

# SIW



AmigaOS 3,9 / AtheOS / Debian 2,2(Potato) / Mac OS 9 / Mac OS X Public Beta



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Kazakh philology-204



## AmigaOS 3.9

- AmigaOS is a family of proprietary native operating systems of the Amiga and AmigaOne personal computers. It was developed first by Commodore International and introduced with the launch of the first Amiga, the Amiga 1000, in 1985. Early versions of AmigaOS required the Motorola 68000 series of 16-bit and 32-bit microprocessors. Later versions were developed by Haage & Partner (AmigaOS 3.5 and 3.9) and then Hyperion Entertainment (AmigaOS 4.0-4.1). A PowerPC microprocessor is required for the most recent release, AmigaOS .



**Developer :** Commodore International, Hyperion Entertainment

**Written in :** Assembly Language, BCPL, C

**OS family :** Amiga

**Working state :** Current

**Source model :** Closed source

**Initial release :** July 23, 1985; 33 years ago

**Latest release :** 4.1 Final Edition Update 1 / December 31, 2016; 20 months ago


**Platforms :** M68K: versions 1.0 through 3.9 PowerPC: versions 4.0 through 4.1

**Kernel type :** Microkernel

**Default user interface :** Graphical (Workbench)

**License :** Proprietary

**Official website :** [www.amigaos.net](http://www.amigaos.net)



## Components

AmigaOS is a single-user operating system based on a preemptive multitasking kernel, called Exec. AmigaOS provides an abstraction of the Amiga's hardware, a disk operating system called AmigaDOS, a windowing system API called Intuition and a desktop file manager called Workbench. A command-line interface (CLI), called AmigaShell, is also integrated into the system, though it also is entirely window-based. The CLI and Workbench components share the same privileges. Notably, AmigaOS lacks any built-in memory protection.

### Firmware and bootloader

Kickstart is the bootstrap firmware, usually stored in ROM. Kickstart contains the code needed to boot standard Amiga hardware and many of the core components of AmigaOS. The function of Kickstart is comparable to the BIOS plus the main operating system kernel in IBM PC compatibles.

### Kernel

The Macintosh should have had multitasking. I can't stress enough what a big contribution it makes to the elegant design of system software. The Amiga has an excellent multitasking system, and I think it will have twice the product life of the Macintosh because of it.

— Adam Brooks Webber, the programmer responsible for porting TrueBASIC to the Amiga and Macintosh, Byte, September 1986.

Exec is the multi-tasking kernel of AmigaOS. Exec provides functionality for multi-tasking, memory allocation, interrupt handling and handling of dynamic shared libraries.

### AmigaDOS

AmigaDOS provides the disk operating system portion of the AmigaOS. This includes file systems, file and directory manipulation, the command-line interface, file redirection, console windows, and so on. Its interfaces offer facilities such as command redirection, piping, scripting with structured programming primitives, and a system of global and local variables.

### Graphical user interface

The native Amiga [windowing system](#) is called [Intuition](#), which handles input from the keyboard and mouse and rendering of screens, windows and [widgets](#). Prior to AmigaOS 2.0, there was no standardized [look and feel](#), application developers had to write their own non-standard widgets. Commodore added the GadTools library and [BOOPSI](#) in AmigaOS 2.0, both of which provided standardized widgets. Commodore also published the Amiga User Interface Style Guide, which explained how applications should be laid out for consistency. [Stefan Stuntz](#) created a popular third-party widget library, based on BOOPSI, called [Magic User Interface](#), or MUI. [MorphOS](#) uses MUI as its official toolkit, while [AROS](#) uses an MUI clone called [Zune](#). AmigaOS 3.5 added another widget set, [ReAction](#), also based on BOOPSI.

### File manager

Workbench is the native graphical [file manager](#) and desktop environment of AmigaOS. Though the term Workbench was originally used to refer to the entire operating system, with the release of AmigaOS 3.1 the operating system was renamed AmigaOS and subsequently Workbench refers to the desktop manager only. As the name suggests, the [metaphor](#) of a [workbench](#) is used, rather than that of a desktop; directories are depicted as drawers, executable files are tools, data files are projects and GUI widgets are gadgets. In many other aspects the interface resembles [Mac OS](#), with the main desktop showing icons of inserted disks and hard drive partitions, and a single menu bar at the top of every screen.

