

15+

Free Apps

for Broadcasters

# Why?

- Save money
- Faster bug fixes
- More security conscious
- More specialized software
- Allows customization
- Infrequent professional quality work

# Why Not?

- Limited support
  - Stability
- Data or privacy issues
  - Licence limitations

# Licencing

Licences determine the rights and responsibilities you have as a user of the software.

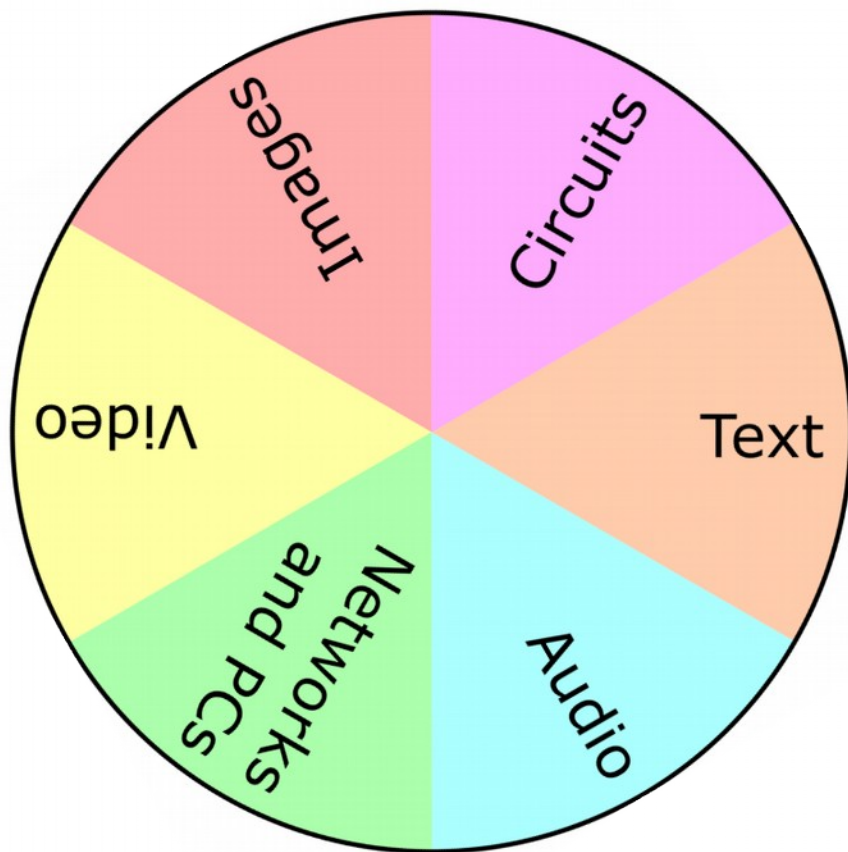
Common licence groups are:

- Apache
- BSD
- Creative Commons
- GNU (GPL and LGPL)
- MIT
- Mozilla

Read the software licence before or during installation to make sure you're following it.

License	Commercial use	Distribution	Modification	Patent use	Private use	Disclose source	License and copyright notice	Network use in distribution	Same license	State changes	Liability	Trademark use	Warranty
BSD Zero Clause License	●	●	●		●						●		●
Academic Free License v3.0	●	●	●	●	●		●			●	●	●	●
GNU Affero General Public License v3.0	●	●	●	●	●	●	●	●	●	●	●	●	●
Apache License 2.0	●	●	●	●	●		●			●	●	●	●
Artistic License 2.0	●	●	●	●	●		●			●	●	●	●
BSD 2-Clause "Simplified" License	●	●	●		●		●				●		●
BSD 3-Clause Clear License	●	●	●	●	●		●				●		●
BSD 3-Clause "New" or "Revised" License	●	●	●		●		●				●		●
Boost Software License 1.0	●	●	●		●		●				●		●
Creative Commons Attribution 4.0 International	●	●	●	●	●		●			●	●	●	●
Creative Commons Attribution Share Alike 4.0 International	●	●	●	●	●		●		●	●	●	●	●
Creative Commons Zero v1.0 Universal	●	●	●	●	●						●	●	●
CC-BY-SA	●	●	●	●	●	●	●		●		●		●
Software License Agreement v2.1	●	●	●	●	●						●		●
Educational Community License v2.0	●	●	●	●	●		●			●	●	●	●
Eclipse Public License 1.0	●	●	●	●	●	●	●		●		●		●
Eclipse Public License 2.0	●	●	●	●	●	●	●		●		●		●
European Union Public License 1.1	●	●	●	●	●	●	●	●	●	●	●	●	●
European Union Public License 1.2	●	●	●	●	●	●	●	●	●	●	●	●	●
GNU General Public License v2.0	●	●	●		●	●	●		●	●	●		●
GNU General Public License v3.0	●	●	●	●	●	●	●		●	●	●		●
ISC License	●	●	●		●		●				●		●
GNU Lesser General Public License v2.1	●	●	●		●	●	●		●	●	●		●
GNU Lesser General Public License v3.0	●	●	●	●	●	●	●		●	●	●		●
LaTeX Project Public License v1.3c	●	●	●		●	●	●			●	●		●
MIT License	●	●	●		●		●				●		●
Mozilla Public License 2.0	●	●	●	●	●	●	●		●		●	●	●
Microsoft Public License	●	●	●	●	●		●					●	●
Microsoft Reciprocal License	●	●	●	●	●	●	●		●			●	●
University of Illinois/NCSA Open Source License	●	●	●		●		●				●		●
ODC Open Database License v1.0	●	●	●	●	●	●	●		●		●	●	●
SIL Open Font License 1.1	●	●	●		●		●		●	●	●		●
Open Software License 3.0	●	●	●	●	●	●	●	●	●	●	●	●	●
PostgreSQL License	●	●	●		●		●				●		●
The Unlicense	●	●	●		●						●		●
Universal Permissive License v1.0	●	●	●	●	●		●				●		●
Do What The F*ck You Want To Public License	●	●	●		●								
gpl License	●	●	●		●		●			●	●		●

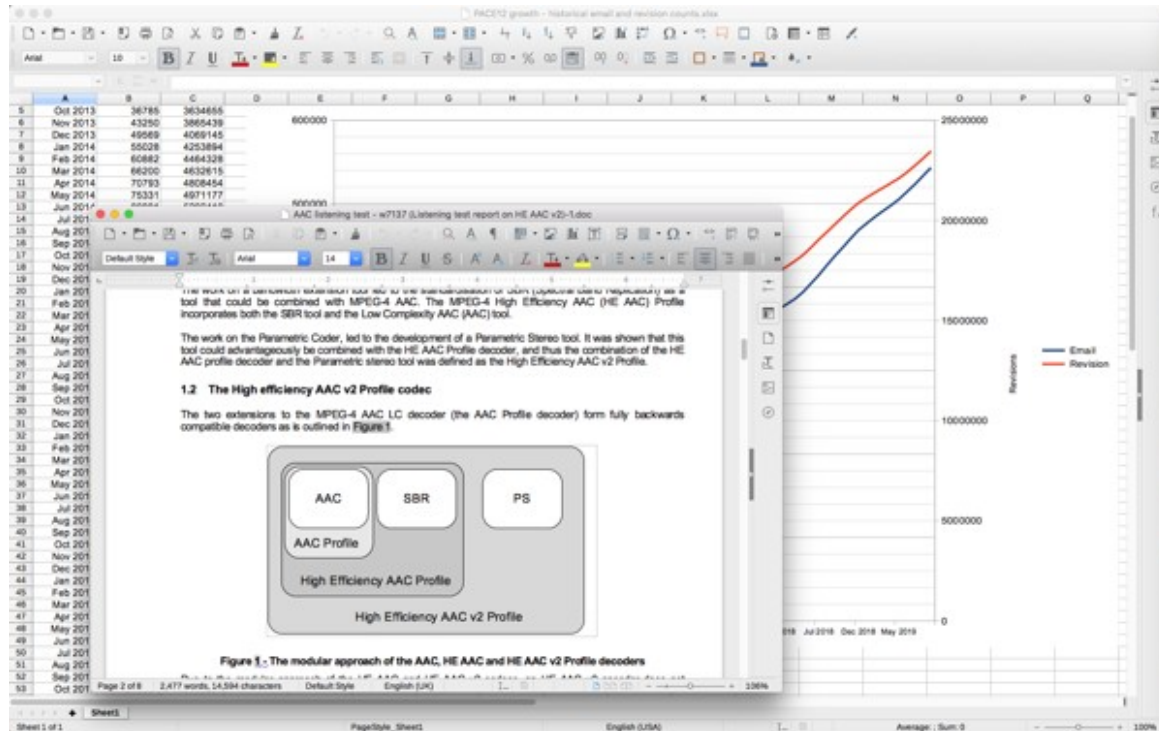
From <https://choosealicense.com/appendix/>





