



CONTENT**ARMOR**

# ContentArmor Live Profiler v. 1.1

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## REVISION HISTORY

Version	Object	Date
1.0	Creation for product release 1.1	March 2022

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# 1 ABOUT THIS DOCUMENT

This document lists the open source software used in the release 1.1 of ContentArmor Live Profiler.

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CTPL	0.0.2	<a href="https://github.com/vit-vit/CTPL/blob/v.0.0.2/LICENSE">https://github.com/vit-vit/CTPL/blob/v.0.0.2/LICENSE</a>	<a href="https://github.com/vit-vit/CTPL/tree/v.0.0.2">https://github.com/vit-vit/CTPL/tree/v.0.0.2</a>
FFmpeg	5.0	<a href="https://www.ffmpeg.org/legal.html">https://www.ffmpeg.org/legal.html</a>	<a href="https://www.ffmpeg.org/">https://www.ffmpeg.org/</a>
glib	2.0	<a href="https://gitlab.gnome.org/GNOME/gtk/-/blob/main/COPYING">https://gitlab.gnome.org/GNOME/gtk/-/blob/main/COPYING</a>	<a href="https://www.gtk.org/">https://www.gtk.org/</a>
glibc	2.27-3	<a href="https://www.gnu.org/software/libc/libc.html">https://www.gnu.org/software/libc/libc.html</a>	<a href="http://ftp.gnu.org/gnu/glibc/">http://ftp.gnu.org/gnu/glibc/</a>
gstreamer	1.0	<a href="https://gstreamer.freedesktop.org/documentation/frequently-asked-questions/licensing.html?gi-language=c">https://gstreamer.freedesktop.org/documentation/frequently-asked-questions/licensing.html?gi-language=c</a>	<a href="https://gstreamer.freedesktop.org/documentation/index.html?gi-language=c">https://gstreamer.freedesktop.org/documentation/index.html?gi-language=c</a>
libdash	Stable_3_0	<a href="https://github.com/bitmovin/libdash#license">https://github.com/bitmovin/libdash#license</a>	<a href="https://github.com/bitmovin/libdash">https://github.com/bitmovin/libdash</a>
OpenSSL	1.0.2n	<a href="https://www.openssl.org/source/license.html">https://www.openssl.org/source/license.html</a>	<a href="https://www.openssl.org">https://www.openssl.org</a>
tar	1.2.11	<a href="https://repo.or.cz/libtar.git/blob/HEAD:/COPYRIGHT">https://repo.or.cz/libtar.git/blob/HEAD:/COPYRIGHT</a>	<a href="https://repo.or.cz/libtar.git">https://repo.or.cz/libtar.git</a>
zlib	1.2.11	<a href="http://www.zlib.net/zlib_license.html">http://www.zlib.net/zlib_license.html</a>	<a href="http://www.zlib.net">http://www.zlib.net</a>

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The primary author is:

.

Tim Mattox  
Department of Electrical and Computer Engineering  
University of Kentucky  
Lexington, KY 40506-0046  
email: [tmattox@engr.uky.edu](mailto:tmattox@engr.uky.edu)  
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### 3.2.1 Code linking

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Version 2.0, January 2004

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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

**6.** As an exception to the Sections above, you may also combine or link a “work that uses the Library” with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer’s own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

- a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable “work that uses the Library”, as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)
- b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user’s computer system, rather



than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

- c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.
- d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
- e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the “work that uses the Library” must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

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## **3.4 Glib**

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Version 2, June 1991

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[This is the first released version of the library GPL. It is  
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The reason we have a separate public license for some libraries is that they blur the distinction we usually make between modifying or adding to a program and simply using it. Linking a program with a library, without changing the library, is in some sense simply using the library, and is analogous to running a utility program or application program. However, in a textual and legal sense, the linked executable is a combined work, a derivative of the original library, and the ordinary General Public License treats it as such.

Because of this blurred distinction, using the ordinary General Public License for libraries did not effectively promote software sharing, because most developers did not use the libraries. We concluded that weaker conditions might promote sharing better.

However, unrestricted linking of non-free programs would deprive the users of those programs of all benefit from the free status of the libraries themselves. This Library General Public License is intended to permit developers of non-free programs to use free libraries, while preserving your freedom as a user of such programs to change the free libraries that are incorporated in them. (We have not seen how to achieve this as regards changes in header files, but we have achieved it as regards changes in the actual functions of the Library.) The hope is that this will lead to faster development of free libraries.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, while the latter only works together with the library.

