

VideoLAN FAQ

Copyright © 2002 - 2006 the VideoLAN project

Frequently Asked Questions about VideoLAN.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version. The text of the license can be found on the GNU website (<http://www.gnu.org/copyleft/gpl.html>).

VideoLAN FAQ

1. VLC media player

1.1. Where can I download VLC for Mac OS 9?

Where did you read VLC for Mac OS 9 exist? There is not, and will not be, a version for Mac OS 9.

1.2. Does VLC support DVDs from all regions?

Well this mostly depends on your DVD drive. Testing it is usually the quickest way to find out. The problem is that a lot of newer drives are RPC2 drives these days. Some of these drives don't allow raw access to the drive until the drive firmware has done a regioncheck. VLC uses *libdvdcss* and it needs raw access to the DVD drive to crack the encryption key. So with these drives it is impossible to circumvent the region protection. (This goes for all software. You will need to flash your drives firmware, but sometimes there is no alternate firmware available for your drive). On other RPC2 drives that DO allow raw access, it might take VLC a *long* time to crack the key. So just pop the disc in your drive and try it out, while you get a coffee. RPC1 drives should 'always' work regardless of the regioncode.

1.3. Where does VLC store its config file?

Currently, a config file is created on a per user basis (there is no global configuration file). If you modify the available options in VLC and save the new configuration, then a configuration file will be created in your user directory. The precise location of this file depends on the Operating System you are running:

- Linux / Unix: `$(HOME)/.vlc/vlcrc`
- Mac OS X: `HOME/Library/Preferences/VLC`
- Windows 95/98/ME: `C:\Windows\Application Data\vlc\vlcrc`
- Windows XP/2000: `C:\Documents and Settings\username\Application Data\vlc\vlcrc`
- BeOS: `config/settings/vlcrc`

1.4. VLC has a strange behavior...

The first thing to do is to reset the VLC preferences in the preferences dialog of the application and restart VLC. If VLC doesn't even start anymore, delete VLC's configuration file (see the previous question to know about its location). Then restart VLC. If it does not get any better, read the following questions!

1.5. I cannot read DVDs!

Here are a few things to check:

- If you are on Linux, did you install the *libdvdcss* package?

- Do you have write access to your DVD device? For instance, under Unix:

```
# chmod 666 /dev/dvd
```

where `/dev/dvd` is the device corresponding to your DVD drive.

1.6. The video runs but the picture is distorted

There is probably a problem with the output layer. There are several ways of troubleshooting it. First, try with another output plugin, for instance:

```
% vlc -v sdl
% vlc -v x11
```

Second, change your screen depth and/or definition. It quite often helps. Lastly, if running Unix, have a look at your XFree86 video driver.

1.7. Video is choppy

Your system might be too slow to decode all pictures. It might be that your CPU basically is not fast enough. It can also be that the subsystem is misconfigured/misdriven, this happens for example under Redhat Linux. Here are some elements to improve speed:

- Turn on DMA on your DVD device, for instance:

- Under Linux:

```
# hdparm -d1 /dev/dvd
```

- Under Windows, go to the *System* section of the control panel, and go to the *Hardware manager* (it is sometimes in a separate tab, and sometimes, you have to go to the *Advanced* tab. Then, right-click on your DVD player, and check the *DMA* checkbox.

- Upgrade to the latest driver for your video board

If you are running Linux, you can additionally upgrade to the latest XFree86 version. If supported, check that the xvideo plug-in is effectively used with:

```
% vlc -vvvv
```

- Stop other running applications...
- Try disabling framedropping. Framedropping allows VLC not to decode some pictures when the CPU is overloaded, but can result in choppy playback under certain conditions.

Framedropping behaviour can be configured in the Video preferences of VLC.

1.8. Audio and video are out of sync

Try using another audio output plugin and, under Unix, kill `esd` or `artsd` if they are running. If the problem is due to the input file, have a look at the "Audio desynchronisation compensation" option.

1.9. VLC crashes.

Increase the verbosity level (either in the preferences or with a `-vvvv` command line option) and look at the debug messages (in the terminal or in the Messages window).