# LibreOffice

libreoffice.org

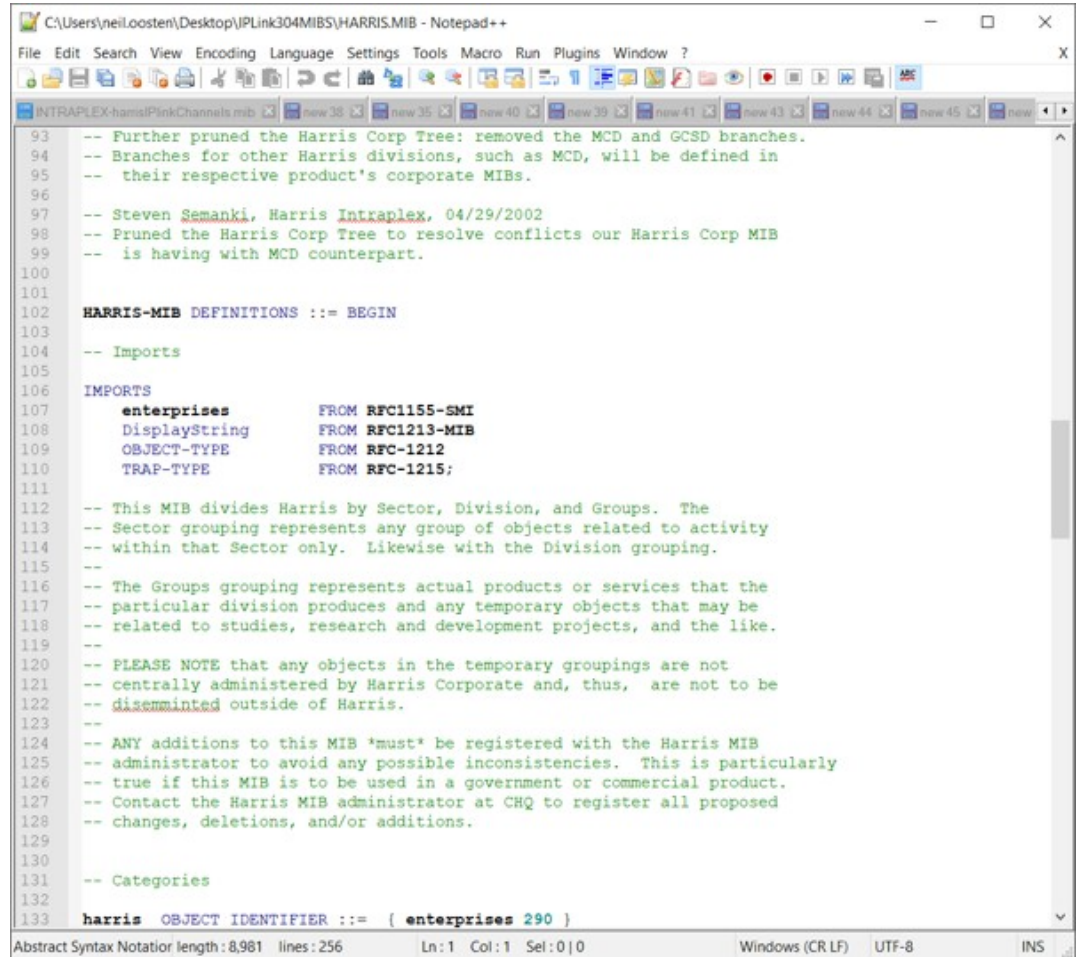


- Full-featured office suite – word processor, spreadsheet, presentation, drawing, and database
- Opens and saves common file formats