AmigaOS is the proprietary native operating system of the Amiga personal computer. Since its introduction with the launch of the Amiga 1000 in 1985, there have been four major versions and several minor revisions of the operating system. Initially the Amiga operating system had no strong name and branding, as it was simply considered an integral part of the Amiga system as a whole. Early names used for the Amiga operating system included "CAOS" and "AmigaDOS". Another non-official name was "Workbench", from the name of the Amiga desktop environment, which was included on a floppy disk named "Amiga Workbench".

### AmigaOS 3.5, 3.9

After the demise of Commodore, Workbench 3.5 was released on 18 October 1999 and Workbench 3.9 in December 2000 by German company Haage & Partner, [5] which was granted the license to update the Amiga operating system by its new owners. Whereas all previous OS releases ran on Motorola 68000, AmigaOS 3.5 onwards required a 68020 or better, CD-ROM and at least 4 MB RAM. Unlike previous releases, 3.5 and 3.9 were released on CD-ROM. Kickstart 3.1 was also required, as the operating system didn't include the new ROM.

Updates included:

- Supplied with TCP/IP stack (unregistered time-limited free MiamiDX demo in 3.5, unrestricted AmiTCP in 3.9), web browser (AWeb), and e-mail client
- Improved GUI and new toolkit called "ReAction"
- AVI/MPEG movie player (OS3.9)
- New partitioning software to support hard disks larger than 4 GB
- HTML documentation in English and German
- MP3 and CD audio player (OS3.9)
- Dock program (OS3.9)
- Improved Workbench with asynchronous features
- Find utility (OS3.9)
- Unarchiving system called XAD (OS3.9)
- WarpOS PowerPC kernel to support PowerUP accelerator boards





## AtheOS

- ❖ AtheOS is a discontinued free and open source operating system for x86-based computers. It was initially intended as an AmigaOS clone, but that objective was later abandoned. It is no longer in development, and has been superseded by the Syllable operating system.



## History

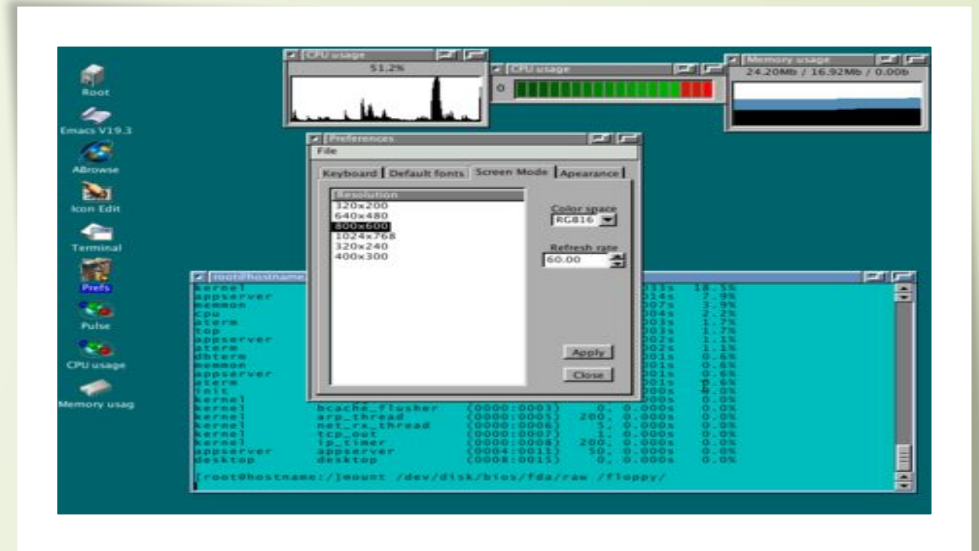
It was created entirely by a [Norwegian programmer](#), [Kurt Skauen](#), from 1994 to the early 2000s; AtheOS was announced to the world in March 2000 on [Usenet](#). Although it was licensed as [free software](#), Skauen was more hesitant to accept contributions from the public than other free and [open source](#) operating system projects. The availability of the code under the [GNU GPL](#) allowed other developers to launch [Syllable](#), a fork from the AtheOS code base, with ongoing development.

Skauen ported [KHTML](#) to AtheOS in order to create the [ABrowse web browser](#).