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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The

threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also compile or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

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b) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

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For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

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<signature of Ty Coon>, 1 April 1990

Ty Coon, President of Vice

That's all there is to it!

## 3.5 Glibc

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Version 2, June 1991

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### 3.6.2 Licensing of code contributed to GStreamer itself

- ▶ GStreamer is a plugin-based framework licensed under the LGPL. The reason for this choice in licensing is to ensure that everyone can use GStreamer to build applications using licenses of their choice.
- ▶ To keep this policy viable, the GStreamer community has made a few licensing rules for code to be included in GStreamer's core or GStreamer's official modules, like our plugin packages. We require that all code going into our core packages is LGPL. For the plugin code, we require the use of the LGPL for all plugins written from scratch or linking to external libraries. The only exception to this is when plugins contain older code under the BSD and MIT license. They can use those licenses instead and will still be considered for inclusion, we do prefer that all new code written though is at least dual licensed LGPL. We do not accept GPL code to be added to our plugins modules, but we do accept LGPL-licensed plugins using an external GPL library for some of our plugin modules. The reason we demand plugins be licensed under the LGPL, even when they are using a GPL library, is that other developers might want to use the plugin code as a template for plugins linking to non-GPL libraries. We also accept dual licensed plugins for inclusion as long as one of the licenses offered for dual licensing is the LGPL.
- ▶ We also do not allow plugins under any license into our core,base or good packages if they have known patent issues associated with them. This means that even a contributed LGPL/MIT licensed implementation of something which there is a licensing body claiming fees for, those plugins would need to go into our `gst-plugins-ugly` module.
- ▶ All new plugins, regardless of licensing or patents tend to have to go through a period in our incubation module, `gst-plugins-bad` before moving to `ugly`, `base` or `good`.

### 3.6.3 Licensing of applications using GStreamer

- ▶ The licensing of GStreamer is no different from a lot of other libraries out there like GTK+ or glibc: we use the [LGPL](#). What complicates things with regards to GStreamer is its plugin-based design and the heavily patented and proprietary nature of many multimedia codecs. While patents on software are currently only allowed in a small minority of world countries (the US and Australia being the most important of those), the problem is that due to the central place the US hold in the world economy and the computing industry, software patents are hard to ignore wherever you are.
- ▶ Due to this situation, many companies, including major GNU/Linux distributions, get trapped in a situation where they either get bad reviews due to lacking out-of-the-box media playback capabilities (and attempts to educate the reviewers have met with little success so far), or go against their own - and the free software movement's - wish to avoid proprietary software. Due to competitive pressure, most choose to add some support. Doing that through pure free software solutions would have them risk heavy litigation and punishment from patent owners. So when the decision is made to include support for patented codecs, it leaves them the choice of either using special proprietary applications, or try to integrate the support for these codecs through proprietary plugins into the multimedia infrastructure provided by GStreamer. Faced with one of these two evils the GStreamer community of course prefer the second option.

- ▶ The problem which arises is that most free software and open source applications developed use the GPL as their license. While this is generally a good thing, it creates a dilemma for people who want to put together a distribution. The dilemma they face is that if they include proprietary plugins in GStreamer to support patented formats in a way that is legal for them, they do risk running afoul of the GPL license of the applications. We have gotten some conflicting reports from lawyers on whether this is actually a problem, but the official stance of the FSF is that it is a problem. We view the FSF as an authority on this matter, so we are inclined to follow their interpretation of the GPL license.
- ▶ So what does this mean for you as an application developer? Well, it means you have to make an active decision on whether you want your application to be used together with proprietary plugins or not. What you decide here will also influence the chances of commercial distributions and Unix vendors shipping your application. The GStreamer community suggest you license your software using a license that will allow non-free, patent implementing or non-GPL compatible plugins to be bundled with GStreamer and your applications, in order to make sure that as many vendors as possible go with GStreamer instead of less free solutions. This in turn we hope and think will let GStreamer be a vehicle for wider use of free formats like the [Xiph.org](http://Xiph.org) formats.
- ▶ If you do decide that you want to allow for non-free plugins to be used with your application you have a variety of choices. One of the simplest is using licenses like LGPL, MPL or BSD for your application instead of the GPL. Or you can add a exceptions clause to your GPL license stating that you except GStreamer plugins from the obligations of the GPL.
- ▶ A good example of such a GPL exception clause would be, using the Totem video player project as an example:
  - ▶ The developers of the Totem video player hereby grants permission for non-GPL compatible GStreamer plugins to be used and distributed together with GStreamer and Totem. This permission is above and beyond the permissions granted by the GPL license by which Totem is covered. If you modify this code, you may extend this exception to your version of the code, but you are not obligated to do so. If you do not wish to do so, delete this exception statement from your version.
- ▶ Our suggestion among these choices is to use the LGPL license, as it is what resembles the GPL most and it makes it a good licensing fit with the major GNU/Linux desktop projects like GNOME and KDE. It also allows you to share code more openly with projects that have compatible licenses. As you might deduce, pure GPL licensed code without the above-mentioned clause is not re-usable in your application under a GPL plus exception clause unless you get the author of the pure GPL code to allow a relicensing to GPL plus exception clause. By choosing the LGPL, there is no need for an exception clause and thus code can be shared freely between your application and other LGPL using projects.
- ▶ We have above outlined the practical reasons for why the GStreamer community suggest you allow non-free plugins to be used with your applications. We feel that in the multimedia arena, the free software community is still not strong enough to set the agenda and that blocking non-free plugins to be used in our infrastructure hurts us more than it hurts the patent owners and their ilk.
- ▶ This view is not shared by everyone. The [Free Software Foundation](http://Free Software Foundation) urges you to use an unmodified GPL for your applications, so as to push back against the temptation to use non-free plug-ins. They say that since not everyone else has the strength to reject them because they are unethical, they ask your help to give them a legal reason to do so.