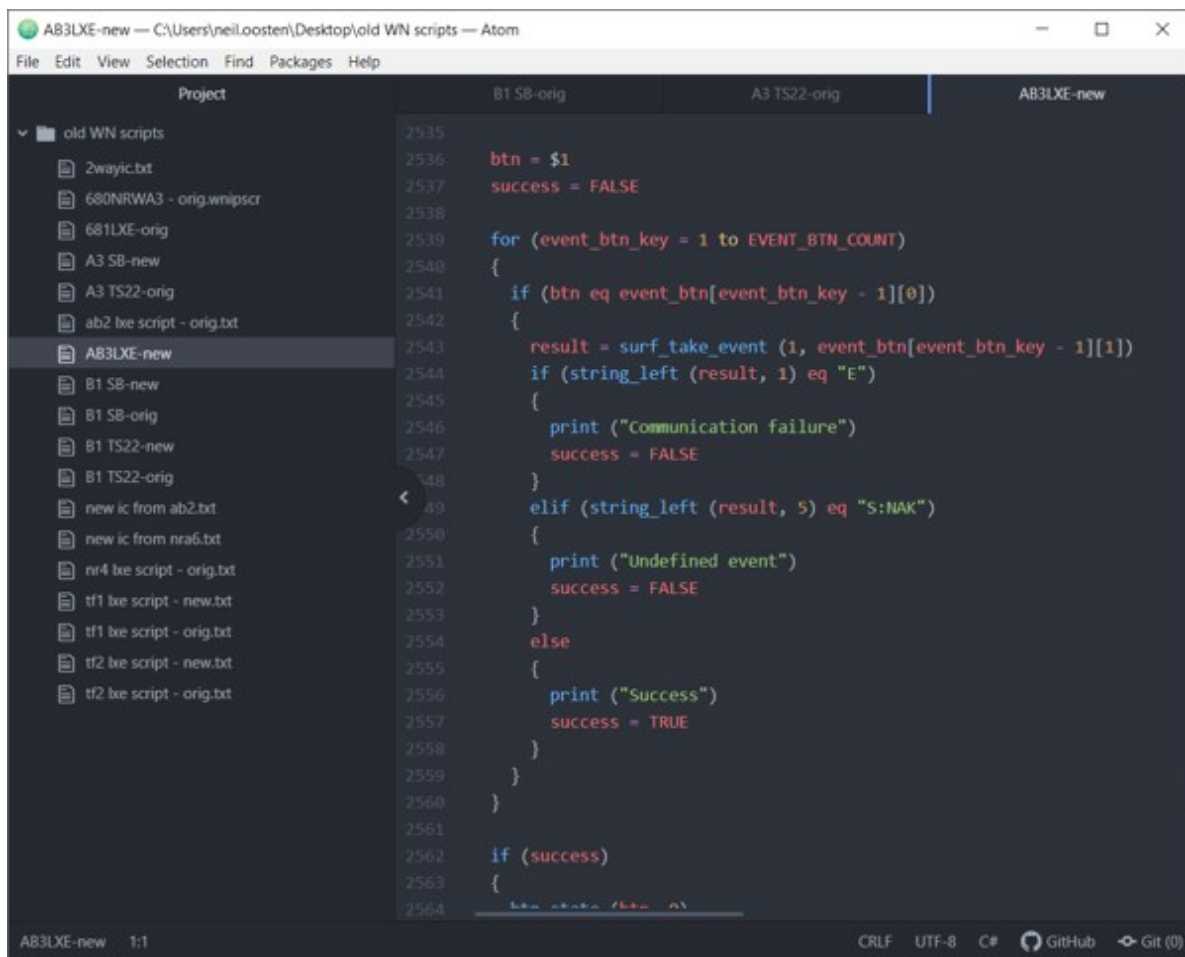
# Notepad++

notepad-plus-plus.org

- Lightweight text editor
- Tabbed interface and syntax highlighting



```
93 -- Further pruned the Harris Corp Tree: removed the MCD and GCSD branches.
94 -- Branches for other Harris divisions, such as MCD, will be defined in
95 -- their respective product's corporate MIBs.
96
97 -- Steven Semanki, Harris Intralex, 04/29/2002
98 -- Pruned the Harris Corp Tree to resolve conflicts our Harris Corp MIB
99 -- is having with MCD counterpart.
100
101 HARRIS-MIB DEFINITIONS ::= BEGIN
102
103 -- Imports
104
105 IMPORTS
106
107     enterprises          FROM RFC1155-SMI
108     DisplayString        FROM RFC1213-MIB
109     OBJECT-TYPE          FROM RFC-1212
110     TRAP-TYPE            FROM RFC-1215;
111
112 -- This MIB divides Harris by Sector, Division, and Groups. The
113 -- Sector grouping represents any group of objects related to activity
114 -- within that Sector only. Likewise with the Division grouping.
115 --
116 -- The Groups grouping represents actual products or services that the
117 -- particular division produces and any temporary objects that may be
118 -- related to studies, research and development projects, and the like.
119 --
120 -- PLEASE NOTE that any objects in the temporary groupings are not
121 -- centrally administered by Harris Corporate and, thus, are not to be
122 -- disseminated outside of Harris.
123 --
124 -- ANY additions to this MIB *must* be registered with the Harris MIB
125 -- administrator to avoid any possible inconsistencies. This is particularly
126 -- true if this MIB is to be used in a government or commercial product.
127 -- Contact the Harris MIB administrator at CHQ to register all proposed
128 -- changes, deletions, and/or additions.
129
130 -- Categories
131
132 harris OBJECT IDENTIFIER ::= { enterprises 290 }
```



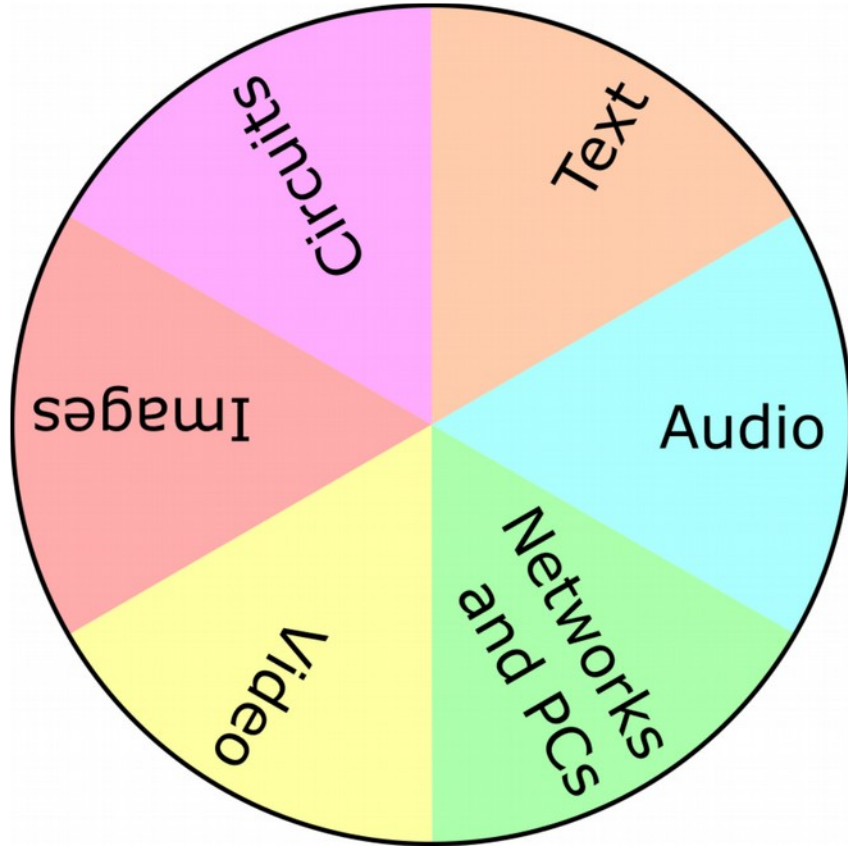
# Atom

atom.io

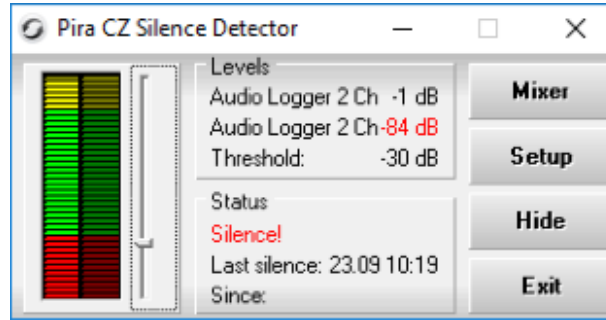


- Cross-platform text editor
- Lots of customization options
- Allows plugins









# Pira CZ Silence Detector

[pira.cz/show.asp?art=silence](http://pira.cz/show.asp?art=silence)

- Run tasks when alarm begins and ends
- Tasks include sending email, taking a screenshot, running an application, and rebooting the computer





# Liquidsoap

liquidsoap.info

- Programming language built for audio and video
- Create and change streams (including metadata)
- Send to various formats and outputs

```
#!/usr/bin/liquidsoap -v

set("log.file.path", "/srv/logger/logs/liquidsoap/liquidsoap.log")
set("log.file.perms", "0640")

audioin = input.alsa(device='hw:0,0,0')
left = amplify(2., mean(stereo.pan(pan=1., audioin)))
right = amplify(2., mean(stereo.pan(pan=-1., audioin)))
sdr = mksafe(input.external("dd if=/tmp/sdr.pcm 2>/dev/null"))

#audioin = vumeter(audioin)

#output.alsa(audioin)
#output.alsa(bufferize = false, audioin)

# Detect silence and recovery. For threshold, choose the peak level and subtract approximately 10.
# For radio, use max 10, min 0.1, thres -25.
left = on_blank(
    max_blank=900.,
    min_noise=6.,
    on_noise=fun()->system("/srv/logger/scripts/silence-detect.sh NOISE 1"),
    threshold=-50.,
    track_sensitive=false,
    fun()->system("/srv/logger/scripts/silence-detect.sh BLANK 1"),
    left
)

# For radio, use max 10, min 0.1, thres -29.
right = on_blank(
    max_blank=10.,
    min_noise=0.1,
    on_noise=fun()->system("/srv/logger/scripts/silence-detect.sh NOISE 2"),
    threshold=-29.,
    track_sensitive=false,
    fun()->system("/srv/logger/scripts/silence-detect.sh BLANK 2"),
    right
)

# Send "both" audio to Icecast - high quality
output.icecast(
    %mp3(bitrate=320, samplerate=44100, stereo=true),
    host="localhost", port=8000, password=
    mount="/both",
    name="Both",
    description="",
    genre="",
    url="",
    public=true,
    fallback=true,
    audioin
)

# Send "both" audio to Icecast - low quality
```

