating system, using a combination of hardware and software, maps memory addresses used by a program, called virtual addresses, into physical addresses in computer memory. Main storage, as seen by a process or task, appears as a contiguous address space or collection of contiguous segments. The operating system manages virtual address spaces and the assignment of real memory to virtual memory. Address translation hardware in the CPU, often referred to as a memory management unit (MMU), automatically translates virtual addresses to physical addresses. Software within the operating system may extend these capabilities, utilizing, e.g., disk storage, to provide a virtual address space that can exceed the capacity of real memory and thus reference more memory than is physically present in the computer.
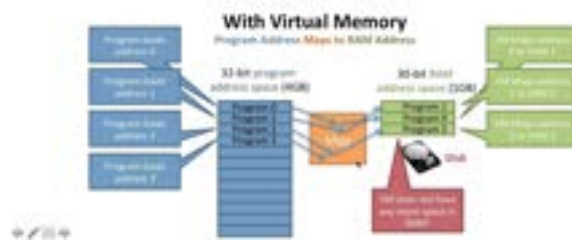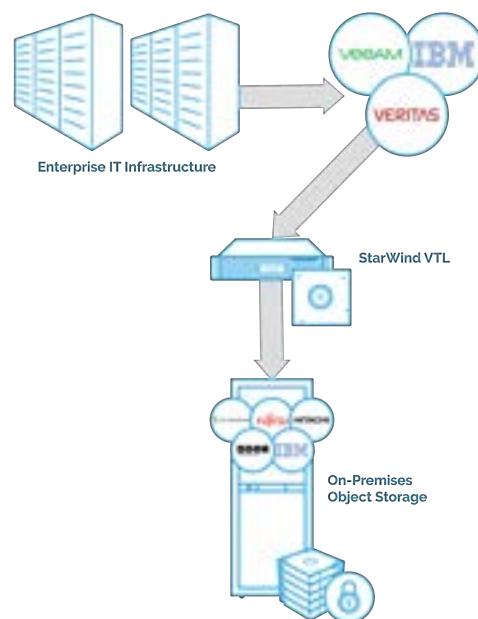
Virtual reality

Virtual reality (VR) is a simulated experience that employs pose tracking and 3D near-eye displays to give the user an immersive feel of a virtual world. Applications of virtual reality include entertainment (particularly video games), education (such as medical or military training) and business (such as virtual meetings). Other distinct types of VR-style technology include augmented reality and mixed reality, sometimes referred to as extended reality or XR, although definitions are currently changing due to the nascence of the industry.Currently, standard virtual reality systems use either virtual reality headsets or multi-projected environments to generate some realistic images, sounds and other sensations that simulate a user's physical presence in a virtual environment. A person using virtual reality equipment is able to look around the artificial world, move around in it, and interact with virtual features or items. The effect is commonly created by VR headsets consisting of a head-mounted display with a small screen in front of the eyes, but can also be created through specially designed rooms with multiple large screens. Virtual reality typically incorporates auditory and video feedback, but may also allow other types of sensory and force feedback through haptic technology.

Virtual tape library

A virtual tape library (VTL) is a data storage virtualization technology used typically for backup and recovery purposes. A VTL presents a storage component (usually hard disk storage) as tape libraries or tape drives for use with existing backup software.

Enterprise IT Infrastructure

StarWind VTL

On-Premises Object Storage

Visualization (graphics)

Visualization or visualisation (see spelling differences) is any technique for creating images, diagrams, or animations to communicate a message. Visualization through visual imagery has been an effective way to communicate both abstract and concrete ideas since the dawn of humanity. Examples from history include cave paintings, Egyptian hieroglyphs, Greek geometry, and Leonardo da Vinci's revolutionary methods of technical drawing for engineering and scientific purposes.

Vkernel

A virtual kernel architecture (vkernel) is an operating system virtualisation paradigm where kernel code can be compiled to run in the user space, for example, to ease debugging of various kernel-level components, in addition to general-purpose virtualisation and compartmentalisation of system resources. It is used by DragonFly BSD in its vkernel implementation since DragonFly 1.7, having been first revealed in September 2006 (2006-09), and first released in the stable branch with DragonFly 1.8 in January 2007 (2007-01).