## Features

Its own native [64-bit journaling file system](#), the [AtheOS File System](#) (usually called *AFS*)

- Support for [symmetric multiprocessing](#)
- An original, legacy-free, [object-oriented GUI](#) architecture
- Support for most of the [POSIX](#) standard
- [Pre-emptive multitasking](#) with [multithreading](#)
- [C++](#) oriented [API](#)



**Developer :** Kurt Skauen

**Working state :** Discontinued


**Source model :** Open source

**Latest release :** 0.3.7 / October 9, 2001; 16 years ago

**License :** GNU General Public License

**Official website :** [atheos.syllable.org/index.html](http://atheos.syllable.org/index.html)





## Debian 2.2 (Potato)

- ❖ Debian (/ˈdebiən/) is a Unix-like computer operating system that is composed entirely of free software, and packaged by a group of individuals participating in the Debian Project. The Debian Project was first announced on August 16, 1993 by Ian Murdock. Debian 0.01 was released on September 15, 1993, and the first stable release was made in 1996.  
The Debian stable release branch is the most popular Debian edition for personal computers and network servers, and has been used as a base for many other distributions.

## History

Debian was first announced on August 16, 1993, by [Ian Murdock](#), who initially called the system "the Debian Linux Release". The word "Debian" was formed as a [portmanteau](#) of the first name of his then-girlfriend Debra Lynn and his own first name. Before Debian's release, the [Softlanding Linux System](#) (SLS) had been a popular Linux distribution and the basis for [Slackware](#). The perceived poor maintenance and prevalence of [bugs](#) in SLS motivated Murdock to launch a new distribution.

Debian 0.01, released on September 15, 1993, was the first of several internal releases. Version 0.90 was the first public release, providing support through mailing lists hosted at Pixar. The release included the Debian Linux Manifesto, outlining Murdock's view for the new [operating system](#). In it he called for the creation of a distribution to be maintained openly, in the spirit of Linux and GNU.


The Debian project released the 0.9x versions in 1994 and 1995. During this time it was sponsored by the [Free Software Foundation](#) for one year. Ian Murdock delegated the base system, the core packages of Debian, to Bruce Perens and Murdock focused on the management of the growing project. The first ports to non-[IA-32](#) architectures began in 1995, and Debian 1.1 was released in 1996. By that time and thanks to [Ian Jackson](#), the dpkg package manager was already an essential part of Debian.

In 1996, Bruce Perens assumed the project leadership. Perens was a controversial leader, regarded as authoritarian and strongly attached to Debian. He drafted a [social contract](#) and edited suggestions from a month-long discussion into the Debian Social Contract and the Debian Free Software Guidelines. After the FSF withdrew their sponsorship in the midst of the [free software vs. open source debate](#), Perens initiated the creation of the legal [umbrella organization Software in the Public Interest](#) instead of seeking renewed involvement with the FSF. He led the conversion of the project from [a.out](#) to [ELF](#). He created the [BusyBox](#) program to make it possible to run a Debian installer on a single floppy, and wrote a new installer. By the time Debian 1.2 was released, the project had grown to nearly two hundred volunteers. Perens left the project in 1998.

Ian Jackson became the leader in 1998. Debian 2.0 introduced the second official port. During this time the first port to a non-Linux kernel, [Debian GNU/Hurd](#), was started. On December 2, the first Debian Constitution was ratified.

Debian 4.0 Nickname: sarge (im Test)  
Debian 3.0 Nickname: woody (aktuelles Debian, stable)  
Debian 2.2 Nickname: potato  
Debian 2.1 Nickname: slink  
Debian 2.0 Nickname: hamm  
Debian 1.3 Nickname: bo  
Debian 1.2 Nickname: rex  
Debian 1.1 Nickname: buzz





Debian GNU/Linux 2.2 is dedicated to the memory of Joel "Espy" Klecker, a Debian developer, unbeknownst to most of the Debian Project, was bedridden and fighting a disease known as Duchenne Muscular Dystrophy during most of his involvement with Debian. Only now is the Debian Project realizing the extent of his dedication, and the friendship he bestowed upon us. So as a show of appreciation, and in memory of his inspirational life, this release of Debian GNU/Linux is dedicated to him. Debian GNU/Linux 2.2 is available from the Internet or from CD vendors, please see the Distribution page for more information on getting Debian.