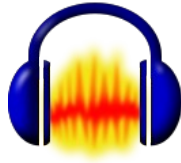


# ocenaudio

ocenaudio.com

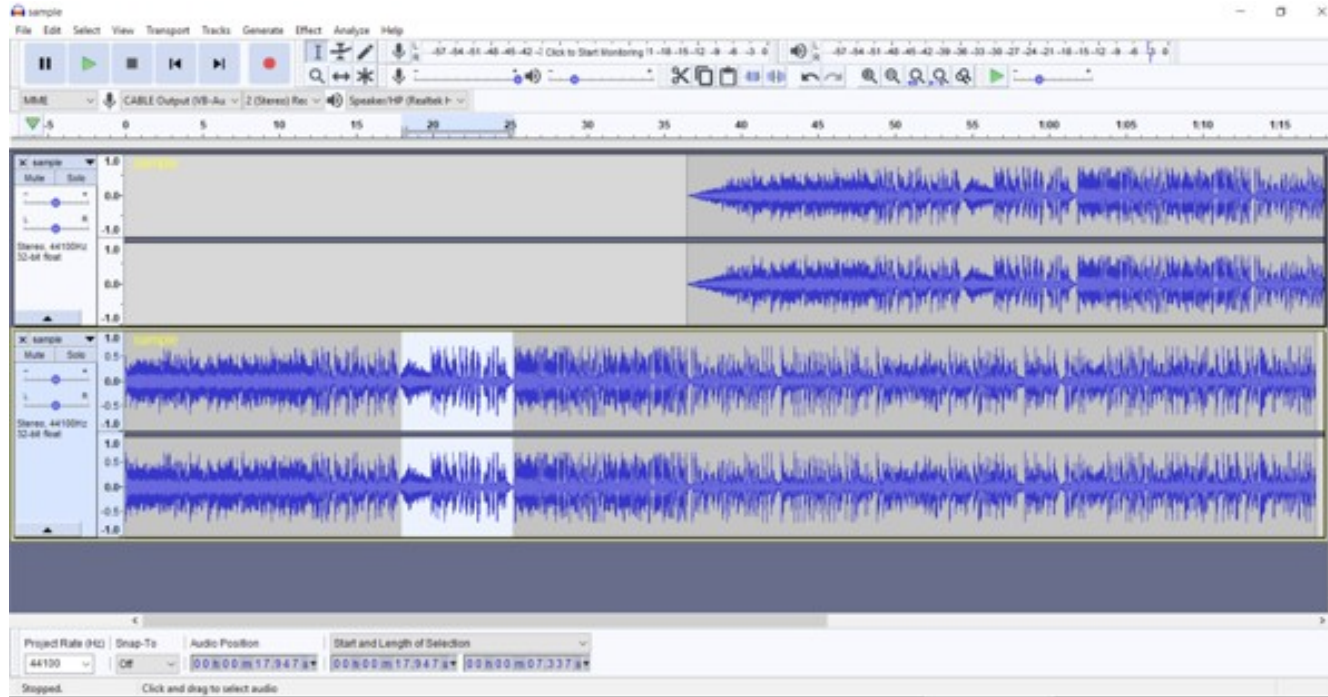


- Modern single-track audio editor
- Opens and saves many common file formats
- Built-in effects and VST plugin support



# Audacity

[audacityteam.org](http://audacityteam.org)

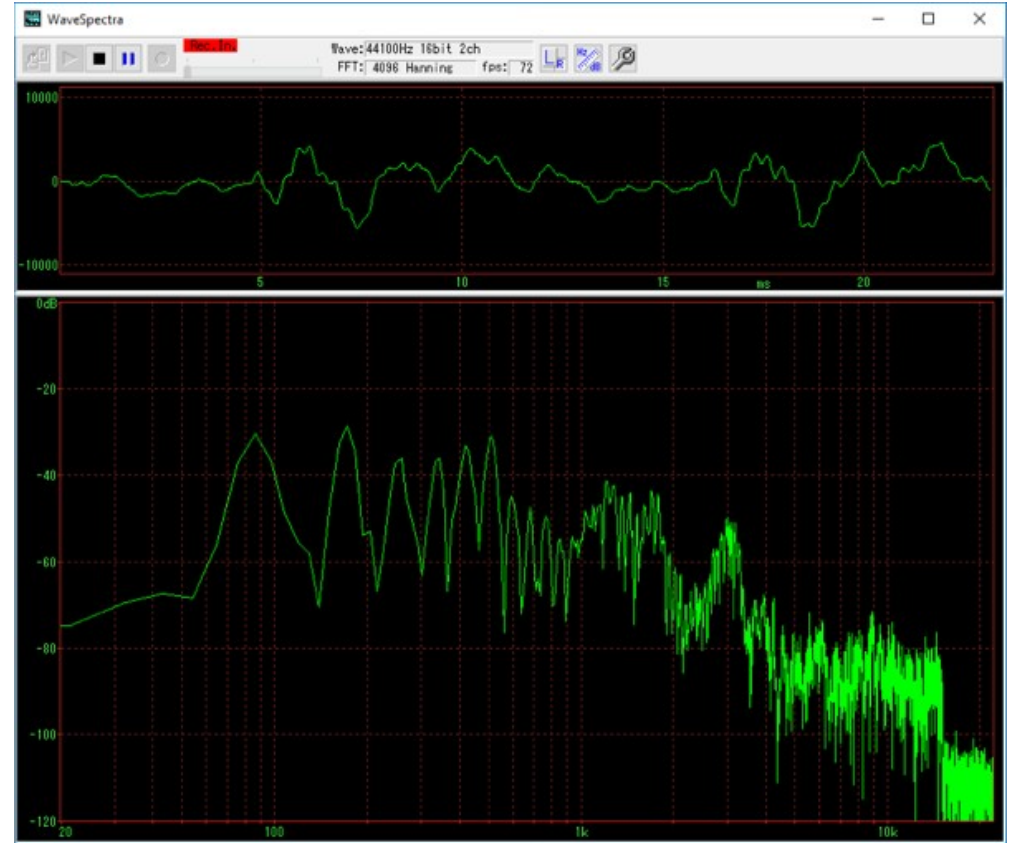
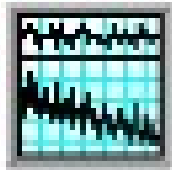


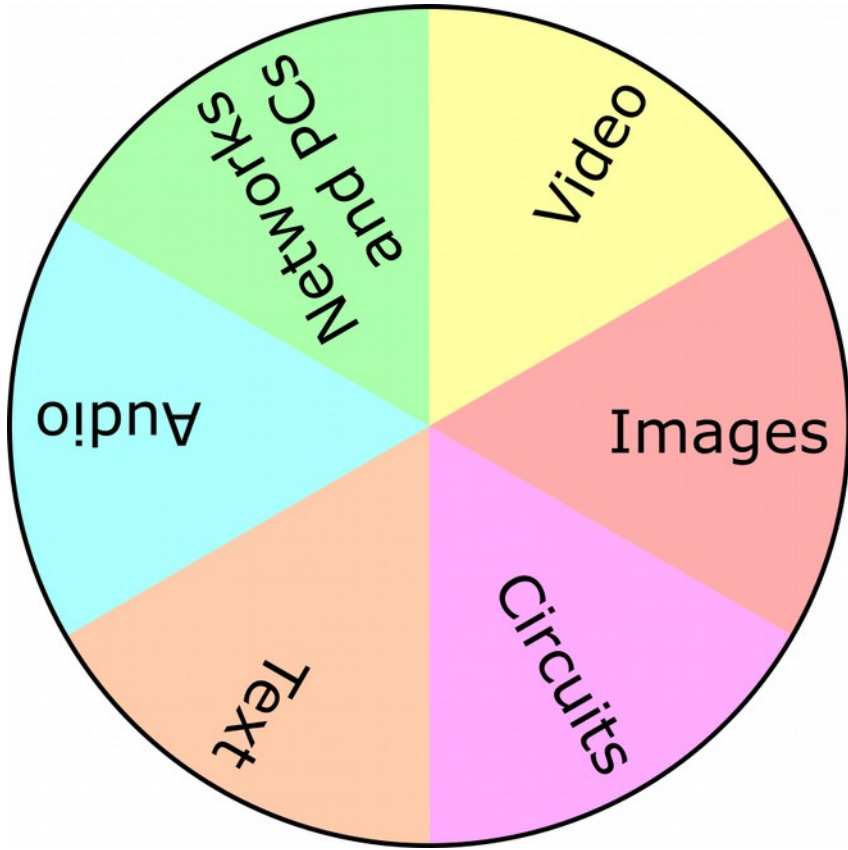
- Multi-track audio editor

# WaveSpectra

[efu.jp.net/soft/ws/ws.html](http://efu.jp.net/soft/ws/ws.html)