VxWorks

VxWorks is a real-time operating system (or RTOS) developed as proprietary software by Wind River Systems, a subsidiary of Aptiv. First released in 1987, VxWorks is designed for use in embedded systems requiring real-time, deterministic performance and, in many cases, safety and security certification for industries such as aerospace, defense, medical devices, industrial equipment, robotics, energy, transportation, network infrastructure, automotive, and consumer electronics.VxWorks supports AMD/Intel architecture, POWER architecture, ARM architectures and RISC-V. The RTOS can be used in multicore asymmetric multiprocessing (AMP), symmetric multiprocessing (SMP), and mixed modes and multi-OS (via Type 1 hypervisor) designs on 32- and 64-bit processors.VxWorks comes with the kernel, middleware, board support packages, Wind River Workbench development suite and complementary third-party software and hardware technologies. In its latest release, VxWorks 7, the RTOS has been re-engineered for modularity and upgradeability so the OS kernel is separate from middleware, applications and other packages. Scalability, security, safety, connectivity, and graphics have been improved to address Internet of Things (IoT) needs.

WIMP (computing)

In human?computer interaction, WIMP stands for "windows, icons, menus, pointer", denoting a style of interaction using these elements of the user interface. Other expansions are sometimes used, such as substituting "mouse" and "mice" for menus, or "pull-down menu" and "pointing" for pointer.Though the acronym has fallen into disuse, it has often been likened to the term graphical user interface (GUI). Any interface that uses graphics can be called a GUI, and WIMP systems derive from such systems. However, while all WIMP systems use graphics as a key element (the icon and pointer elements), and therefore are GUIs, the reverse is not true. Some GUIs are not based in windows, icons, menus, and pointers. For example, most mobile phones represent actions as icons and menus, but often do not rely on a conventional pointer or containerized windows to host program interactions.WIMP interaction was developed at Xerox PARC (see Xerox Alto, developed in 1973) and popularized with Apple's introduction of the Macintosh in 1984, which added the concepts of the "menu bar" and extended window management.The WIMP interface has the following components:
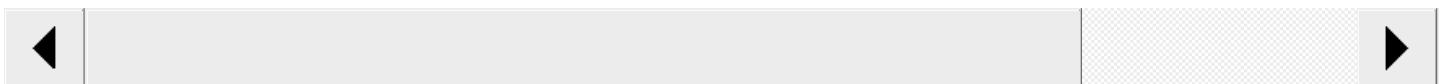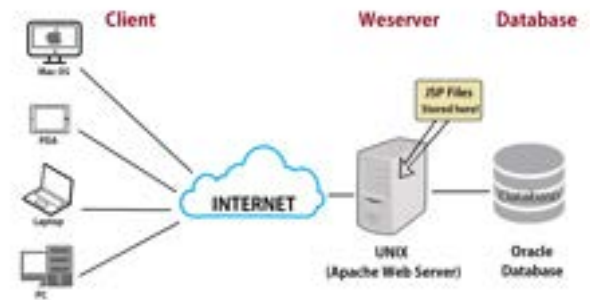
Wayback Machine

The Wayback Machine is a digital archive of the World Wide Web founded by the Internet Archive, a nonprofit based in San Francisco, California. Created in 1996 and launched to the public in 2001, it allows the user to go "back in time" and see how websites looked in the past. Its founders, Brewster Kahle and Bruce Gilliat, developed the Wayback Machine to provide "universal access to all knowledge" by preserving archived copies of defunct web pages.Launched on May 10, 1996, the Wayback Machine had saved more than 38.2 million web pages at the end of 2009. As of 3 February 2023, the Wayback Machine has archived more than 783 billion web pages.

Web server

A web server is computer software and underlying hardware that accepts requests via HTTP (the network protocol created to distribute web content) or its secure variant HTTPS. A user agent, commonly a web browser or web crawler, initiates communication by making a request for a web page or other resource using HTTP, and the server responds with the content of that resource or an error message. A web server can also accept and store resources sent from the user agent if configured to do so.The hardware used to run a web server can vary according to the volume of requests that it needs to handle. At the low end of the range are embedded systems, such as a router that runs a small web server as its configuration interface. A high-traffic Internet website might handle requests with hundreds of servers that run on racks of high-speed computers.