#### Licensing your applications and plugins for use with GStreamer

This document is the result of many discussions both inside the GStreamer community and with stakeholders outside the community. It includes the results of discussions with lawyers, including official representatives of the FSF, to help us ensure we cover the legal issues as correctly as possible. This does not mean the FSF or anyone else endorse the opinions in this page. The opinions only represent the rough consensus of the GStreamer community. The advice contained in here is meant as information and guidance for people developing free and open source software using the GStreamer library, so they are



aware of the consequences of their choices. People developing proprietary software or people distributing GStreamer might also find this document useful in order to understand how GStreamer works in a licensing context.

This text is also meant to explain a little about our thinking in regards to how to deal with the problem of software patents which is an even bigger pain in the field of multimedia than other fields of programming.

For more information on licensing you can check out our legal FAQ

### Licensing of code contributed to GStreamer itself

GStreamer is a plugin-based framework licensed under the LGPL. The reason for this choice in licensing is to ensure that everyone can use GStreamer to build applications using licenses of their choice.

To keep this policy viable, the GStreamer community has made a few licensing rules for code to be included in GStreamer's core or GStreamer's official modules, like our plugin packages. We require that all code going into our core packages is LGPL. For the plugin code, we require the use of the LGPL for all plugins written from scratch or linking to external libraries. The only exception to this is when plugins contain older code under the BSD and MIT license. They can use those licenses instead and will still be considered for inclusion, we do prefer that all new code written though is at least dual licensed LGPL. We do not accept GPL code to be added to our plugins modules, but we do accept LGPL-licensed plugins using an external GPL library for some of our plugin modules. The reason we demand plugins be licensed under the LGPL, even when they are using a GPL library, is that other developers might want to use the plugin code as a template for plugins linking to non-GPL libraries. We also accept dual licensed plugins for inclusion as long as one of the licenses offered for dual licensing is the LGPL.

We also do not allow plugins under any license into our core,base or good packages if they have known patent issues associated with them. This means that even a contributed LGPL/MIT licensed implementation of something which there is a licensing body claiming fees for, those plugins would need to go into our `gst-plugins-ugly` module.

All new plugins, regardless of licensing or patents tend to have to go through a period in our incubation module, `gst-plugins-bad` before moving to `ugly`, `base` or `good`.

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Due to this situation, many companies, including major GNU/Linux distributions, get trapped in a situation where they either get bad reviews due to lacking out-of-the-box media playback capabilities (and attempts to educate the reviewers have met with little success so far), or go against their own - and the free software movement's - wish to avoid proprietary software. Due to competitive pressure,

most choose to add some support. Doing that through pure free software solutions would have them risk heavy litigation and punishment from patent owners. So when the decision is made to include support for patented codecs, it leaves them the choice of either using special proprietary applications, or try to integrate the support for these codecs through proprietary plugins into the multimedia infrastructure provided by GStreamer. Faced with one of these two evils the GStreamer community of course prefer the second option.

