

Tails (operating system)

Tails, or "**The Amnesic Incognito Live System**", is a [security-focused Debian-based Linux distribution](#) aimed at preserving [privacy](#) and [anonymity](#) against [surveillance](#).^[5] It connects to the [Internet](#) exclusively through the anonymity [alt-network Tor](#).^[6] The system is designed to be [booted](#) as a [live DVD](#) or [live USB](#) and never writes to the [hard drive](#) or [SSD](#), leaving no [digital footprint](#) on the machine unless explicitly told to do so. It can also be run as a [virtual machine](#), with some additional security risks.^[7]

The [Tor Project](#) provided financial support for Tails' development in the beginnings of the project,^[8] and continues to do so alongside numerous corporate and anonymous sponsors.

History

Tails was first released on June 23, 2009. It is the next iteration of development on [Incognito](#), a discontinued [Gentoo-based Linux distribution](#).^[9] The original project was called Amnesia. The operating system was born when Amnesia was merged with Incognito.^[10] The Tor Project provided financial support for its development in the beginnings of the project.^[8] Tails also received funding from the [Open Technology Fund](#), [Mozilla](#), and the [Freedom of the Press Foundation](#).^[11]

[Laura Poitras](#), [Glenn Greenwald](#), [Bruce Schneier](#) and [Barton Gellman](#) have each said that Tails was an important tool they used in their work with [National Security Agency](#) whistleblower [Edward Snowden](#).^{[10][12][13][14]}

From release 3.0, in 2017, Tails requires a [64-bit processor](#) to run.^[15]

In 2023, the Tails Project approached the Tor Project to merge operations. The merger was completed on September 26, 2024, stating that, "By joining forces, the Tails team can now focus on their core mission of maintaining and improving Tails OS, exploring more and complementary use cases while benefiting from the larger organizational structure of The Tor Project."^{[16][17]}

Features

Tails's [pre-installed desktop environment](#) is [GNOME](#). The system includes essential software for functions such as reading and editing documents, image editing, video watching and printing. Other software from Debian can be installed at the user's behest.^{[18][19]} Despite being [open-source](#), Tails contains non-free [firmware blobs](#).^[20]

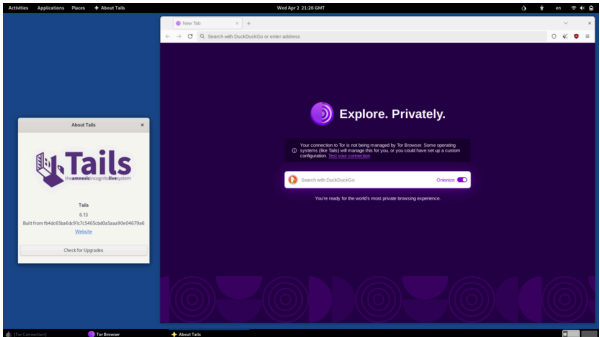
Tails includes a unique variety of software that handles the encryption of files and internet transmissions, [cryptographic signing](#) and [hashing](#), [Electrum Bitcoin Wallet](#), [Aircrack-ng](#) and other functions important to security. It is pre-configured to use [Tor](#) with multiple connection options. It tries to force all connections to use Tor and blocks connection attempts outside Tor. For networking, it features a modified version of [Tor Browser](#) with the inclusion of [uBlock Origin](#),^[21] instant messaging, email, file transmission and monitoring local network connections for security.^[19]

By design, Tails is "amnesic". It runs in the computer's [random access memory](#) (RAM) and does not write to a hard drive or other storage medium. The user may choose to keep files, applications or some settings on their Tails drive in "Persistent Storage". Though the Persistent Storage is [encrypted](#) by default, it is not hidden and easily detectable by forensic analysis.^[22] While shutting down, Tails [overwrites](#) most of the used RAM to avoid a [cold boot attack](#).^[23]

Hardware support

Tails is based on [Linux](#). Linux generally supports a wide range of hardware, including many older devices, due to standardized drivers. Yet, users may still face problems trying to use certain hardware with the system due to non-standardization or other issues (such as with graphics, Wi-Fi and Bluetooth or decreased security).^{[24][25]}

Using an [AMD GPU](#) with fully open source official [amdgpu driver](#) support should in theory and

Tails	
	
	
Tails 6.1 Desktop, with Tor Browser open.	
Developer	The Tails Project
OS family	Linux (Unix-like)
Working state	Active
Source model	Open source
Initial release	June 23, 2009
Latest release	7.0 ^[1]  / 18 September 2025
Repository	gitlab.tails.boum.org/tails/tails (https://gitlab.tails.boum.org/tails/tails)
Marketing target	Personal computers
Available in	33 languages
Update method	Tails Upgrader ^[2]
Package manager	APT (front-end), dpkg
Supported platforms	x86-64 ^[3]

technically give the users a better experience and possibly better security when compared to [Nvidia](#) whose Linux drivers are known to be subpar from the get-go and are in fact not included in Tails for being [proprietary](#) and [closed source](#), they are switched for [nouveau](#) which is indeed [open source](#) but known to be much less stable and not official or endorsed by Nvidia in any way.^[26]

Kernel type	Monolithic
Userland	GNU
Default user interface	GNOME 43
License	GNU GPLv3 ^[4]
Preceded by	Incognito
Official website	tails.net (https://tails.net/)

Security incidents

In 2014, [Das Erste](#) reported that the US [National Security Agency](#) (NSA)'s [XKeyscore](#) surveillance system sets threat definitions for people who search for Tails using a search engine or visit the Tails website. A comment in XKeyscore's source code calls Tails "a [comsec](#) mechanism advocated by [extremists](#) on extremist forums".^{[27][28]}

In the same year, [Der Spiegel](#) published slides from an internal NSA presentation dating to June 2012, in which the NSA deemed Tails on its own as a "major threat" to its mission and in conjunction with other privacy tools as "catastrophic".^{[29][30]}

In 2017, the US [Federal Bureau of Investigation](#) (FBI) used malicious code developed by [Facebook](#), identifying sexual extortionist and Tails user [Buster Hernandez](#) through a [zero-day vulnerability](#) in the system's default video player, [GNOME Videos](#). The exploit was never explained to or discovered by the Tails developers, but it is believed that the vulnerability was patched in a later release of Tails. Hernandez had eluded authorities for a long time; the FBI and Facebook had searched for him with no success, and resorted to developing the custom hacking tool. He was arrested in 2017, and in 2021 he was sentenced to 75 years in prison.^[31]

See also

- [Crypto-anarchism](#)
- [Computer and network surveillance](#)
- [Dark web](#)
- [Deep web](#)
- [Freedom of information](#)
- [GlobaLeaks](#)
- [GNU Privacy Guard](#)
- [I2P](#)
- [Internet censorship](#)
- [Kali Linux](#)
- [Linux](#)
- [Mass surveillance](#)

- [Off-the-record messaging](#)
- [Parrot OS](#)
- [Proxy server](#)
- [Signal](#)
- [Tor2web](#)
- [Whonix](#)

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External links

- Official website (<https://tails.net>) 
- Tails (<https://distrowatch.com/table.php?distribution=tails>) at DistroWatch
- Tails OS USB – Schweiz (tailsusb.ch) (<https://tailsusb.ch>)

Portals:



Anarchism



Free and open-source software



Freedom of speech



Linux