Just so that you know, we use cookies on our website.
Want to know more? Click here (https://itsfoss.com/privacy-policy/).

It's FOSS

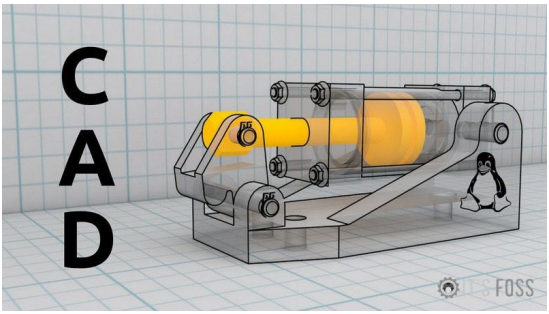
Best CAD Software Available for Linux

Last updated January 20, 2020 By Aquil Roshan (https://itsfoss.com/author/aquil/)

Computer Aided Design (CAD) (https://en.wikipedia.org/wiki/Computer-aided_design) is an essential part of many streams of engineering. CAD is professionally used in architecture, auto parts design, space shuttle research, aeronautics, bridge construction, interior design, and even clothing and jewelry.

A number of professional-grade CAD software like SolidWorks and Autodesk AutoCAD are not natively supported on the Linux platform. So today we will be having a look at the top CAD software available for Linux. Let's dive right in.

Best CAD Software available for Linux



Just so that you know, we use cookies on our website.
Want to know more? Click here (https://itsfoss.com/privacy-policy/).

Non-FOSS alert!

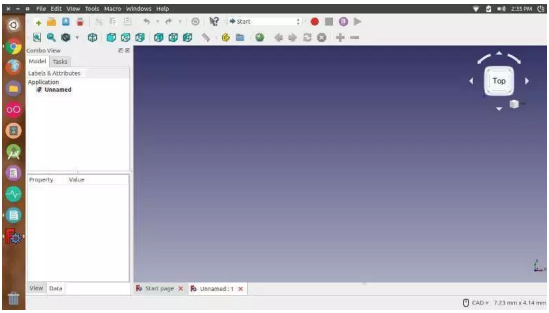
Before you see the list of CAD software for Linux, you should keep one thing in mind that not all the applications listed here are open source and free. We included some non-FOSS CAD software to help average Linux users. The non open source software has been duly indicated.

Installation instructions of Ubuntu-based Linux distributions have been provided. You may check the respective websites to learn the installation procedure for other distributions.

The list is not any specific order. CAD application at number one should not be considered better than the one at number three and so on.

1. FreeCAD

For 3D Modelling, FreeCAD is an excellent option that is both free (beer and speech) and open source. FreeCAD is built with keeping mechanical engineering and product design as target purposes. FreeCAD is multiplatform and is available on Windows, Mac OS X+ along with Linux.



Although FreeCAD has been the choice of many Linux users, it should be noted that FreeCAD is not a full-fledged solution. However, it is good to know that it is being actively developed and you can find the latest releases on GitHub

(https://github.com/FreeCAD/FreeCAD/releases) as well.

Just so that you know, we use cookies on our website.
Want to know more? Click here (https://itsfoss.com/privacy-policy/).

FreeCAD (https://www.freecadweb.org/)

FreeCAD does not focus on direct 2D drawings and animation of organic shapes but it's great for design related to mechanical engineering. FreeCAD version 0.15 is available in the Ubuntu repositories.

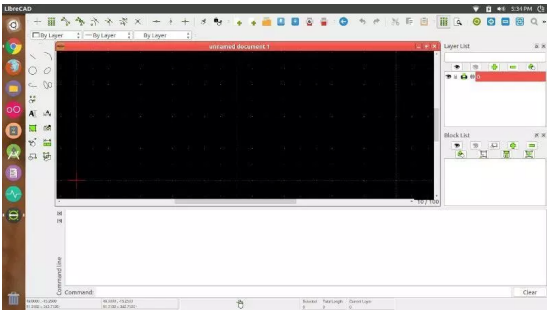
So, you can directly get it installed from your software center. If you do not find it there, you can install it by running the following command:

```
sudo apt install freecad
```

To get newer daily builds (0.19 at the moment), simply head to the GitHub releases (https://github.com/FreeCAD/FreeCAD/releases)page to download them.

2. LibreCAD

LibreCAD is a free, opensource, 2D CAD solution. Generally, CAD tends to be a resource-intensive task, and if you have rather modest hardware, then I'd suggest you go for LibreCAD as it is really lightweight in terms of resource usage. LibreCAD is a great candidate for geometric constructions.



Just so that you know, we use cookies on our website.
Want to know more? Click here (https://itsfoss.com/privacy-policy/).