The problem which arises is that most free software and open source applications developed use the GPL as their license. While this is generally a good thing, it creates a dilemma for people who want to put together a distribution. The dilemma they face is that if they include proprietary plugins in GStreamer to support patented formats in a way that is legal for them, they do risk running afoul of the GPL license of the applications. We have gotten some conflicting reports from lawyers on whether this is actually a problem, but the official stance of the FSF is that it is a problem. We view the FSF as an authority on this matter, so we are inclined to follow their interpretation of the GPL license.

So what does this mean for you as an application developer? Well, it means you have to make an active decision on whether you want your application to be used together with proprietary plugins or not. What you decide here will also influence the chances of commercial distributions and Unix vendors shipping your application. The GStreamer community suggest you license your software using a license that will allow non-free, patent implementing or non-GPL compatible plugins to be bundled with GStreamer and your applications, in order to make sure that as many vendors as possible go with GStreamer instead of less free solutions. This in turn we hope and think will let GStreamer be a vehicle for wider use of free formats like the Xiph.org formats.

If you do decide that you want to allow for non-free plugins to be used with your application you have a variety of choices. One of the simplest is using licenses like LGPL, MPL or BSD for your application instead of the GPL. Or you can add a exceptions clause to your GPL license stating that you except GStreamer plugins from the obligations of the GPL.

A good example of such a GPL exception clause would be, using the Totem video player project as an example:

The developers of the Totem video player hereby grants permission for non-GPL compatible GStreamer plugins to be used and distributed together with GStreamer and Totem. This permission is above and beyond the permissions granted by the GPL license by which Totem is covered. If you modify this code, you may extend this exception to your version of the code, but you are not obligated to do so. If you do not wish to do so, delete this exception statement from your version.

Our suggestion among these choices is to use the LGPL license, as it is what resembles the GPL most and it makes it a good licensing fit with the major GNU/Linux desktop projects like GNOME and KDE. It also allows you to share code more openly with projects that have compatible licenses. As you might deduce, pure GPL licensed code without the above-mentioned clause is not re-usable in your application under a GPL plus exception clause unless you get the author of the pure GPL code to allow a relicensing to GPL plus exception clause. By choosing the LGPL, there is no need for an exception clause and thus code can be shared freely between your application and other LGPL using projects.

We have above outlined the practical reasons for why the GStreamer community suggest you allow non-free plugins to be used with your applications. We feel that in the multimedia arena, the free software

community is still not strong enough to set the agenda and that blocking non-free plugins to be used in our infrastructure hurts us more than it hurts the patent owners and their ilk.

This view is not shared by everyone. The Free Software Foundation urges you to use an unmodified GPL for your applications, so as to push back against the temptation to use non-free plug-ins. They say that since not everyone else has the strength to reject them because they are unethical, they ask your help to give them a legal reason to do so.

## 3.7 Libdash

libdash is open source available and licensed under LGPL:

“This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version. This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details. You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA”

As libdash is licensed under LGPL, changes to the library have to be published again to the open-source project. As many user and companies do not want to publish their specific changes, libdash can be also relicensed to a commercial license on request. Please contact sales@bitmovin.com to provide you an offer.

## 3.8 OpenSSL

### LICENSE ISSUES

The OpenSSL toolkit stays under a double license, i.e. both the conditions of the OpenSSL License and the original SSLeay license apply to the toolkit.

See below for the actual license texts.

### 3.8.1 OpenSSL License

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This product includes cryptographic software written by Eric Young ([eay@cryptsoft.com](mailto:eay@cryptsoft.com)). This product includes software written by Tim Hudson ([tjh@cryptsoft.com](mailto:tjh@cryptsoft.com)).

### 3.8.2 SSLeay License

Copyright (C) 1995-1998 Eric Young ([eay@cryptsoft.com](mailto:eay@cryptsoft.com))  
All rights reserved.

This package is an SSL implementation written by Eric Young ([eay@cryptsoft.com](mailto:eay@cryptsoft.com)).

The implementation was written so as to conform with Netscapes SSL.

This library is free for commercial and non-commercial use as long as the following conditions are aheared to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, lhash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson ([tjh@cryptsoft.com](mailto:tjh@cryptsoft.com)).

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## 3.9 Tar

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### 3.10 Zlib

zlib.h - interface of the 'zlib' general purpose compression library  
version 1.2.11, January 15th, 2017

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Jean-loup Gailly  
jloup@gzip.org

Mark Adler  
madler@alumni.caltech.edu

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