

Open source, shareware, and other free software

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Please let me know of outdated links, errors, suggestions, and comments

As a creative CAD professional I know as well as anyone that software companies lock us into upgrade cycles by any means they can. This obsolescence-based marketing model doesn't encourage code writers to improve simplicity, stability, and speed (something that users would really appreciate). It does however encourage the rush development of marketing based features regardless of their actual value to users. Open source software by contrast costs nothing, works well, and (being written by volunteers) isn't driven by a financial incentive. As a result speed and stability are impressive, hardware requirements are minimal, and features are determined by users' feedback to the development community rather than marketing decisions.

Open source will never replace for-profit software unless this world suddenly becomes a good and perfect place, but even as things are it offers more than most people realize. Try some yourself: open your sources.

One more thing: a great deal of web-based applications are now available, usually in free and for-purchase options. These come and go by the month, and it would be impossible to keep track of them so I'm not going to try. Everything here is an old school downloadable desktop application.

A few definitions:

OS – open source, meaning the code is available for inspection and revision. No cost to the user, may be a manual or help pages on the web site, generally help is provided by user forums.

SW – shareware, meaning the code is proprietary and copyright, but usage of the program is free. Small donations to the developer are encouraged and may unlock additional features.

FS – free software produced for commercial purposes, generally a file reader, viewer, or player. May have limited productivity features with additional features available for purchase.

Win/Mac/Linux – operating systems for which the software is available.

I favor open source software compiled for all three major platforms as it is more likely to be written and maintained by idealistic and knowledgeable enthusiasts. The best website that I know for further open source software is www.sourceforge.net. There is a comprehensive list of free and open source software at http://en.wikipedia.org/wiki/List_of_free_software_packages. There is also a good introduction to free software at <http://fieldguide.gizmodo.com/the-best-free-alternatives-to-expensive-software-1789052889>.

Operating systems

Linux – www.ubuntu.com – I find Ubuntu the most versatile and best documented flavor of Linux, though if you get seriously into open source operating systems another version may suit your needs better. The current Ubuntu looks like a better designed version of Windows and runs fast on old machines; I use it regularly to show videos in trade shows and bring old machines back to life for additional workstations in the studio. You can create a “dual boot” system on a computer

with enough disc space and choose which operating system to run on startup. Beginners to Linux might want to contact a local users' group for advice and tuition.

Linux Mint – <http://www.linuxmint.com> – supposedly the most user-friendly version of Linux, and particularly easy to download and install additional software.

VirtualBox (OS: Win/Mac/Linux) – www.virtualbox.org – is a virtualization product free for home use that allows you to run programs written for Windows, Mac, or Linux on any other operating system. ComputerWorld has a review of it at <http://bit.ly/d8dA2j>. Mainly useful if there are some Windows programs you absolutely have to run on Mac or Linux and you don't want to purchase them – even if available for that OS – a second time.

Communication

LibreOffice – (OS: Win/Mac/Linux) - <http://www.documentfoundation.org> – virtually a clone of Microsoft Office from a few years back (before the Ribbon interface appeared) but LibreOffice is entirely free, written and maintained by former leading members of the OpenOffice team. OpenOffice reads and saves all current MS Office formats including Word, Excel, and PowerPoint, though its PowerPoint replacement is minimally featured. I use LibreOffice these days rather than buying more copies of the overpriced and overfeatured Office.

jEdit (SW: Win/Mac/Linux) – www.jedit.org – programmer's text editor, very customizable and powerful. I use this for Google Earth animation and tour development.

Chrome (FS: Win/Mac/Linux) – www.google.com/chrome - fast, powerful browser from Google. If you don't like ads disfiguring web pages, download and install the Adblock Plus extension from www.adblockplus.org/en.

FileZilla (OS: Win/Mac/Linux) – www.filezilla-project.org – excellent FTP client. This allows you to upload and download files from a server directory that you have access to.

Creativity: 3D

Blender (OS: Win/Mac/Linux) – www.blender.org – the leading open source modeling, rendering, and animation software. Good documentation, but as with any animation software quite a steep learning curve

123D – (FS: Win only) – www.123dapp.com – a series of free applications for 3D modeling from Autodesk, the makers of AutoCAD.