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William Ross Ashby

W. Ross Ashby (6 September 1903 ? 15 November 1972) was an English psychiatrist and a pioneer in cybernetics, the study of the science of communications and automatic control systems in both machines and living things. His first name was not used: he was known as Ross Ashby.:?91? His two books, Design for a Brain and An Introduction to Cybernetics, introduced exact and logical thinking into the brand new discipline of cybernetics and were highly influential.:?93? These "missionary works" along with his technical contributions made Ashby "the major theoretician of cybernetics after Wiener".:?28?
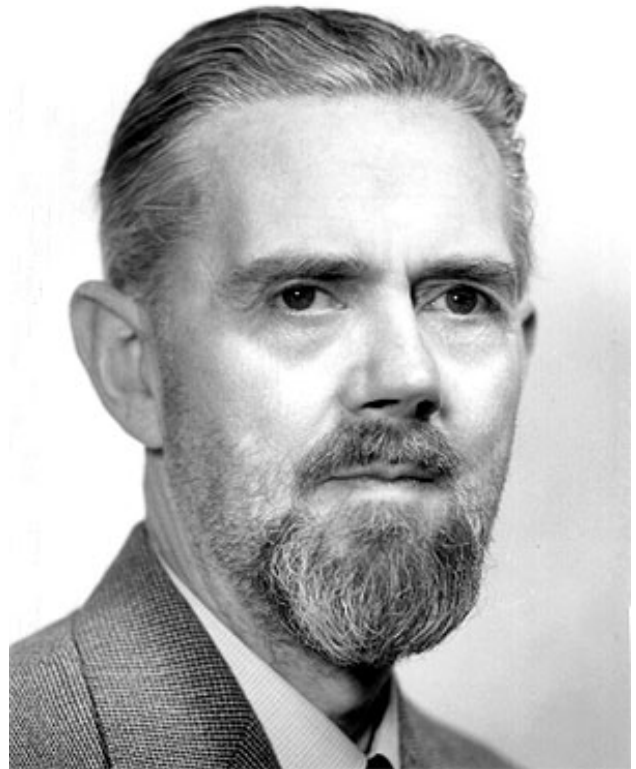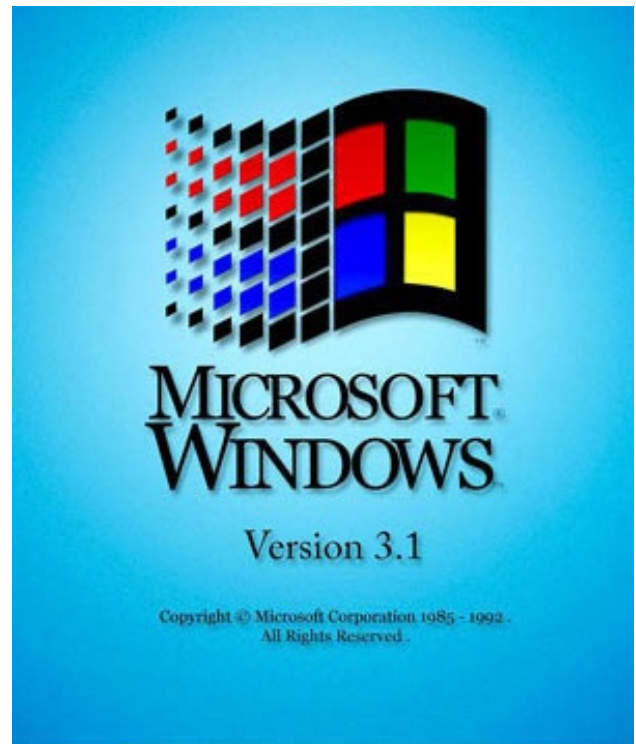
Windows 11

Windows 11 is the latest major release of Microsoft's Windows NT operating system, released in October 2021. It is a free upgrade to its predecessor, Windows 10 (2015), and is available for any Windows 10 devices that meet the new Windows 11 system requirements.