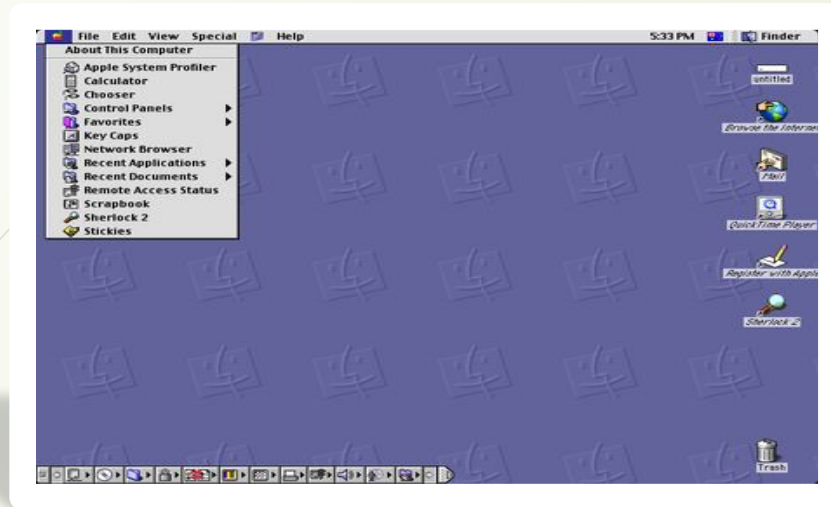
The following architectures are supported in this release:

- Alpha
- ARM
- 32-bit PC (i386)
- Motorola 680x0
- PowerPC
- SPARC



## Mac OS 9

- ❖ Mac OS 9 is the ninth and final major release of Apple's classic Mac OS operating system. Introduced on October 23, 1999, it was promoted by Apple as "The Best Internet Operating System Ever", highlighting Sherlock 2's Internet search capabilities, integration with Apple's free online services known as iTools and improved Open Transport networking. While Mac OS 9 lacks protected memory and full pre-emptive multitasking, lasting improvements include the introduction of an automated Software Update engine and support for multiple users. Apple discontinued development of Mac OS 9 in 2001, transitioning all future development to Mac OS X. The final updates to Mac OS 9 addressed compatibility issues with Mac OS X while running in the Classic Environment and compatibility with Carbon applications. At the 2002 World Wide Developers Conference, Steve Jobs began his keynote address by staging a mock funeral for OS



**Developer :** Apple Computer, Inc.

**OS family :** Macintosh

**Working state :** Historic, not supported

**Source model :** Closed source

**Released to manufacturing :** October 23, 1999; 18 years ago

**Latest release :** 9.2.2 / December 5, 2001; 16 years ago[1]

**Kernel type :** Nanokernel

**License :** Proprietary

**Preceded by :** Mac OS 8

**Succeeded by :** Mac OS X (10.0) , Mac OS X Public Beta

**Official website :** Apple - Products - Mac OS 9 at the Wayback Machine  
(archived November 9, 2000)



## Mac OS 9 and the Classic Environment

PowerPC versions of OS X prior to 10.5 include a compatibility layer (a shell) called Classic, enabling users to run applications and hardware requiring Mac OS 9 from within OS X. This is achieved through running Mac OS 9 without access to Finder inside OS X. This requires Mac OS 9 to be installed on the computer, even if computers that can run the Classic environment are not necessarily able to boot into Mac OS 9. Some Mac OS 9 applications do not run well in Classic. They demonstrate screen redraw problems and lagging performance.

In addition, some drivers and other software which directly interact with the hardware fail to work properly. In May 2002, at Apple's Worldwide Developers Conference in San Jose, California, Steve Jobs, accompanied by a coffin, held a mock funeral to announce that Apple had stopped development of Mac OS 9. Mac OS 9.2.2, released in December 2001, was the final version of Mac OS 9 and the "classic" Mac OS. In June 2005, Jobs announced that the Macintosh platform would be transitioning to Intel x86 microprocessors. Developer documentation of the Rosetta PowerPC emulation layer revealed that applications written for Mac OS 8 or 9 would not run on x86-based Macs. The Classic Environment remains in the PowerPC version of OS X 10.4; however, x86 versions of OS X do not support the Classic environment.

As a workaround for Intel-based Macs, Mac OS 9 can be emulated up to version 9.0.4 by using SheepShaver, a PowerPC emulator. It cannot emulate above 9.0.4 because SheepShaver does not emulate a memory management unit. The PearPC PowerPC emulator does not support Mac OS 9.