- Audio analysis of sound card input or WAV file









# Paint.NET

getpaint.net



- Image and photo editor
- Support for layers and transparency

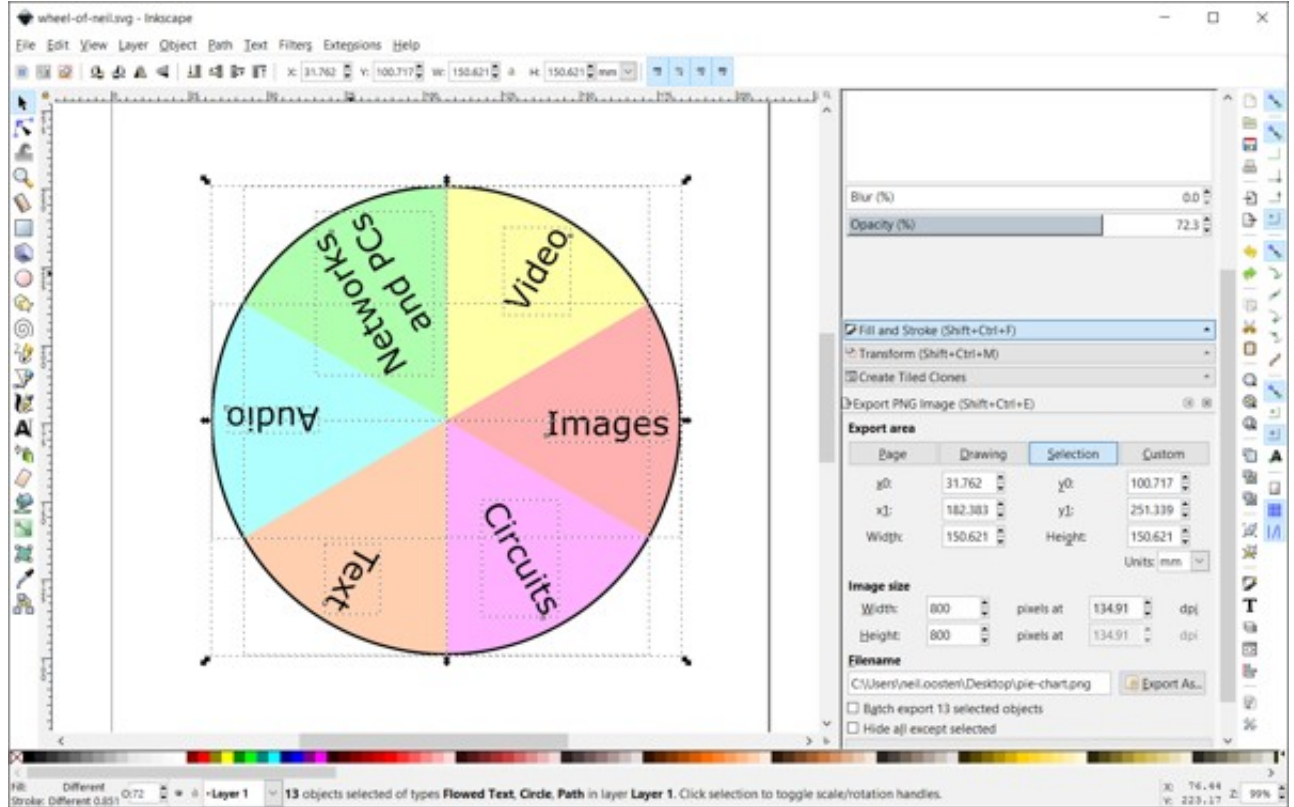


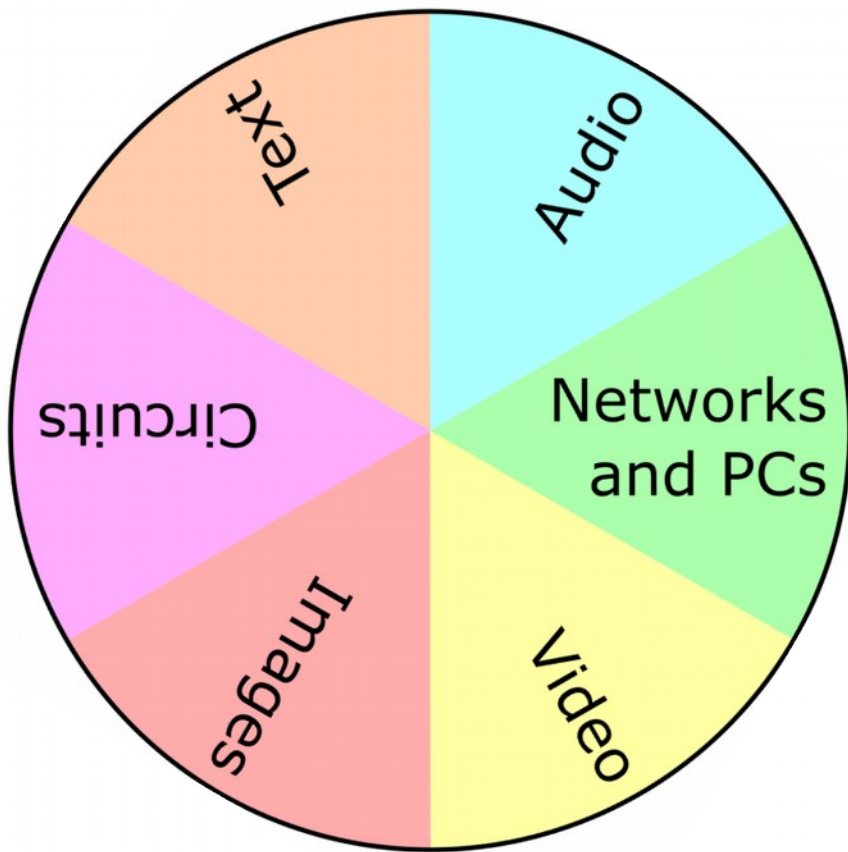
# Inkscape

inkscape.org



- Vector graphic editor
- Can convert to PNG file format





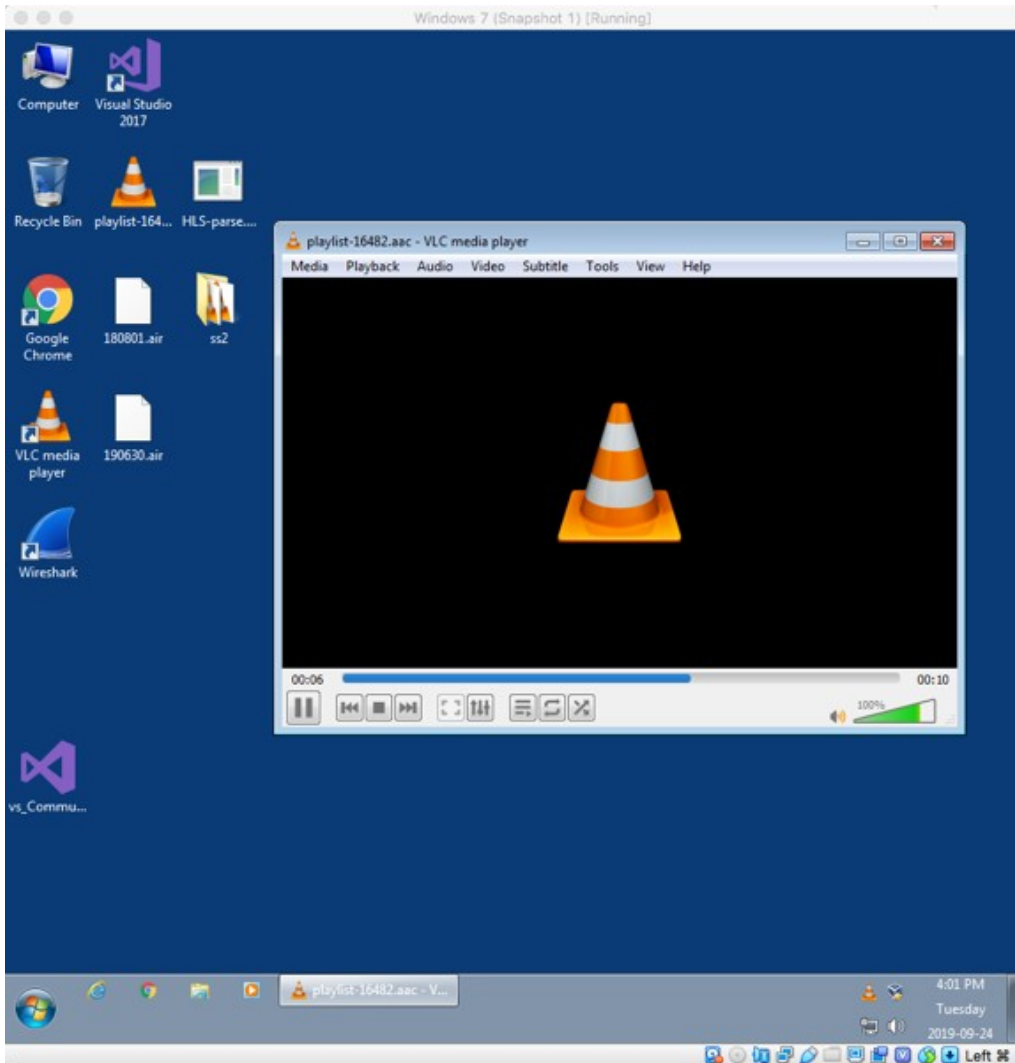


# Zabbix

[zabbix.com](https://zabbix.com)