Windows 3.x

Windows 3.x means either of, or all of the
following versions of Microsoft Windows:

Windows 95

Windows 95 is a consumer-oriented operating system developed by Microsoft as part of its Windows 9x family of operating systems. The first operating system in the 9x family, it is the successor to Windows 3.1x, and was released to manufacturing on July 14, 1995, and generally to retail on August 24, 1995, almost three months after the release of Windows NT 3.51. Windows 95 merged Microsoft's formerly separate MS-DOS and Microsoft Windows products, and featured significant improvements over its predecessor, most notably in the graphical user interface (GUI) and in its simplified "plug-and-play" features. There were also major changes made to the core components of the operating system, such as moving from a mainly cooperatively multitasked 16-bit architecture to a 32-bit preemptive multitasking architecture, at least when running only 32-bit protected mode applications.

Windows 9x

Windows 9x is a generic term referring to a series of Microsoft Windows computer operating systems produced from 1995 to 2000, which were based on the Windows 95 kernel and its underlying foundation of MS-DOS, both of which were updated in subsequent versions. The first version in the 9x series was Windows 95, which was succeeded by Windows 98 and then Windows Me, which was the third and last version of Windows on the 9x line, until the series was superseded by Windows XP.Windows 9x is predominantly known for its use in home desktops. In 1998, Windows made up 82% of operating system market share.Internal release versions for versions of Windows 9x are 4.x. The internal versions for Windows 95, 98, and Me are 4.0, 4.1, and 4.9, respectively. Previous MS-DOS-based versions of Windows used version numbers of 3.2 or lower. Windows NT, which was aimed at professional users such as networks and businesses, used a similar but separate version number between 3.1 and 4.0. All versions of Windows from Windows XP onwards are based on the Windows NT codebase.

Windows CE

Windows Embedded Compact, formerly
Windows Embedded CE, Windows
Powered and Windows CE, is an operating
system subfamily developed by Microsoft
as part of its Windows Embedded family of
products.

Windows ME

Windows Millennium Edition, or Windows Me (marketed with the pronunciation of the pronoun "me"), is an operating system developed by Microsoft as part of its Windows 9x family of Microsoft Windows operating systems. It is the successor to Windows 98, and was released to manufacturing on June 19, 2000, and then to retail on September 14, 2000. It was Microsoft's main operating system for home users until the introduction of its successor Windows XP in October 2001.Windows Me was targeted specifically at home PC users, and included Internet Explorer 5.5 (later default was Internet Explorer 6), Windows Media Player 7 (later default was Windows Media Player 9 Series) and the new Windows Movie Maker software, which provided basic video editing and was designed to be easy to use for consumers. Microsoft also incorporated features first introduced in Windows 2000, which had been released as a business-oriented operating system seven months earlier, into the graphical user interface, shell and Windows Explorer. Although Windows Me was still ultimately based around MS-DOS like its predecessors, access to real-mode DOS was restricted to decrease system boot time.Windows Me was initially positively received when it was released, but it soon garnered a negative reception from many users due to stability problems. Windows Me is now infamously known by many as one of the worst operating systems Microsoft has ever produced, being unfavorably compared with its immediate predecessor, Windows 98, several years before. In October 2001, Windows XP was released to the public, having already been under development at the time of Windows Me's release, and popularized most of Windows Me's features, while being far more stable because of it being based on the Windows NT kernel.
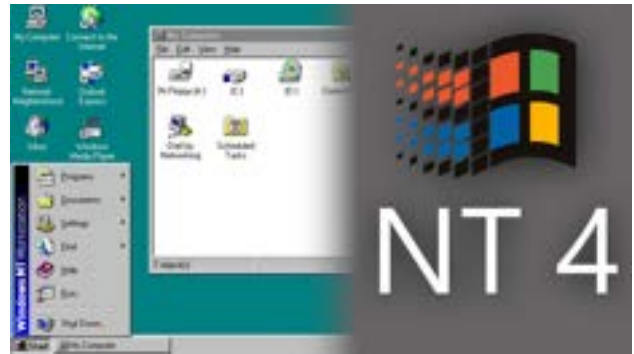
Windows NT