As a 2D tool, LibreCAD is good but it cannot work on 3D models and renderings. It might be unstable at times but it has a dependable autosave that won't let your work go wasted.

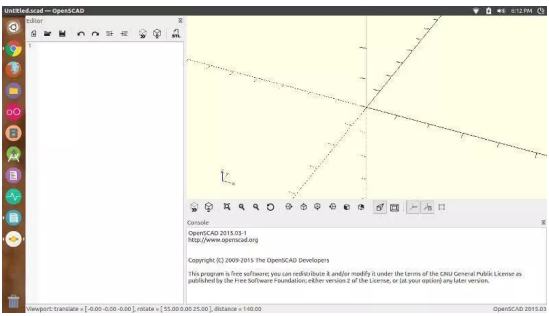
LibreCAD (https://librecad.org/)

You can install LibreCAD by running the following command

```
sudo apt install librecad
```

3. OpenSCAD

OpenSCAD is a free 3D CAD software. OpenSCAD is very lightweight and flexible. OpenSCAD is not interactive. You need to 'program' the model and OpenSCAD interprets that code to render a visual model. It is a compiler in a sense. You cannot draw the model. You describe the model.



OpenSCAD is the most complicated tool on this list but once you get to know it, it provides an enjoyable work experience.

OpenSCAD (https://www.openscad.org/)

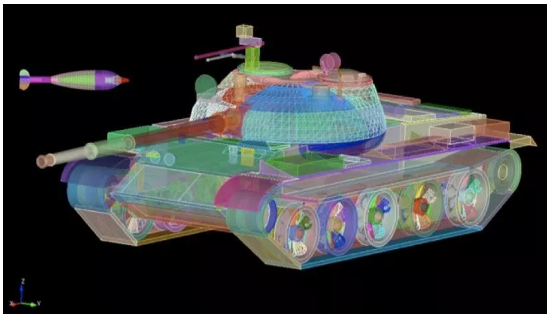
You can use the following commands to install OpenSCAD.

Just so that you know, we use cookies on our website.
Want to know more? Click here (https://itsfoss.com/privacy-policy/).

```
sudo apt-get install openscad
```

4. BRL-CAD

BRL-CAD is one of the oldest CAD tools out there. It also has been loved by Linux/UNIX users as it aligns itself with *nix philosophies of modularity and freedom.



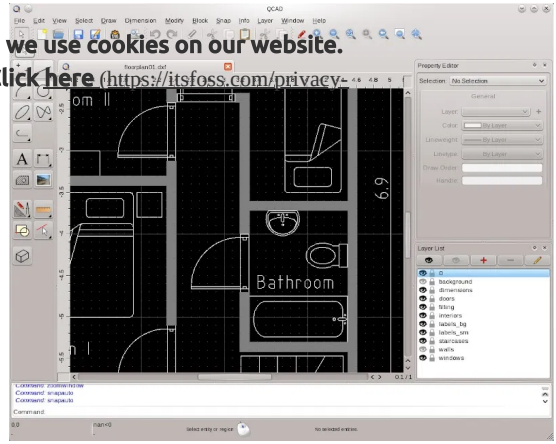
BRL-CAD rendering by Sean

BRL-CAD was started in 1979, and it is still developed actively. Now, BRL-CAD is not AutoCAD but it is still a great choice for transport studies such as thermal and ballistic penetration. BRL-CAD underlies CSG instead of boundary representation. You might need to keep that in mind while opting for BRL-CAD. You can download BRL-CAD from its official website.

BRL-CAD (https://brlcad.org/)

5. QCAD

Just so that you know, we use cookies on our website.
Want to know more? Click here (https://itsfoss.com/privacy-policy/).



QCAD is a commercially available open-source CAD software based on Qt framework (https://www.qt.io/).

The free community edition is open source and its source code is available (https://github.com/qcad/qcad). The professional version contains add-ons for advanced DXF support, DWG support and many extra tools and features.

In other words, the free community edition will be restricted to certain features.

QCAD may not be the best CAD software there is but the UI and the options get a lot of things done. So, if you are interested to try an open-source CAD software, you may download the trial version to test-drive it.

You can opt for the trial version first – which runs for 15 minutes and then you need to restart the session. And, if you like using the trial version, you can consider upgrading it.

QCAD (https://qcad.org/en/)

6. BricsCAD (not open source)

Just so that you know, we use cookies on our website.
Want to know more? Click here (https://itsfoss.com/privacy-policy/).

Yet another alternative as suggested by some of our readers.

This may not be a free and open-source solution. However, you will find it available for Linux when you purchase it.

It is a feature-rich CAD software available for Linux users. If you are curious, they also have a comparison chart (https://www.bricsys.com/en-eu/bricscad/compare/) on their official website with AutoCAD to let you know of its capability and features.

