

Types of Software based on Their Distribution:

Freeware:

- Loosely defined as a type of proprietary software, that it's being distributed at no cost whatsoever for the user, freeware is the answer to accomplishing very simple tasks without the need of investing in expensive, license-based software.
- Freeware software has no EULA, license, or rights of any kind, which means that it can be deployed on both home and enterprise machines.
- These softwares *do not provide any freedom of modifying, sharing and studying the program* as in open source software. Freeware is *closed source*.
- The term was coined in the golden 80s by Andrew Fluegelman, who sought means of making PC-Talk (Skype's long-forgotten ancestors) available outside regular distribution channels.
- The key differentiator between freeware, shareware, and open-source is that freeware does not make its source code available, despite being free of charge.

A couple of freeware examples:

Discord (IM used by the gaming community),
Yahoo Messenger
µTorrent,
IrfanView,
Groove Music,
Winamp,
DVD Shrink,
CCleaner,
Adobe PDF
Google Talk
MSN messenger

Freeware pros:

- Easy to use and deploy (for home users and enterprises\SMBs).
- A great way to incentivize your potential customers (for soft makers and marketers gunning for paid licenses).
- Solve daily tasks without having to invest in expensive software.
- Quickly grow your user base.

Freeware cons:

- Limited functionality.
- No way of reverse-engineering it since the source code is not made available.
- Customers may sometimes perceive the product as inferior.

Shareware

- Probably most of the apps found online and offline fall under this category. Shareware is so widespread that it 'felt' the need to have its own consortium.
- Called the Association of Shareware Professionals or ASP, for short, this international trading and trade organization comprises over 1,500 vendors, authors, and online retailers.
- Shareware software is a software that are *freely distributed to users on trial basis*.
- There is a *time limit* inbuilt in the software (for example- free for 30 days or 2 months).
- As the time limit gets over, it will be deactivated.
- To use it after time limit, you have to pay for the software.
- Once that time has elapsed, if the user wishes to continue using the software they must purchase an un-blocking code.

- The limitations do not always involve time, but sometimes also functionalities (eg the number of invoices issued in the case of accounting software).
- In some cases, the user can also decide not to purchase the code.
- They must however be prepared to accept numerous functional limitations or the presence of watermarks on saved files.

Users prefer shareware because of following reasons –

- Available free of cost
- helps to know about the product before buying it

Some examples of freeware software are –

- Adobe acrobat 8 professional
- PHP Debugger 2.1.3.3
- Winzip
- Getright

Shareware is an umbrella term, encompassing various types of apps, each following a unique business model.

Types of shareware

1. Adware

- Also called “advertising-supported software”, this type of shareware has embedded ads running alongside the apps.
- The purpose of adware is to generate revenue for its creator.
- Ads may be present during the installation process or as part of the user interface.
- Most are ‘hardwired’ to analyze the users’ traffic in order to display customized ads.
- Adware is free-to-use, but the sheer number of ads can interfere with normal operation.
- A large number of apps currently available on Google Play are adware.

2. Crippleware

- It may sound like a new form of malware, but it’s actually a legit type of software.
- Why is it called “Crippleware”? Because the author purposely “cripples” the app’s vital functions, making them available in the paid or premium version.
- For instance, if you have photo-editing apps, the download as jpeg function may be disabled or the photos may have watermarks that can be removed by upgrading to full.

3. Trialware

- Trialware apps can be used for a limited period.
- In most cases, users will be granted access to all of the app’s functions (including the ones available in the paid version).
- However, once the trial period expires, the app will be disabled or revert to a very basic (and very unusable version).
- From my experience, trialware that doesn’t cover vital system processes (i.e. antivirus or malware-scanner), will simply stop working.
- They will, of course, display a splash screen meant to inform the user that the software has expired and that he must upgrade to full.

4. Donationware

- The software grants the user access to all of its features.
- However, it does come with one small request: the user is asked to shell out a small amount of cash to support the project or just show appreciation for the author’s work.

- The payout part is optional, having no bearing of the app's functionality.
- Given its behavior, one could consider that donationware has more in common with freeware than with shareware.

5. Nagware

- Pejorative in nature, the term “nagware” describes a software category that reminds users via on-screen messages that their licenses are about to expire and that they should upgrade to the full version.
- In most cases, the nags will continue well after the trial period is over.
- The functionality will be reduced, the user having access only to basic functions.

6. Freemium

- A portmanteau term (“free” + “premium”) describing a type of software that ‘withholds’ advanced features, making them available in the premium version.
- The free version is fully functional.
- Nags are rare, but users might receive ads from time to time regarding the advantages of the premium versions.

Shareware pros:

- Free to use.
- Powerful feature. Great for getting a one-time task done.
- Donationware is just as good as any license-based application.
- Diversity and abundance.
- Most of them are cross-platformers.

Shareware cons:

- Some legal issues may arise if deployed on enterprise machines.
- Poor compatibility with newer operating systems.
- Ads and nags can become annoying.
- Shareware doesn't benefit from regular security and functionality updates as licensed software.
- One last thing to mention – neither freeware nor shareware authors don't make the software code available for studying or altering.
- Which brings us to the third software category: open-source.

Open-Source:

- Open-source software or OSS is a type of software in which the author releases the source code. Furthermore, as far as the copyright is concerned, whoever holds the software's license can distribute, study or alter the source code.
- Enterprises would often turn to open-source solutions since they're much easier to customize compared to licensed software.
- An Open source software can *either be free of cost or chargeable*.

Users prefer open source software because of following reasons-

- More control over the software
- More secure
- Stable
- High quality results
- Helps in becoming a better programmer as you can learn and develop from the source code to make new softwares.
- Free and cheaper compared to (paid) license-based products.
- Modable, reliable, and easy to use.
- Safer from a cybersecurity standpoint compared to free and even some license-based products.

- Very flexible. It can be used beyond its intended purpose (you're going to need a talented backend hand for that).

Open-source software cons:

- It can incur some long-term (and unforeseeable) costs. Any issues that arise have to be dealt with by yourself or your dev team. This usually happens when the software has been outstretched or altered more than necessary. Doing in-house patching and/or repair points to another con: no support for the product. So, if something goes wrong, you're on your own.
- Less-than-friendly UI. It will also take you a while to learn the product.

Examples of open source software are –

- Apache HTTP web server
- VLC Player
- Mozilla's Firefox web browser
- Thunderbird email client
- GNU (General Public License) compiler collection, like LINUX
- Moodle
- OpenOffice
- PHP
- perl
- OpenCart (online shopping platform),
- SuiteCRM (useful for managing customer info),
- Helpy (self-service support),
- Mailman (management tool for email lists),
- WordPress (blogging),
- Daawarpper (data visualization),
- Gimp (powerful image editor),
- LibreOffice (perfect and free alternative to Microsoft Office), and the list goes on.

Proprietary Software

Proprietary software refers to the software which is owned by an individual or a company. There are restrictions on its distribution and use. It is also sometimes known as closed-source or commercial software.

Some of the advantages associated with proprietary software are –

- Stability – Its releases are stable throughout and the software does not crash easily.
- Reliable – It can be relied upon during handling of critical processes.
- Uniqueness – It is unique in nature and does not have much alternatives.
- Compatibility – It is compatible with many Operating systems.

Some of its disadvantages are –

- It is costly in nature.
- Source code is not accessible for modification.
- Redistribution is forbidden.

Examples of Proprietary Software –

- MacOS
- Microsoft Windows Professional Edition
- Adobe Suite