Windows NT is a proprietary graphical operating system produced by Microsoft, the first version of which was released on July 27, 1993. It is a processor-independent, multiprocessing and multi-user operating system.
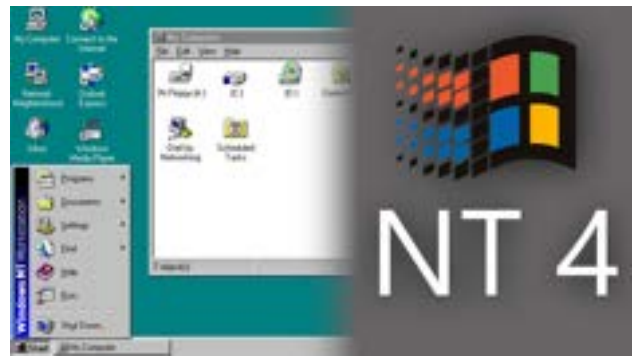
Windows NT 4.0

Windows NT 4.0 is a major release of the Windows NT operating system developed by Microsoft and oriented towards businesses. It is the direct successor to Windows NT 3.51, and was released to manufacturing on July 31, 1996, and then to retail on August 24, 1996. It was Microsoft's primary business-oriented operating system until the introduction of Windows 2000. Workstation, server and embedded editions were sold, and all editions feature a graphical user interface similar to that of Windows 95, which was superseded by Windows 98 and could still be directly upgraded by either Windows 2000 Professional or Windows Me.

Windows Server 2003

Windows Server 2003, codenamed "Whistler Server", is the sixth version of Windows Server operating system produced by Microsoft. It is part of the Windows NT family of operating systems and was released to manufacturing on March 28, 2003 and generally available on April 24, 2003. Windows Server 2003 is the successor to the Server editions of Windows 2000 and the predecessor to Windows Server 2008. An updated version, Windows Server 2003 R2, was released to manufacturing on December 6, 2005. Windows Server 2003 is based on the consumer operating system, Windows XP.Windows Server 2003's kernel has also been used in Windows XP 64-bit Edition and Windows XP Professional x64 Edition, and was the starting point for the development of Windows Vista.

Windows Server 2008 R2

Windows Server 2008 R2, codenamed "Windows Server 7", is the fifth version of the Windows Server operating system produced by Microsoft and released as part of the Windows NT family of operating systems. It was released to manufacturing on July 22, 2009, and became generally available on October 22, 2009, shortly after the completion of Windows 7. It is the successor to Windows Server 2008, which is derived from the Windows Vista codebase, released the previous year, and was succeeded by the Windows 8-based Windows Server 2012.
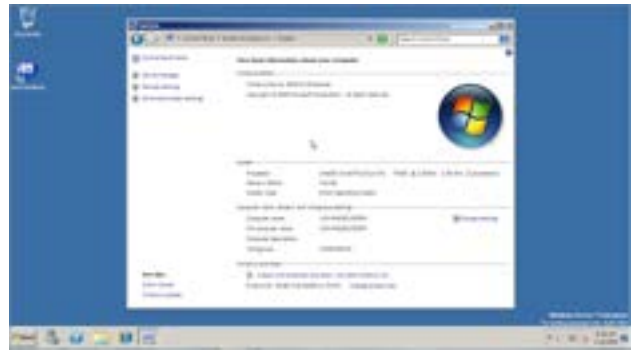
Windows Vista

Windows Vista is a major release of the Windows NT operating system developed by Microsoft. It was the direct successor to Windows XP, which was released five years earlier, at the time being the longest time span between successive releases of Microsoft's Windows desktop operating systems. Development was completed on November 8, 2006, and over the following three months, it was released in stages to computer hardware and software manufacturers, business customers, and retail channels. On January 30, 2007, it was released internationally and made available for purchase and download from the Windows Marketplace; this is the first release of Windows to be made available through a digital distribution platform.New features of Windows Vista include an updated graphical user interface and visual style dubbed "Aero," a new search component called "Windows Search," redesigned networking, audio, print, and display sub-systems, and new multimedia tools such as Windows DVD Maker. Windows Vista aimed to increase the level of communication between machines on a home network, using peer-to-peer technology to simplify sharing files and media between computers and devices. Windows Vista included version 3.0 of the .NET Framework, allowing software developers to write applications without traditional Windows APIs. Windows Vista removed support for Itanium and devices without ACPI.

Windows XP

Windows XP is a major release of Microsoft's Windows NT operating system. It was released to manufacturing on August 24, 2001, and later to retail on October 25, 2001. It is a direct upgrade to its predecessors, Windows 2000 for high-end and business users and Windows Me for home users, and is available for any devices running Windows NT 4.0, Windows 98, Windows 2000, or Windows Me that meet the new Windows XP system requirements.