SketchUp (FS: Win/Mac) – <http://www.sketchup.com/> – free modeling and rendering software from Trimble; formerly owned by Google. It still has good integration with Google Earth.

Unity3D – (FS: Win/Mac) – www.unity3d.com – leading interactive game/presentation development software. The base version is free and works well with Blender. A Linux version is reportedly under development.

Creativity: 2D

GIMP (OS: Win/Mac/Linux) – www.gimp.org – as good as Photoshop was a few years ago. Widely used, well documented, highly recommended image manipulation program. The interface is very different to Photoshop, however; download the Gimphoto and Gimpad plugins from www.gimphoto.com to create something closer to an interface clone.

Inkscape (OS: Win/Mac/Linux) – <http://inkscape.org> is the leading open source vector graphics editor, similar to Illustrator.

FontForge – (OS: Win/Mac/Linux) – <http://fontforge.sourceforge.net> - an outline font editor that lets you create your own Postscript, TrueType, or OpenType fonts. Includes conversion utilities.

CamStudio – (OS: Win) – <http://camstudio.org> – a screen recording app to create demonstration videos in AVI or SWF format.

Scribus – (OS: Win/Mac/Linux) – www.scribus.net – page layout software comparable to InDesign; can output CMYK color separations and PDF files.

Audacity (OS: Win/Mac/Linux) – www.audacity.sourceforge.net – versatile, well featured audio editor.

KompoZer – (OS: Win/Mac/Linux) – www.kompozer.net – web page file management and WYSIWYG web page editing.

Video editing

Blender, as mentioned above, includes a very competent video editing module, though it is not the most intuitive to use. I introduce some of its features in a twenty minute tutorial at <https://youtu.be/W11W-OZ8e5s>.

Lightworks (OS: Win/Mac/Linux) is a professional video editor with a limited free version. You can find it at <https://www.lwks.com/>.

VideoPad (OS: Win only) is a drag and drop video editor with basic feature. This has a free version for non-commercial use at <http://www.nchsoftware.com/videopad/>.

Audio editing

LMMS (OS: Win/Mac/Linux - <https://lmms.io/>) is an open source, fully featured audio editor.

Audacity (OS: Win/Mac/Linux - <http://www.audacityteam.org/>) is a track-based open source editor, and the one I use myself.

Video players

VLC Player (OS: Win/Mac/Linux) – www.videolan.org/vlc - widely used, versatile multimedia player and converter. I used to also recommend Apple's QuickTime, but this is no longer maintained for Windows and has become a security risk.

File viewers

Irfanview (SW: Win) – www.irfanview.com – unbeatable image viewer/image adjustment program. The default in Studio Cruz for five years, it also runs slide shows and video presentations. Unfortunately only available for Windows.

Acrobat Reader (FS: Win/Mac/Linux) – <http://get.adobe.com/reader/> - reads and runs Acrobat files; can also present PDFs full screen (using Control-L in Windows).

Rhinoceros trial version – (FS: Win) – www.rhino3d.com/download.htm – the trial version of Rhinoceros allows 25 saves, but unlimited importing, viewing, and manipulation of every major 3D format. Again Windows only (though it is being ported to Mac, with info at <http://mac.rhino3d.com/>, and there is a campaign to persuade McNeel to port it to Linux).

DVD ripping

Handbrake (OS: Win/Mac/Linux) – www.handbrake.fr – straightforward DVD ripper. Though its use in the US is technically illegal under the Digital Millennium Copyright Act, this French program gives US DVD owners the ability to backup their property to an electronic format, as is allowed for music CDs in the US, and both CDs and DVDs in other parts of the world. DVDs can be saved via Handbrake as MP4 or MKV video files, either compact enough to fit on a data CD or uncompressed. DVD chapters can be saved in the MP4 format.

Utilities

7-Zip (OS: Win/Linux) - <http://www.7-zip.org> – file archiver/compressor with high compression. Offers conventional Zip and Tar packing as well as its own 7z format, unpacks pretty much everything. Linux version is command line only.

TeamViewer (OS: Win/Linux) allow two people in separate locations to share a desktop, such as for example in a troubleshooting or creatively collaborative situation. That's at <https://www.teamviewer.com/en/>. It is a commercial product with a free version for personal use.