## Version history :

Version	Release Date	Changes	Codename	Computer	Price
<a href="#">9.0</a>	<a href="#">October 23, 1999</a>	<ul style="list-style-type: none"> <li>Initial release</li> </ul>	<a href="#">Sonata</a>	<a href="#">iMac G3</a>	<a href="#">99 USD</a>
9.0.2	February 2000 (Shipped with Macs)	<ul style="list-style-type: none"> <li>Bug fixes.</li> </ul>	N/A	PowerBook (FireWire)	Only shipped with referred Macs
9.0.3	March 2000 (Shipped with Macs)			iMac/iMac DV/iMac DV SE	
<a href="#">9.0.4</a>	April 4, 2000	<ul style="list-style-type: none"> <li>Improved USB and FireWire support.</li> <li>Other bug fixes.</li> </ul>	Minuet	iMac G3 (slot loading)	Free Update
<a href="#">9.1</a>	January 9, 2001	<ul style="list-style-type: none"> <li>Integrated Disc Burning within Finder.</li> <li>Implementation of Finder 'Window' menu.</li> <li>Improved stability.</li> </ul>	Fortissimo	iBook 14 inch and 12 inch	
9.2	June 18, 2001 (Shipped with Macs)	<ul style="list-style-type: none"> <li>G3 processor as minimum system requirement.</li> <li>Improved speed and Classic Environment support.</li> </ul>	Moonlight	Power Mac G4 (QuickSilver)	Only shipped with referred Macs
9.2.1	August 21, 2001	<ul style="list-style-type: none"> <li>Minor bug fixes.</li> </ul>	Limelight	iBook (Late 2001), PowerBook G4 (Gigabit Ethernet)	Free Update
9.2.2	December 5, 2001	<ul style="list-style-type: none"> <li>Bug fixes relating to Classic Environment.</li> </ul>	LU1	eMac	





## Mac OS X Public Beta

- ❖ The Mac OS X Public Beta (internally code named "Kodiak") was the first publicly available version of Apple Computer's Mac OS X (now named macOS) operating system to feature the Aqua user interface. It was released to the public on September 13, 2000 for US\$29.95. Its release was significant as the first publicly-available evidence of Apple's ability to ship the long-awaited "next-generation Mac operating system" after the Copland and Rhapsody failures. It allowed software developers and early adopters to test a preview of the upcoming operating system and develop software for the forthcoming operating system before its final release.

**Developer :** Apple Computer  
**OS family :** MacintoshUnix-like  
**Working state :** Historic, not supported  
**Released to manufacturing :** September 13, 2000  
**Kernel type :** Hybrid (XNU)  
**Preceded by :** Mac OS 9  
**Succeeded by :** Mac OS X 10.0 Cheetah  
**Official website :** Apple - Mac OS X at the Wayback Machine  
(archived November 9, 2000)





## Successor OS

The Public Beta succeeded Mac OS X Server 1.0, the first public release of Apple's new NeXT OpenStep-based operating system, which used a variant of the classic Mac OS's "Platinum" user interface look and feel. The Public Beta introduced the Aqua user interface to the world. Fundamental user interface changes were revealed with respect to fonts, the Dock, the menu bar .

## Technical changes

The Kodiak's arrival marked some fundamental technical changes, most courtesy of an open source Darwin 1.2.1 core, including two features that Mac users and developers had been anticipating for almost a decade: preemptive multitasking and protected memory. To illustrate the benefits of the latter, at the MacWorld Expo in June 2000, Apple CEO Steve Jobs demonstrated Bomb.app, a test application intended to crash.

## Native software

The Public Beta included many of the standard programs bundled with macOS today, such as TextEdit, Preview, Mail, Quicktime Player and Terminal. Also included with the Public Beta, but not in any subsequent versions of Mac OS X, were a simple MP3 player (iTunes had not yet been introduced), Sketch, a basic vector drawing program demonstrating features of Quartz, and HTMLEdit, a WYSIWYG HTML editor inherited from WebObjects.

## Expiration

Mac OS X Public Beta expired on May 14, 2001. It will not run on later PowerPC-based Macintosh computers, nor on current Macintosh hardware, which uses the x86 processor architecture. Using the Mac OS X Public Beta on compatible equipment today requires setting the hardware clock to a date prior to the expiration date.

The expiration date forced users to purchase a copy of the final release rather than continuing to use the Public Beta. Owners of the Public Beta version were entitled to a \$30 discount on the price of the first full version of Mac OS X 10.0 .



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**Thank you for your attention !!!**