

GAP package licensing

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I. Notes on choosing a License for the Distribution of Your Package

When you write a GAP package (or any other software), you generally own the copyright to that software. (Exceptions are “work-for-hire” situations.) Copyright law is complicated, and I am not a lawyer, but the basics world-wide appear to be fairly uniform (at least for most countries). For example, under US copyright law, the rights controlled by the copyright holder are (§1-106, Title 17, U.S. Code):

1. The exclusive right to copy the work;
2. The exclusive right to make derivative works;
3. The exclusive right to distribute the work;
4. The exclusive right to perform the work; and
5. The exclusive right to display the work.

Possibly these may be even stronger in the EU.

Presently, the GAP Council advises all package authors to make clear in the documentation of their package the legal basis on which it is being distributed to users, i.e., a license. It is possible that GAP will soon *require* all package authors to license their code. As indicated, these are the terms which you give others to copy, modify and redistribute your software (of which you presumably own the copyright) for their purposes.

Some possibilities are listed below.

1. Public domain. This essentially means you give up your copyright and allow anyone to do anything with your code. including publishing it under their own name (which would be unethical of course but not illegal).

To do this, simply say:

```
I <author> hereby release all code in my <pkg> package into
the public domain. <date>
```

Technically, this is not a license, since you are simply giving up the legal rights mentioned above.

2. New (or “modified”) BSD: This allows redistribution and use in source and binary forms, with or without modification, provided that the copyright notice is preserved and the author(s) are not used for endorsement purposes.

To do this, under your copyright notice, simply copy and paste the template <http://www.opensource.org/licenses/bsd-license.php> and fill out the appropriate blanks.

If you wish to make it easy for companies to use your code, this is a good license to choose.

3. The GPL: GAP itself is distributed under the Gnu Public License version 2, a popular “free software” license which allows users to redistribute it under the same terms, and requires that any software which incorporates GAP or a modified version of GAP (technically, any “derived work”) also be distributed under those terms.

We would encourage you to consider the GPL for your packages, and in fact “GPL version 2 or later (at your preference)” is the most flexible. This allows users of your package (e.g., GAP) to relicense under GPLv3 without worrying about compatibility issues.

To do this, under your copyright notice, place the following:

```
This code is released under the GPL version 2 or later
(at your preference). For the text of the GPL, please see
http://www.gnu.org/licenses/.
```

Of course, this assumes that that link will be valid years from now, which may or may not be the case. To be legally precise, you should also place a file called COPYING in your package containing <http://www.gnu.org/licenses/old-licenses/gpl-2.0.txt> (for version 2) and <http://www.gnu.org/licenses/gpl.txt> (for version 3).

GPLv3 is incompatible with version 2, and no GPLv2-incompatible code can be distributed with GAP. However, you can release a (separately distributed) GAP package under GPLv3 if you wish.

Technically, companies can still use your code for a commercial product under the GPLv2 or GPLv3 (think of SuSE or other linux distribution companies), but in practical terms it appears to be relatively rare (at least, at the time of this writing in 2007). If you want to restrict your code from being used commercially, choosing the GPL will practically do that, if not legally.

4. You might wish to be more restrictive (for instance, forbidding redistribution for profit, or allowing for any redistribution but forbidding any modifications). The SmallGroups library is an example of a package with such a custom-made license. You can add a custom-made license to your README or to a file called `license.txt`, for example.

II. A legal opinion about GAP packages

Here is a quotation from the GPL FAQ on the Free Software Foundation website which is relevant to this issue.

What is the difference between “mere aggregation” and “combining two modules into one program”?

Mere aggregation of two programs means putting them side by side on the same CD-ROM or hard disk. We use this term in the case where they are separate programs, not parts of a single program. In this case, if one of the programs is covered by the GPL, it has no effect on the other program.

Combining two modules means connecting them together so that they form a single larger program. If either part is covered by the GPL, the whole combination must also be released under the GPL—if you can’t, or won’t, do that, you may not combine them.

What constitutes combining two parts into one program? This is a legal question, which ultimately judges will decide. We believe that a proper criterion depends both on the mechanism of communication (exec, pipes, rpc, function calls within a shared address space, etc.) and the semantics of the communication (what kinds of information are interchanged).

If the modules are included in the same executable file, they are definitely combined in one program. If modules are designed to run linked together in a shared address space, that almost surely means combining them into one program.

By contrast, pipes, sockets and command-line arguments are communication mechanisms normally used between two separate programs. So when they are used for communication, the modules normally are separate programs. But if the semantics of the communication are intimate enough, exchanging complex internal data structures, that too could be a basis to consider the two parts as combined into a larger program.

- <http://www.gnu.org/licenses/gpl-faq.html#MereAggregation>
(this FAQ entry is copyright the FSF)

References:

1. The Open Source Initiative has investigated free licenses. A list of OSI-approved licenses can be found at <http://www.opensource.org/licenses/>.
2. Mark Webbink, Senior Vice President and General Counsel of Red Hat, Inc, has written an excellent article explaining the basics at: "Understanding Open Source Software" New South Wales Society for Computers and the Law Journal, March 2003, http://www.nswscl.org.au/journal/51/Mark_H_Webbink.html.
3. The Free Software Foundation has a lot more information about the GPL and other licenses: <http://www.gnu.org/licenses/>.