If you are convinced that it is a bug in VLC, have a look at the bug reporting page (<http://www.videolan.org/support/bug-reporting.html>).

On Debian Sarge, if it segfaults on TS or V4L, try removing `/usr/lib/vlc/demux/libty_plugin.so`.

1.10. How can I take screenshots?

To take a snapshot of the video displayed by VLC, you just need to press the pre-defined snapshot hotkey:

- Windows / Linux / Unix: **Ctrl-Alt-s**
- Mac OS X: **Command-Alt-s**

To change it, go to Preferences -> Interface -> Hotkeys settings, check Advanced options, and set *Take video snapshot*.

1.11. Where are my screenshots?

If you haven't changed the snapshot directory in your preferences, your screenshots should go to:

- Windows: `My Documents\My Pictures\`
- Linux / Unix: `$(HOME)/.vlc/`
- Mac OS X: `Desktop/`

To change it, go to Preferences -> Video -> Video snapshot directory.

1.12. My file doesn't seem to work!

Are you sure VLC supports the file? Try checking the features page (<http://www.videolan.org/vlc/features.html>). If it supported and you compiled VLC yourself, check if you have downloaded and installed all the codecs correctly. If it is not supported, then you are out of luck for now.

Note: At present, especially WMV3, the most Real Player, and the most Indeo Video ("IV50", etc.) files are not supported by VLC and are not going to be in the near future.

2. VideoLAN streaming solution

2.1. Do I need a "streaming server"?

Well, there are in fact two kinds of streaming: passive streaming in which a movie is sent by a server and watched by one or several client, and Video On Demand (VOD) in which each client asks for its own stream.

- In passive streaming, the client has no control upon the server, and must subscribe for instance to a multicast group to receive the stream. This kind of streaming needs a server able to send data on a network with a protocol such as UDP multicast or RTP, for instance VLS or VLC stream output. The client side needs a player supporting such protocols, as VLC does.
- In Video On Demand, no specific "streaming server" is required, but the client must be able to read the stream in real time, instead of just downloading the whole video before one can start viewing it. A simple protocol such as HTTP is sufficient for Video On Demand, so you just have to put your movie on a web server, and use a clever player to view it in real time, VLC for instance ;-). However of course you will not be able to view movies in real time if your network is too slow, so you **MUST** check that the average bandwidth of your network link is higher than the average bandwidth of your movie (size / duration). If it is not the case, VLC will try to keep in real time as much as possible, so you will probably get only the audio track and no video.

2.2. VLC vs. VLS

Yes, both programs can be used to stream video, as explained in the VideoLAN HOWTO (<http://www.videolan.org/doc/>). The streaming features of each program are described on the streaming features (<http://www.videolan.org/streaming/features.html>) page.

Technically, there is an important difference:

- VLC opens all the system layers of the input stream, regenerate them all and then stream the result on the network or write it to a file. So VLC is good at streaming untrusted video and/or audio sources, like the video files found on the Internet and/or produced by non-professional software. VLC implements many muxers/demuxers (ps, ts, avi, ogg, mp4, ...) and many codecs, which allows to convert encapsulation formats and/or transcode an input stream on-the-fly ! VLC also has nice graphical interfaces.
- VLS only opens the highest system layers of the input stream and only has PS and TS demuxers. So VLS is good at streaming from trusted video and/or audio sources in PS or TS format produced by professional software or hardware like DVDs and DVB channels (satellite or digital terrestrial TV) because it only regenerate the system layers that need to be regenerated, and no more. VLS is specially well designed to stream multiplexed TS streams, for instance a whole DVB transponder. VLS only has a TS muxer, doesn't do transcoding and doesn't have graphical interfaces.

2.3. Is it not a waste of time to develop both?

To understand this situation, you must consider the history of VideoLAN. Before VLC's stream output, we had two very different programs:

- VLS, a program written in C++ running under Linux, Mac OS X and Windows only, that is basically a MPEG Transport Stream engine, with a very basic telnet interface, which was used as a server;
- VLC, a multi-platform program written in C, that implements demuxers, codecs, video and audio outputs and graphical interfaces, which was used as a client only.

