**OPEN SOURCE OPERATING SYSTEM**

**What is an Open-Source Operating System?**

The term **"open source"** refers to computer software or applications where the owners or copyright holders enable the users or third parties to use, see, and edit the product's source code. The source code of an open-source OS is publicly visible and editable.

The open-source operating system allows the use of code that is freely distributed and available to anyone and for commercial purposes. Being an open-source application or program, the program source code of an open-source OS is available. The user may modify or change those codes and develop new applications according to the user requirement.

Some basic examples of the open-source operating systems are

**Linux, Open Solaris, Free RTOS, Open BDS, Free BSD, Minix,** etc.

## How does Open-Source Operating System work?

It works similarly to a closed operating system, except that the user may modify the source code of the program or application. There may be a difference in function even if there is no difference in performance.

For instance, the information is packed and stored in a proprietary (closed) operating system. In open-source, the same thing happens. However, because the source code is visible to you, you may better understand the process and change how data is processed.

Best Open-Source Operating System

Most of the open-source operating systems are Linux based. Some of the best open-source operating systems are as follows:

1. Linux Kernel

Linux kernel was developed by Linus Torvalds. It offers the essential functions required for an operating system, such as data cancellation, memory processing, and interactions with computer hardware. It is open-source software, and many developers researched the source code and produced a plethora of helpful plug-ins and operating systems to meet their requirements.

### 2. Linux Lite

Linux Lite is another free and open-source operating system that can run on lower-end hardware. It is a lightweight operating system designed to help users who are unfamiliar with Linux-based operating systems. The operating system includes all of the required programs, capabilities, tools, and desktops. It has a minimal interface and is entirely based on the Ubuntu system. In the last five years, the operating system has been stable and has received regular updates. It is efficiently functional soon after installation. After installation, users are not required to install any further drivers. If you want a lightweight open-source operating system on your PC, go with Linux Lite.

### 3. Linux mint

Linux Mint is a powerful Linux-based operating system that exudes modernity and power. It is simple to use and includes complete multimedia capabilities, making it a user-friendly open-source operating system. It is an Ubuntu-based distribution that is popular among both beginners and experts. It is built on the Debian platform and includes one of the most powerful software managers. It is more stable and has better visual aesthetics than Ubuntu.

### 4. Fedora

Fedora is another popular Linux-based operating system, and it is widely considered the best open-source operating system after Ubuntu. It is an RPM-based general-purpose operating system that is supported by Red Hat and built by the Fedora Project community. Its purpose is to develop and share cutting-edge open-source technology for free. As a result, Fedora developers prefer to make upstream improvements rather than create fixes specifically for Fedora. Fedora developers' updates are available to all Linux distributions.

It has a GNOME-based desktop that may be customized. Fedora comes with a customizable GNOME-based desktop. Its Fedora Spins feature allows you to customize and run several user interfaces and desktop environments.

### React OS

ReactOS is another free and open-source operating system that has nearly 1 million downloads in over **100** countries. This community-based OS may run Windows apps, making it an excellent alternative to the Windows operating system. Although ReactOS is still growing, users, who love highly customizable operating systems, can select ReactOS. However, the operating system is developer-focused.

Chrome OS

Chrome OS is a partly open-source operating system with various attractive features. It's a part of the Chromium and Linux families, with features including better security, compatibility for supported Android and Chrome apps, Aura windows manager, Google cloud print, integrated media player, virtual desktop access, and cloud-based management.