- Monitor devices and applications
- Level-based alerts depending on problem
- Data collection and history

**ZABBIX**



# VirtualBox

[virtualbox.org](https://www.virtualbox.org)

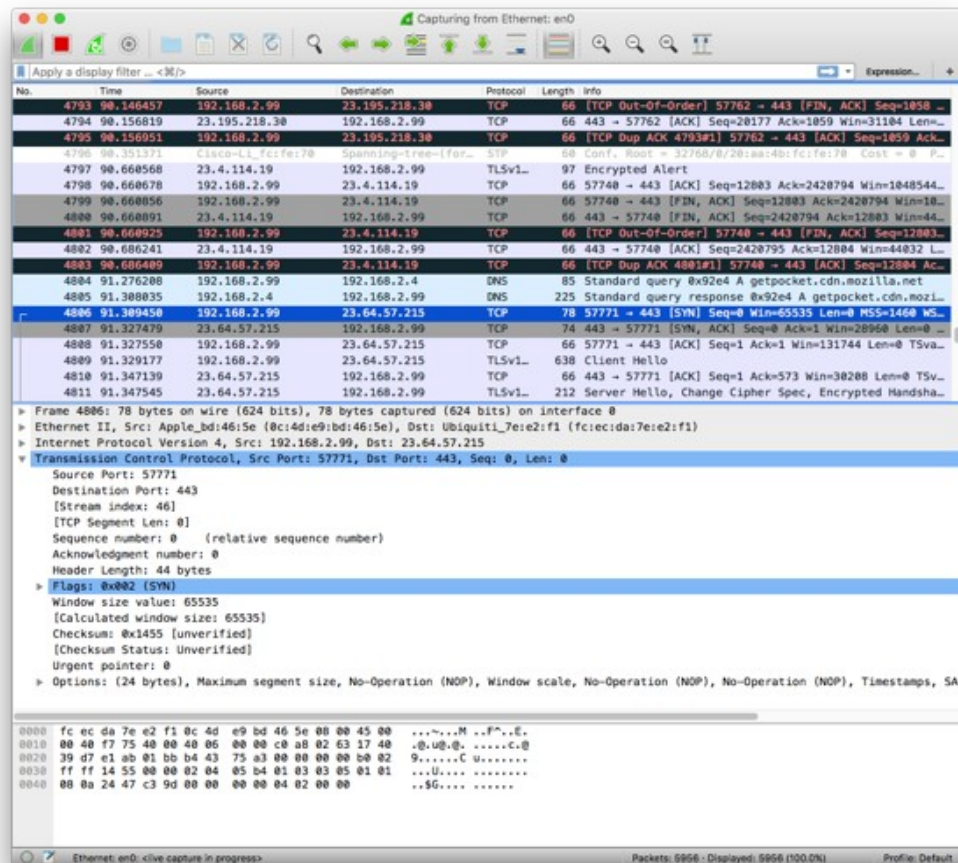


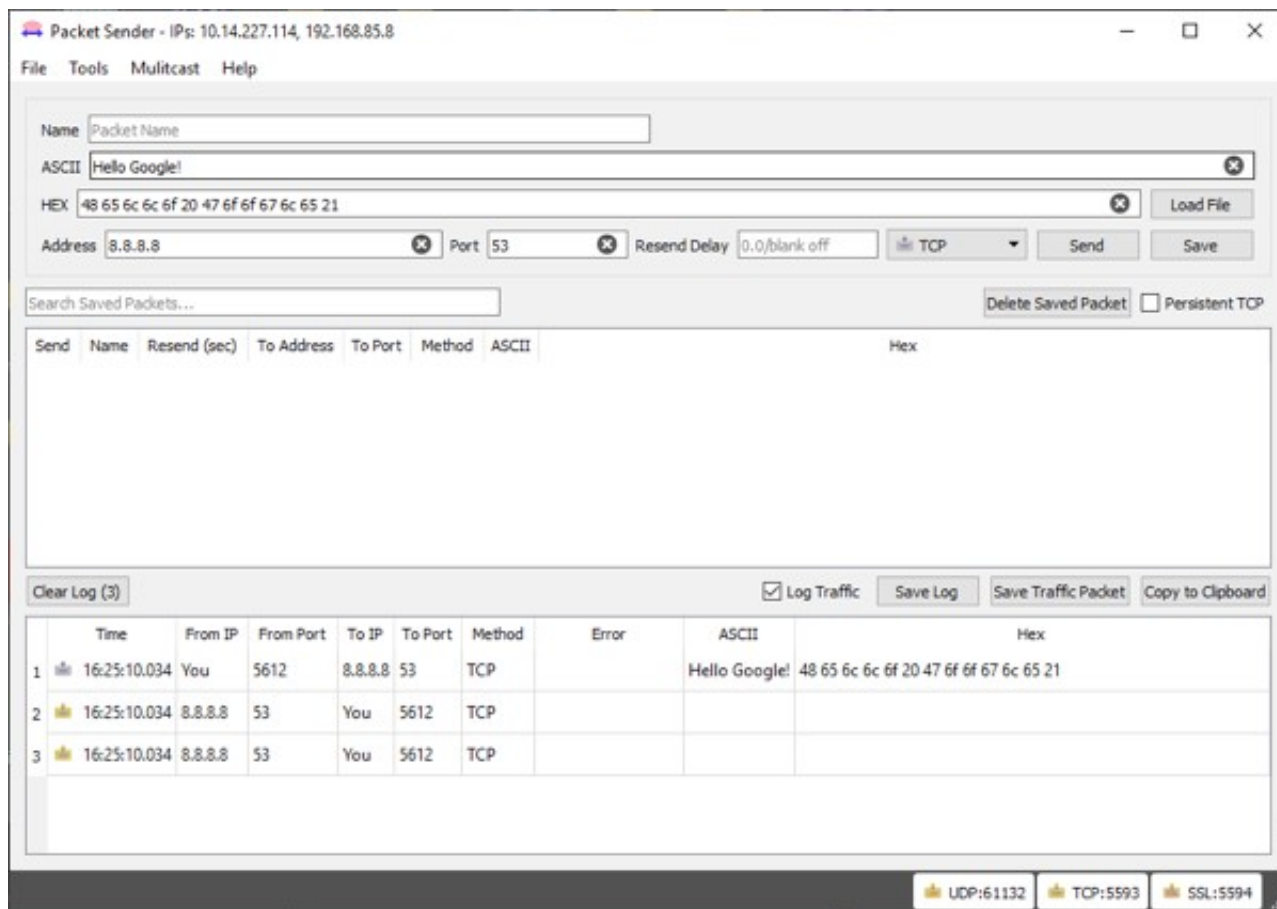
- Run a virtual machine on your computer
- Good for testing or when an application is not available for your OS