Windows shell

The Windows shell is the graphical user interface for the Microsoft Windows operating system. Its readily identifiable elements consist of the desktop, the taskbar, the Start menu, the task switcher and the AutoPlay feature. On some versions of Windows, it also includes Flip 3D and the charms. In Windows 10, the Windows Shell Experience Host interface drives visuals like the Start Menu, Action Center, Taskbar, and Task View/Timeline. However, the Windows shell also implements a shell namespace that enables computer programs running on Windows to access the computer's resources via the hierarchy of shell objects. "Desktop" is the top object of the hierarchy; below it there are a number of files and folders stored on the disk, as well as a number of special folders whose contents are either virtual or dynamically created. Recycle Bin, Libraries, Control Panel, This PC and Network are examples of such shell objects.

Windows shell replacement

This is a list of software that provides an alternative graphical user interface for Microsoft Windows operating systems. The technical term for this interface is a shell. Windows' standard user interface is the Windows shell; Windows 3.0 and Windows 3.1x have a different shell, called Program Manager. The programs in this list do not restyle the Windows shell, but replace it; therefore, they look and function differently, and have different configuration options.
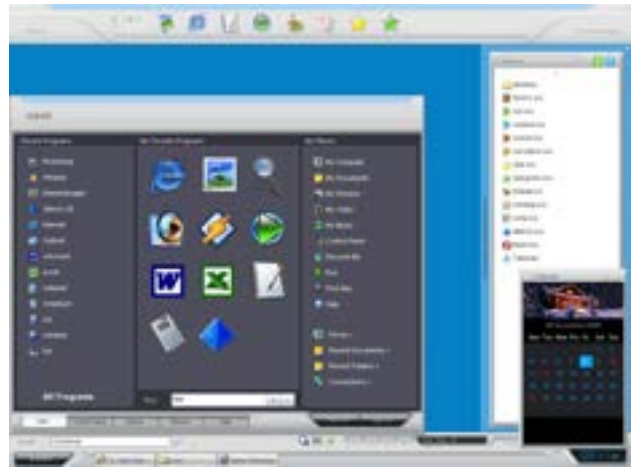
Word processor

A word processor (WP) is a device or computer program that provides for input, editing, formatting, and output of text, often with some additional features.

Workstation

A workstation is a special computer designed for technical or scientific applications. Intended primarily to be used by a single user, they are commonly connected to a local area network and run multi-user operating systems. The term workstation has been used loosely to refer to everything from a mainframe computer terminal to a PC connected to a network, but the most common form refers to the class of hardware offered by several current and defunct companies such as Sun Microsystems, Silicon Graphics, Apollo Computer, DEC, HP, NeXT, and IBM which powered the 3D computer graphics revolution of the late 1990s.Workstations formerly offered higher performance than mainstream personal computers, especially in CPU, graphics, memory, and multitasking. Workstations are optimized for the visualization and manipulation of different types of complex data such as 3D mechanical design, engineering simulations like computational fluid dynamics, animation, medical imaging, image rendering, and mathematical plots. Typically, the form factor is that of a desktop computer, which consists of a high-resolution display, a keyboard, and a mouse at a minimum, but also offers multiple displays, graphics tablets, and 3D mice for manipulating objects and navigating scenes. Workstations were the first segment of the computer market to present advanced accessories, and collaboration tools like videoconferencing.The increasing capabilities of mainstream PCs since the late 1990s have reduced distinction between the PCs and workstations. Typical 1980s workstations have expensive proprietary hardware and operating systems to categorically distinguish from standardized PCs.

World Wide Web

The World Wide Web (WWW), commonly known as the Web, is an information system enabling documents and other web resources to be accessed over the Internet.Documents and downloadable media are made available to the network through web servers and can be accessed by programs such as web browsers. Servers and resources on the World Wide Web are identified and located through character strings called uniform resource locators (URLs). The original and still very common document type is a web page formatted in Hypertext Markup Language (HTML). This markup language supports plain text, images, embedded video and audio contents, and scripts (short programs) that implement complex user interaction. The HTML language also supports hyperlinks (embedded URLs) which provide immediate access to other web resources. Web navigation, or web surfing, is the common practice of following such hyperlinks across multiple websites. Web applications are web pages that function as application software. The information in the Web is transferred across the Internet using the Hypertext Transfer Protocol (HTTP).