In september 2002, some VLC developers had the idea of taking advantage of the multiple demuxers and codecs implemented in VLC to build a Stream Output whose ultimate goal was to be able to do transcoding. They wrote a stream output for VLC, that was released with VLC 0.5.0 in late January 2003. Introduced with the 0.8.0 release, VLC is able to transcode to any format it can read. Furthermore, starting with the 0.7.x series, VLC is able to stream multiple sources with one instance. This can be controlled with the VideoLAN (Media) Manager (VLM), which can be accessed through the telnet interface only. The http interface will be supported in future releases.

But what is more important is that VLS and VLC developers are not the same people, and that they are free to write the software they prefer! That is how free software runs, and it has shown in the past that it was a good engine for innovation and enhancement.

3. Legal concerns

3.1. May I use the VideoLAN logo?

You may freely use the VideoLAN logo using the following copyright:

Copyright (c) 1996-2003 VideoLAN. This logo or a modified version may be used or modified by anyone to refer to the VideoLAN project or any product developed by the VideoLAN team, but does not indicate endorsement by the project.

3.2. May I redistribute a piece of VideoLAN software?

You may distribute an original or modified version of a piece of VideoLAN software as long as you comply with its license terms. It is the GNU General Public License Version 2 (referred herein as GPL), and it is in the file named COPYING in our products. The easiest way to conform to the GPL is to accompany the product you want to distribute with its sources. For example, if you plan to distribute the latest binary version of VLC, you should also include all the files listed on the VLC source code page (<http://www.videolan.org/vlc/download-sources.html>). You do not need to bother explaining where the sources are, but the sources have to share the same media as the products. There are other ways to comply with the GPL, but this should be the simplest because it does not rely on a contract.

Note: You do not need to ask the VideoLAN team the permission to do so!

3.3. Is libdvdcss legal?

The use and distribution of the libdvdcss library is controversial in a few countries such as the United States because of a law called the DMCA (Digital Millennium Copyright Act). If you are unsure about the legality of using and distributing this library in your country, please consult your lawyer.

Note: Beware: VLC media player binaries are distributed with the libdvdcss library included.

3.4. What about personal/commercial usage?

Some of the codecs distributed with VLC are patented and require you to pay royalties to their licensors. These are mostly the MPEG style codecs.

With many products the producer pays the license body (in this case MPEG LA (<http://www.mpegla.com>)) so the user (commercial or personal) does not have to take care of this. VLC (and ffmpeg and libmpeg2 which it uses in most of these cases) cannot do this because they are Free and Open Source implementations of these codecs. The software is not sold and therefore the end-user becomes responsible for complying to the licensing and royalty requirements. You will need to contact the licensor on how to comply to these licenses.

This goes for playing a DVD with VLC for your personal joy (\$2.50 one time payment to MPEG LA) as well as for using VLC for streaming a live event in MPEG-4 over the Internet.

4. Miscellaneous

4.1. How may I help VideoLAN?

You might either contribute time, material, or money. We are also always needing some translators. You will find all information you need on the contribute page (<http://www.videolan.org/contribute.html>).

4.2. Why are your mailing-lists and your website in english?

VideoLAN's developers come from all around the world and english is the only language they can use to communicate together. Although great care is given to the translation of VLC in various languages, maintaining translations of our website costs too much more time than we can afford.

4.3. What to do if I can't find an answer to my question here?

Have a look at the Wiki (<http://wiki.videolan.org/>). There is another FAQ, which answers more questions on using and compiling the VideoLAN applications. Technical terms on streaming and multimedia are discussed too.

Search the forums (<http://forum.videolan.org/>) for your question. There are many solutions to problems on using our programs.

If your question still was not answered, post it on the forums or mail a fitting mailing-list (<http://www.videolan.org/support/lists.html>). More information on support provided by the project or consulting companies can be found on the support page (<http://www.videolan.org/support/index.html>).