You need to sign up for a 30-day trial to start with and purchase it later if you like it.

BricsCAD (https://www.bricsys.com/en-eu/bricscad/)

7. VariCAD (not open source)

Just so that you know, we use cookies on our website. Want to know more? Click here (https://itsfoss.com/privacy-policy/).

Made Using VariCAD

VariCAD is another decent CAD software for 2D/3D designs. Even though it isn't free – you get a 30-day free trial version to test it out.

For Linux, you get Debian and RPM packages to try it out. It is actively maintained and supports most of the latest Linux distributions to work with. It also offers a free VariCAD viewer which you can use to convert DWG to DFX and similar tasks.

VariCAD (https://www.varicad.com/en/home/)

Honorary mentions

- With a huge growth in cloud computing technologies, cloud CAD solutions like OnShape (https://www.onshape.com/) have been getting popular day by day.
- SolveSpace (http://solvespace.com/index.pl) is another open-source project worth mentioning. It supports 3D modeling.
- Siemens NX is an industrial-grade CAD solution available on Windows, Mac OS and Linux, but it is ridiculously expensive, so omitted in this list.

- Then you have LeoCAD (https://www.leocad.org/), which is a CAD software where you use LEGO blocks to build stuff. What you do with this information is up to you.

Just so that you know, we use cookies on our website.
Want to know more? Click here (https://itsfoss.com/privacy-policy/).

CAD on Linux, in my opinion

Although gaming on Linux has picked up, I always tell my hardcore gaming friends to stick to Windows. Similarly, if you are an engineering student with CAD in your curriculum, I'd recommend that you use the software that your college prescribes (AutoCAD, SolidEdge, Catia), which generally tends to run on Windows only.

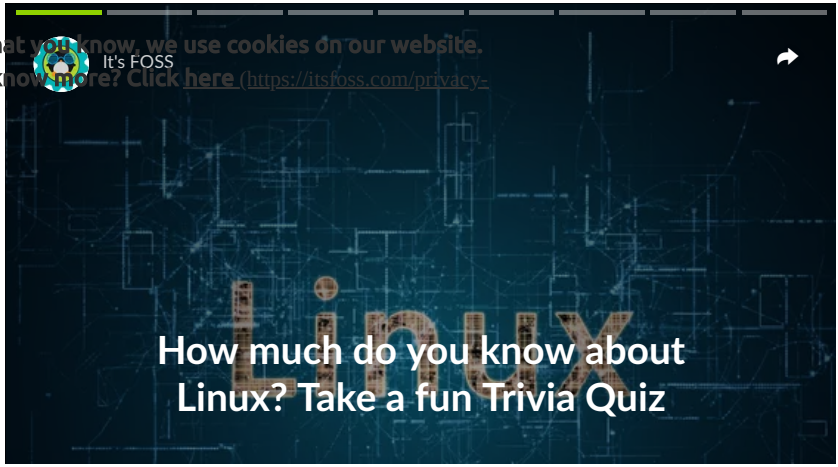
And for the advanced professionals, these tools are simply not up to the mark when we're talking about industry standards.

For those of you thinking about running AutoCAD in WINE, although some older versions of AutoCAD can be installed on WINE, they simply do not perform, with glitches and crashes ruining the experience.

That being said, I highly respect the work that has been put by the developers of the above-listed software. They have enriched the FOSS world. And it's great to see a software like FreeCAD developing at an accelerated pace in recent years.

Do share your thoughts with us using the comments section below and don't forget to share this article. Cheers.

Just so that you know, we use cookies on our website.
Want to know more? Click here (https://itsfoss.com/privacy-policy/).



Like what you read? Please share it with others.

368
Shares

Facebook 102 Twitter 50 LinkedIn 9 Reddit 90
Pinterest 117

About Aquil Roshan

Aquil Roshan is a tech writer driven by the passion for the ideology of open source software. He is a graduate in Computer Applications and loves to review Linux distros, open-source software and write how-to articles. Currently, He is pursuing Masters in Computer Applications and munches books by the dozen in his spare time. He's a dog person. Connect with him on Twitter (https://twitter.com/Aquilroshan)

76 comments
Newest comments first

Just so that you know, we use cookies on our website.
Want to know more? Click here (https://itsfoss.com/privacy-policy/)**.**

Comment as a guest:

Notify me when someone replies to my comment

Lazar

1 week ago

BricsCAD has:
– All 2D commands from AutoCAD.
– 3D better than AutoCAD (greater number of tools, better speed, 3D constraints, better visualization…)
– Impressive Sheet Metal module (now Mechanical), comparable with SolidWorks (for example)
– Point Clouds
– BIM (i don't use that module)
There is also AutoLISP, BRX (ARX)…
Everything work on Linux (I tested Ubuntu and Xubuntu) just like on Windows.
Unfortunately, only BricsCAD and Ares Commander are serious CAD programs for Linux.

