



Most Linux distros are available as a “live” version that lets you run Linux from a disk – so you can try it out without installing Linux onto your hard drive.

# Choosing a Distro

At the very heart of Linux is a bunch of tried-and-tested compiled code called the “kernel”. The kernel provides the operating system with its core functionality, much like the engine in a car. It takes care of the basics, such as helping other programs access hardware and sharing your computer’s processor among various programs.

In addition to the kernel, Linux contains a number of system-level programs, such as the services to handle your email, web connection and bootloader. Consider these as a car’s transmission, gears, and chassis – without these, the engine is not much use.

Linux distributions generally also include a large number of user-level programs – the applications for daily use: for instance, web browsers, word processors, text editors, graphics editors, media players, and so on. These are the finishing touches to the car that ensure a great ride – whitewall tires and soft leather upholstery.

All of these components are bundled together in a wide variety of Linux distribution packages, commonly referred to as “distros” – just as all the components of a car are bundled together to make a complete car.

In the same way that there are many makes and models of cars, there are many Linux distros to choose from. Some of the best known distros are RedHat Fedora, SUSE, Ubuntu, and Mint. Each distro has its own installer and unique default configuration according to what the distributor considers to be the best arrangement. The ideal one for you will depend on your own personal preferences and how you want to use Linux. The most popular distros are described below to help you choose:

## RedHat Fedora

One of the most publicized Linux distros, comprising the commercial RedHat Enterprise Linux product line and the free Fedora distro that is developed by the Fedora Project community. There are several editions of the Fedora distro – “Workstation” for PCs, “Server” for servers, and “Atomic” for cloud computing.

**Pros:** Widely used, excellent community support, innovative.

**Cons:** Limited product life-span of Fedora editions, poor multimedia support.

Free download from [getfedora.org](http://getfedora.org)



“Choose Freedom.  
Choose Fedora.”

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## Novell SUSE

The community-based “openSUSE” distro, sponsored by Novell, is another distro with desktop focus that has received positive reviews for its installer and YaST configuration tools. The documentation, which comes with the boxed product, has been labeled as the most complete, thorough and usable by far. This distro provides the base for Novell’s award-winning SUSE Linux Enterprise products.

**Pros:** Attention to detail, easy-to-use YaST configuration tools.

**Cons:** Huge distro – including over 1,500 bundled packages.

Free download from [opensuse.org](http://opensuse.org)

## Ubuntu

This sophisticated community distro typically employs the popular Gnome GUI desktop manager. It has the advantage of a fixed six-month release cycle, and every two years there is an LTS (Long Term Support) release that is supported for five years.

There are several editions of the Ubuntu distro – “Desktop” for PCs, “Server” for servers, and “Core” for IoT (Internet of Things) devices. The default interface of the Ubuntu Desktop edition is quite different to that of the Windows desktop.

**Pros:** Great community, and fixed release cycle.

**Cons:** The interface will seem unfamiliar to Windows users.

Free download from [ubuntu.com](http://ubuntu.com)

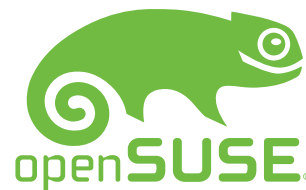
## Linux Mint

A modern, elegant operating system that is easy to use. It is based on the Ubuntu operating system and works straight out of the box, with full multimedia support. All Linux Mint distros are LTS releases that appear shortly after each Ubuntu LTS release, and are supported for five years. Users are encouraged to send feedback so their ideas can be used to improve Linux Mint. This operating system typically employs the Cinnamon GUI desktop manager, which will feel familiar to those moving from the Windows operating system. For that reason, Mint is used throughout this book to demonstrate the features of a Linux operating system.

**Pros:** Great community, and the interface will seem familiar to Windows users – the best distro for beginners.

**Cons:** Ubuntu has a larger community of users.

Free download from [linuxmint.com](http://linuxmint.com)



“The makers’ choice for sysadmins, developers and desktop users.”



“Fast, secure and simple, Ubuntu powers millions of PCs worldwide.”



“Linux Mint. From freedom came elegance”.