World-systems theory

World-systems theory (also known as world-systems analysis or the world-systems perspective) is a multidisciplinary approach to world history and social change which emphasizes the world-system (and not nation states) as the primary (but not exclusive) unit of social analysis."World-system" refers to the inter-regional and transnational division of labor, which divides the world into core countries, semi-periphery countries, and the periphery countries. Core countries focus on higher-skill, capital-intensive production, and the rest of the world focuses on low-skill, labor-intensive production and extraction of raw materials. This constantly reinforces the dominance of the core countries. Nonetheless, the system has dynamic characteristics, in part as a result of revolutions in transport technology, and individual states can gain or lose their core (semi-periphery, periphery) status over time. This structure is unified by the division of labour. It is a world-economy rooted in a capitalist economy. For a time, certain countries become the world hegemon; during the last few centuries, as the world-system has extended geographically and intensified economically, this status has passed from the Netherlands, to the United Kingdom and (most recently) to the United States.Components of the world-systems analysis are longue dur�e by Fernand Braudel, "development of underdevelopment" by Gunder Frank, and the single-society assumption. Longue dur�e is the concept of the gradual change through the day-to-day activities by which social systems are continually reproduced. "Development of underdevelopment" described that the economic processes in the periphery are the opposite of the development in the core. Poorer countries are impoverished to enable a few countries to get richer.
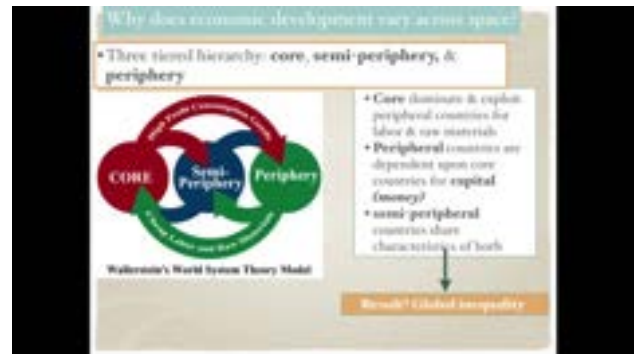
Writing system

A writing system is a method of visually representing verbal communication, based on a script and a set of rules regulating its use. While both writing and speech are useful in conveying messages, writing differs in also being a reliable form of information storage and transfer. Writing systems require shared understanding between writers and readers of the meaning behind the sets of characters that make up a script. Writing is usually recorded onto a durable medium, such as paper or electronic storage, although non-durable methods may also be used, such as writing on a computer display, on a blackboard, in sand, or by skywriting. Reading a text can be accomplished purely in the mind as an internal process, or expressed orally.

## Making a writing system:

Now you can start making symbols!
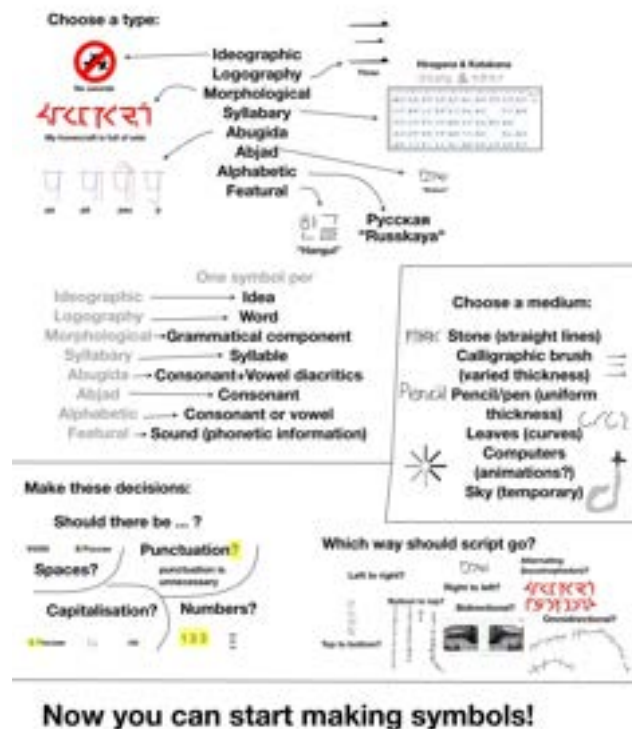
X Window System

The X Window System (X11, or simply X) is a windowing system for bitmap displays, common on Unix-like operating systems.