Juin

Just so that you know, we use cookies on our website.
Want to know more? Click here (https://itsfoss.com/policy/).

1 week ago

Valcad is also a great program for 3D modeling, I think is even better than Bricscad.

Andrew Barney

2 weeks ago

This is a great list. I just wish freecad and others were closer to the usability of Solidworks. Solidworks gave an error last time I tried to install in virtualbox. I heard it might work under VMware.

Joe

3 weeks ago

In the link to access the download for DraftSight there is no .deb file do be downloaded. Only Windows and mac.
Where is it?

Just so that you know, we use cookies on our website.
Want to know more? Click here (https://itsfoss.com/privacy-policy/).

Abhishek Prakash (https://itsfoss.com/)

3 weeks ago

Draftsight for Linux has been discontinued very recently.

Renato Lobo

3 weeks ago

Acho que ainda da pra baixa-lo no manjaro

Juin

3 weeks ago

look in 4shared!

Just so that you know, we use cookies on our website.
Want to know more? Click here (https://itsfoss.com/privacy-policy/).

Lazar

2 weeks ago

You can try ARES Commander. It's not free, but it's also strong alternative to AutoCAD (just like BricsCAD).

Mark

1 week ago

DraftSight no longer cater to Linux… they dropped support at end of 2019. They also charge for Windows and MAC. I was actually waiting for the new version and was quite prepared to pay, I didn't however expect them to just vanish!, they have lost me now to QCAD. Shame really… :(

JJ.

1 week ago

Hi! you can still use draftsght 2019, just return your year date system.

Mark

Just so that you know, we use cookies on our website.
Want to know more? Click here (https://itsfoss.com/privacy-policy/).

7 days ago

Ok. I believe it is [illegible] computer locked to a past year just for a particular CAD program… Life moves on, move on with it.
DraftSight has missed the opportunity not I, I was happy to pay for their program and couldn't so I bought and payed for another… And I moved on. :)

JJ

4 days ago

ARES Commander, is a clone to draftsight and also corelcad, it's a proprietary, try it out!

Rodger

1 month ago

I think you need to consider OnShape as well these days. It is a commercial program but offers a free version and student version. As it runs online using a web browser you can run it from any hardware and operating system

Just so that you know, we use cookies on our website.
Want to know more? Click here (https://itsfoss.com/privacy-policy/).

Juin

1 month ago

You can still use draftsight 2019, just returning the date of linux system to that year. But you'll be not able to acces certain websites.

Add your comment...

Subscribe to comments

About Pages

About It's FOSS (https://itsfoss.com/about/)

Meet the team (https://itsfoss.com/its-foss-team/)

We Donate to FOSS Projects (https://itsfoss.com/donations-foss/)

Contact Pages

Contact Us (https://itsfoss.com/contact-us/)

Get Featured on It's FOSS (https://itsfoss.com/get-featured-on-its-foss/)

Request a tutorial (https://itsfoss.com/request-tutorial/)

(https://itsfoss.com/copyright/)

Just so that you know, we use cookies on our website.
Want to know more? Click here (https://itsfoss.com/privacy-policy/).

Stay in Touch with It's FOSS

Follow us on Facebook (https://www.facebook.com/itsfoss/)

Follow us on Instagram (https://www.instagram.com/itsfoss/)

Follow us on Pinterest (https://www.pinterest.fr/its_foss/)

Follow us on Twitter (https://twitter.com/itsfoss2)

Follow us via RSS Feed (https://itsfoss.com/feed/)

Subscribe to Newsletter (https://itsfoss.com/subscribe-to-newsletter/)

Subscribe to YouTube Channel (https://www.youtube.com/c/itsfoss?sub_confirmation=1)

Communities

Exclusive Telegram Channel (https://t.me/joinchat/AAAAAEPRGUJrEE1itjpH6A)

Join LinkedIn Community (https://www.linkedin.com/groups/8597839)

Linux Users Group on Facebook (https://www.facebook.com/groups/LinuxUsersGroupOfficial/)

Linux Users Group on Reddit (https://www.reddit.com/r/LinuxUsersGroup/)

Policies

Affiliate Policy (https://itsfoss.com/affiliate-policy/)

Privacy Policy (https://itsfoss.com/privacy-policy/)

It's F.O.S.S is Part of chmod777 Media Tech (OPC) Pvt Ltd· Built on Genesis Framework (https://www.shareasale.com/r.cfm?b=346198&u=747593&m=28169&urllink=&afftrack=) and Powered by UpCloud (https://www.upcloud.com/register/?promo=itsfoss)

Just so that you know, we use cookies on our website.
Want to know more? Click here (https://itsfoss.com/privacy-policy/).