# Wireshark

wireshark.org

- Network packet analyzer
- Many filters to find relevant information





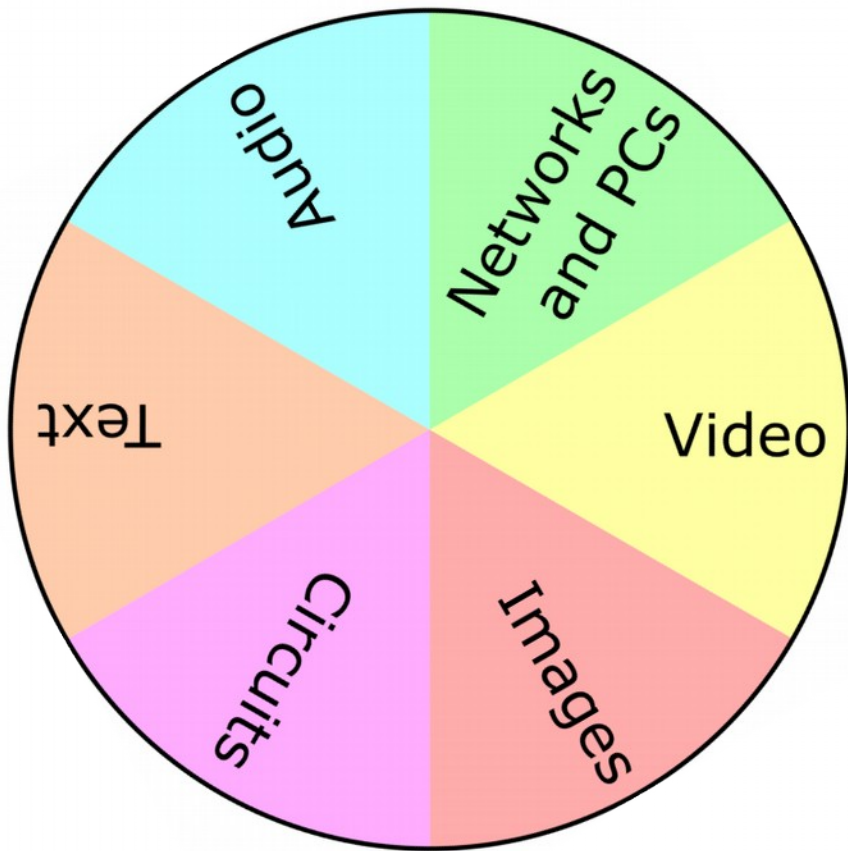
# Packet Sender

packetsender.com



- Sends and receives network packets
- Good for testing metadata and APIs



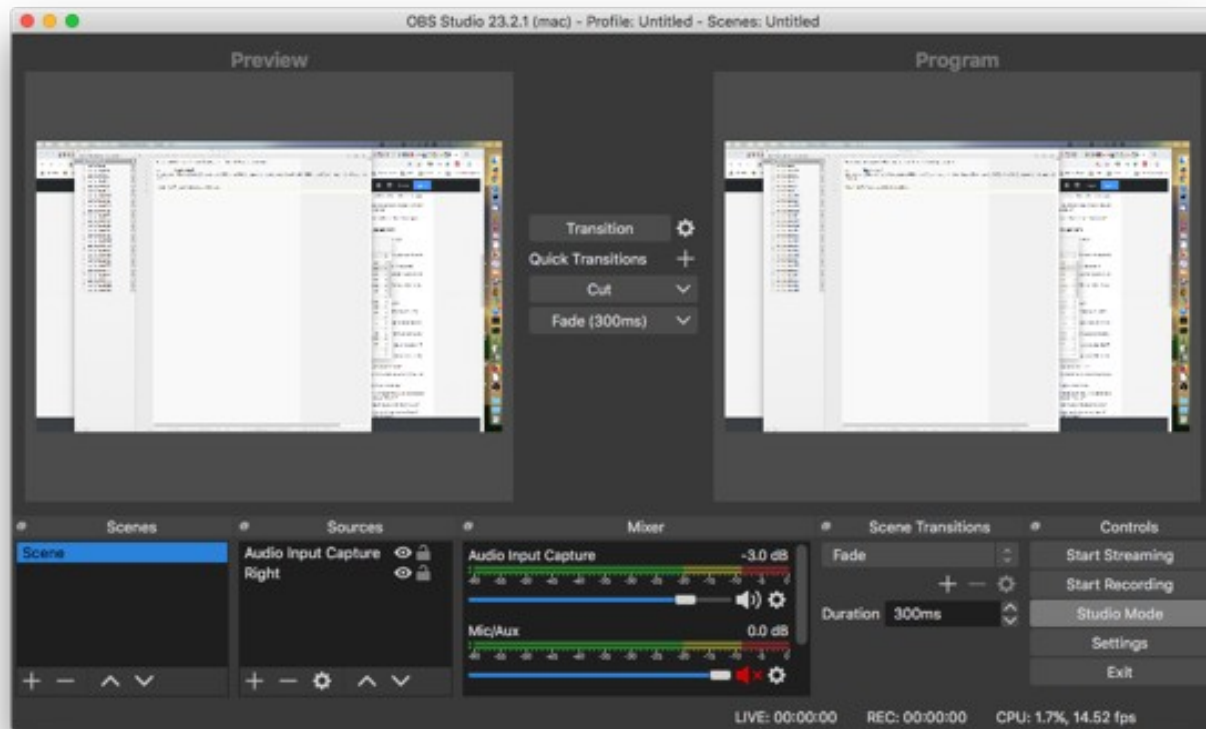




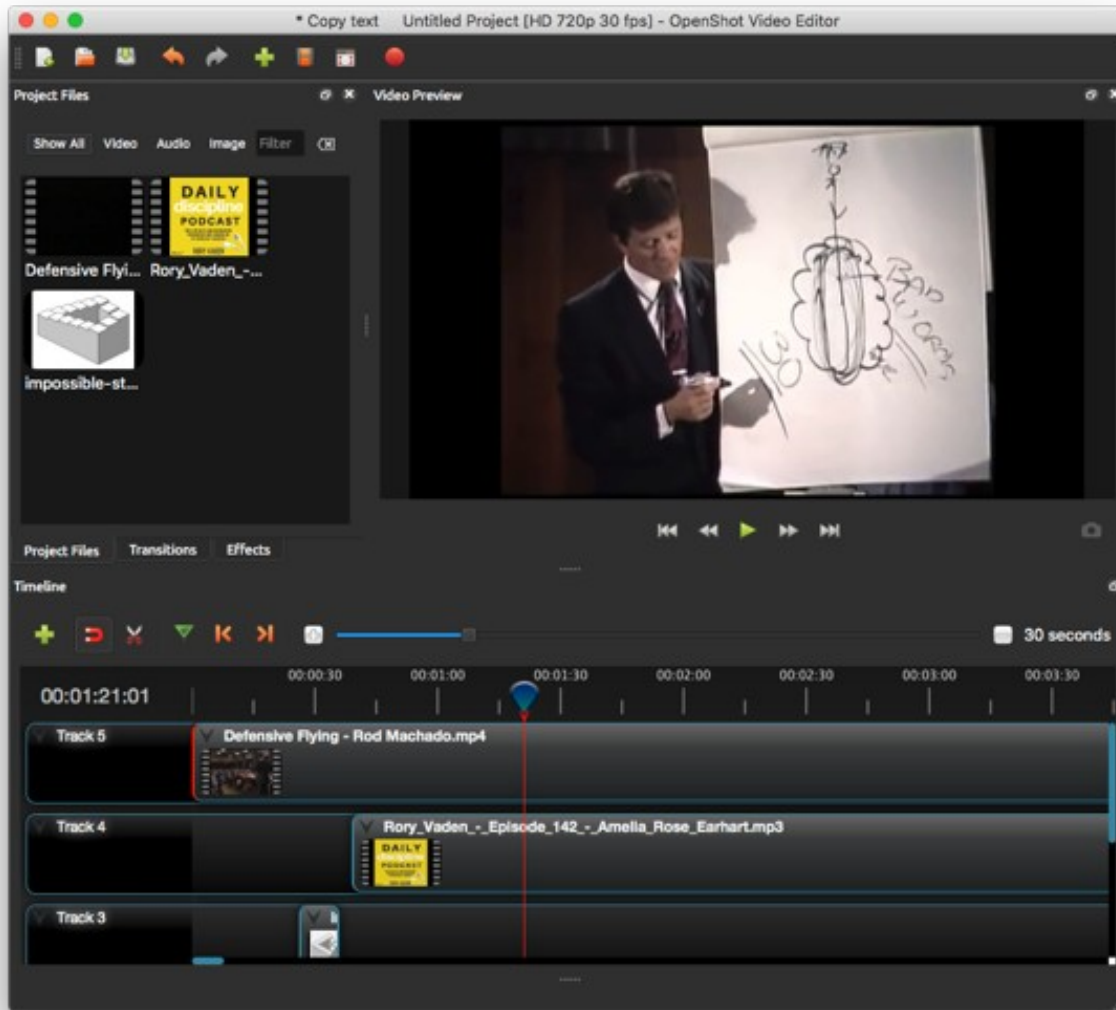


# OBS Studio

obsproject.com



- Video recording and streaming
- Can capture cameras or desktop

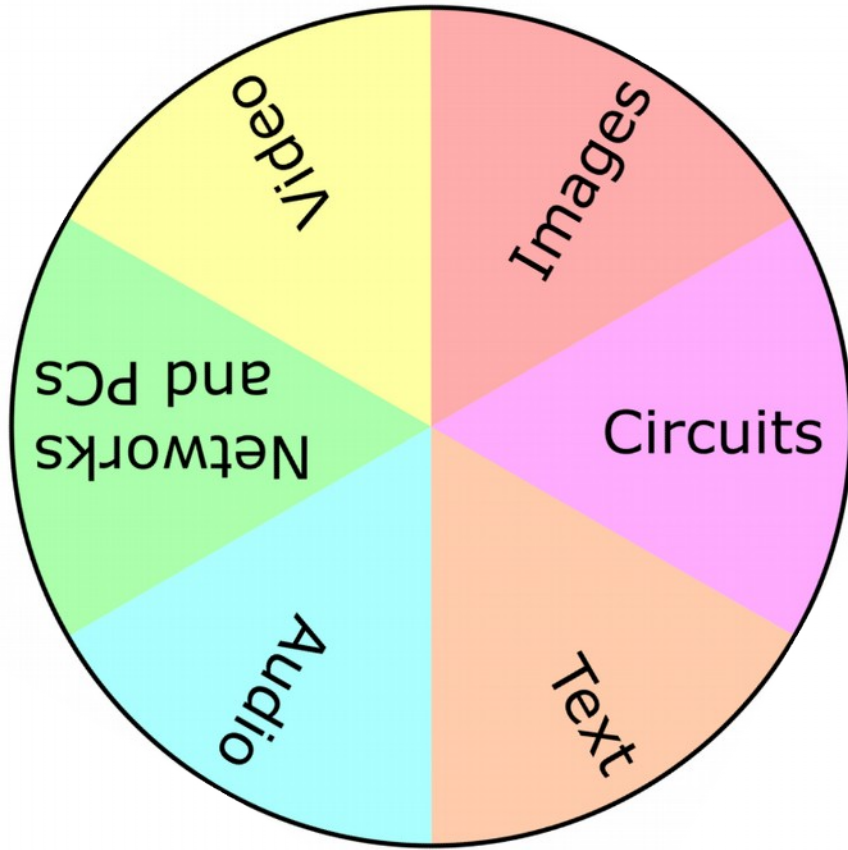


# OpenShot Video Editor

[openshot.org](https://openshot.org)



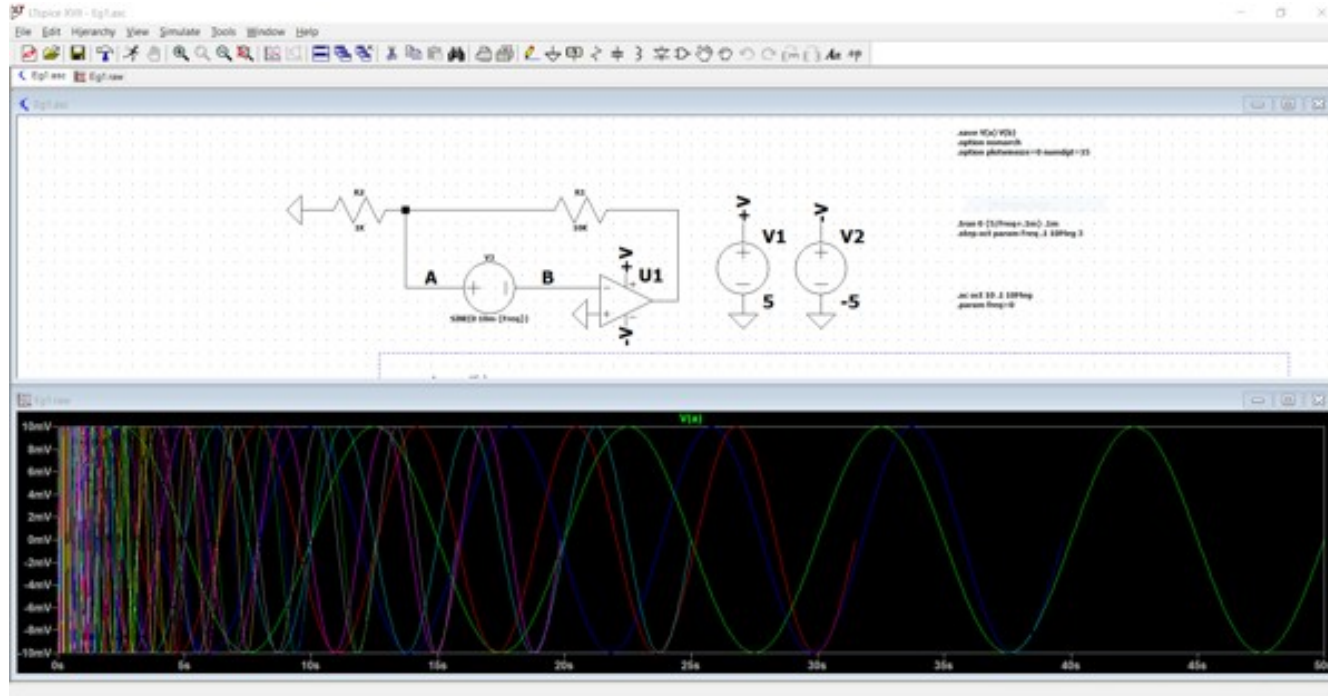
- Cross-platform video editor
- Includes animations, effects, and transitions





# LTspice

[analog.com/LTspice](http://analog.com/LTspice)



- Draw schematics
- “Run” the circuit to analyze with virtual instruments



# Add to Your Toolbox

## AlternativeTo

- Software recommendations
- [alternativeto.net](https://alternativeto.net)

## Portable Apps

- Carry ready-to-run software and settings on a USB drive
- [portableapps.com](https://portableapps.com)

## GitHub

- Source code storage and collaboration
- [github.com](https://github.com)

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