X86

x86 (also known as 80x86 or the 8086 family) is a family of complex instruction set computer (CISC) instruction set architectures initially developed by Intel based on the Intel 8086 microprocessor and its 8088 variant. The 8086 was introduced in 1978 as a fully 16-bit extension of Intel's 8-bit 8080 microprocessor, with memory segmentation as a solution for addressing more memory than can be covered by a plain 16-bit address. The term "x86" came into being because the names of several successors to Intel's 8086 processor end in "86", including the 80186, 80286, 80386 and 80486 processors.
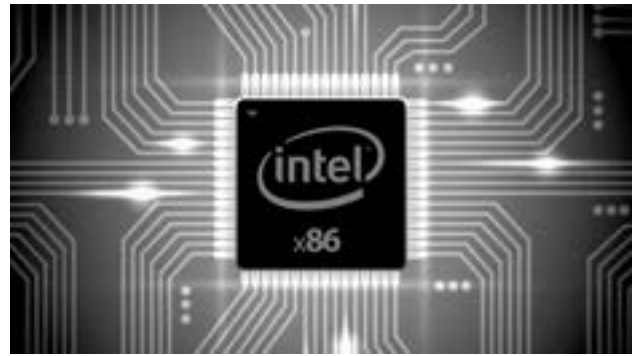
X86-64

x86-64 (also known as x64, x86_64, AMD64, and Intel 64) is a 64-bit version of the x86 instruction set, first released in 1999. It introduced two new modes of operation, 64-bit mode and compatibility mode, along with a new 4-level paging mode.

XTS-400

The XTS-400 is a multilevel secure computer operating system. It is multiuser and multitasking that uses multilevel scheduling in processing data and information. It works in networked environments and supports Gigabit Ethernet and both IPv4 and IPv6.

Z/Architecture

z/Architecture, initially and briefly called ESA Modal Extensions (ESAME), is IBM's 64-bit complex instruction set computer (CISC) instruction set architecture, implemented by its mainframe computers. IBM introduced its first z/Architecture-based system, the z900, in late 2000. Later z/Architecture systems include the IBM z800, z990, z890, System z9, System z10, zEnterprise 196, zEnterprise 114, zEC12, zBC12, z13, z14, z15 and z16.

Z/OS

z/OS is a 64-bit operating system for IBM z/Architecture mainframes, introduced by IBM in October 2000. It derives from and is the successor to OS/390, which in turn was preceded by a string of MVS versions. Like OS/390, z/OS combines a number of formerly separate, related products, some of which are still optional. z/OS has the attributes of modern operating systems, but also retains much of the older functionality originated in the 1960s and still in regular use?z/OS is designed for backward compatibility.
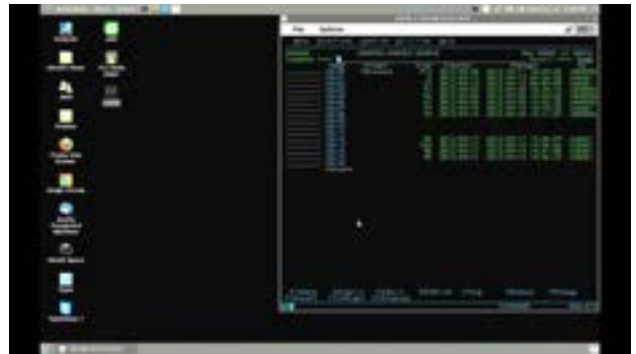
Z/VM

z/VM is the current version in IBM's VM family of virtual machine operating systems. z/VM was first released in October 2000 and remains in active use and development as of 2022. It is directly based on technology and concepts dating back to the 1960s, with IBM's CP/CMS on the IBM System/360-67 (see article History of CP/CMS for historical details). z/VM runs on IBM's IBM Z family of computers. It can be used to support large numbers (thousands) of Linux virtual machines. (See Linux on IBM Z.)