

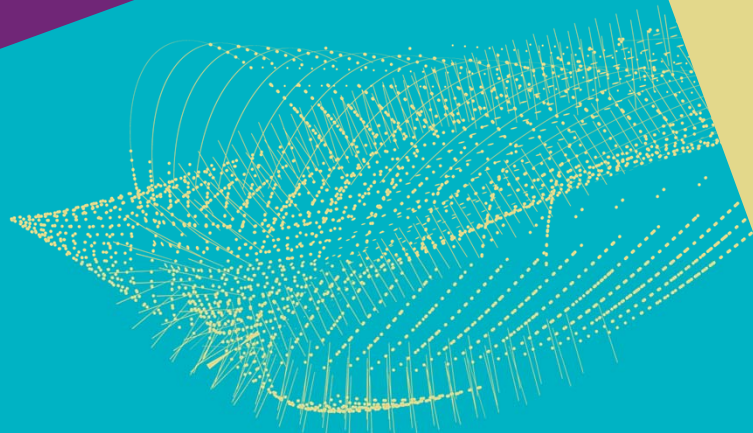


ESCAPE WOSSL

# Collaborating on software

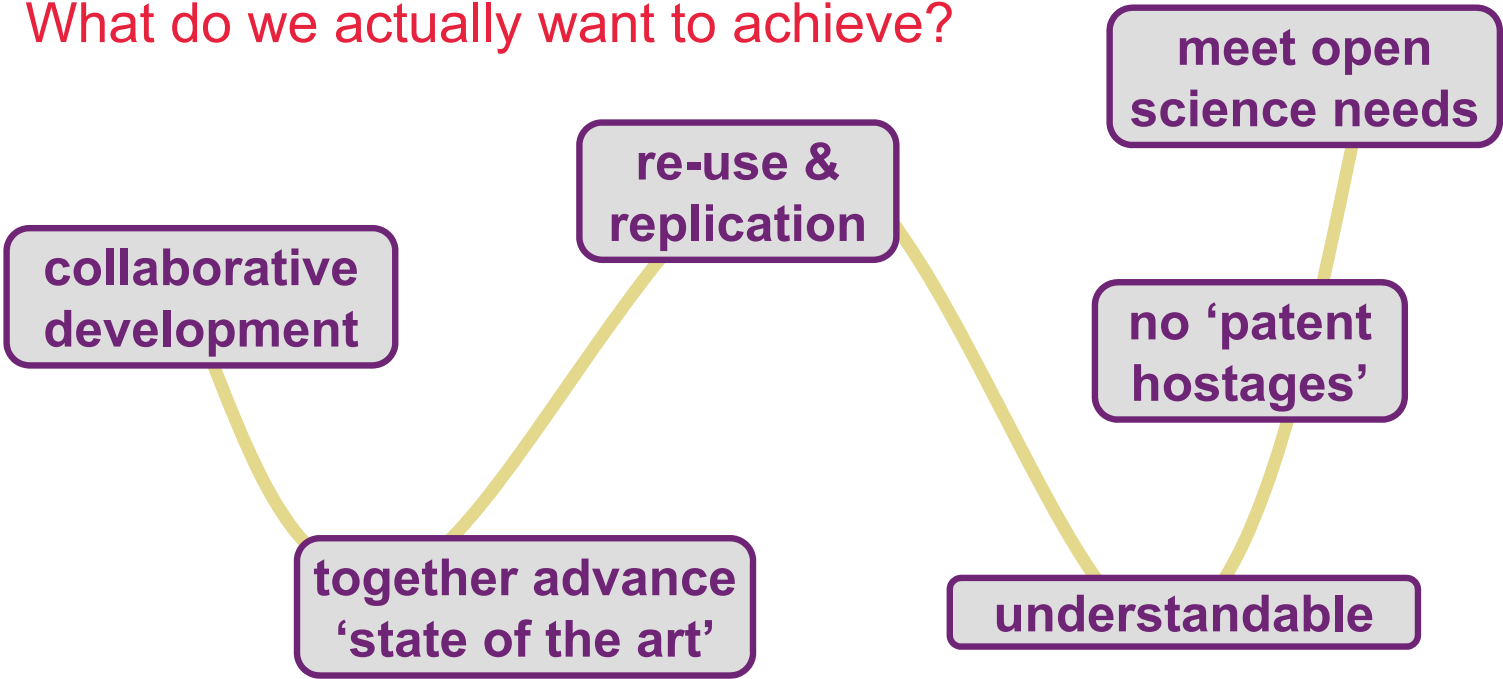
*exploring the framework of copyright  
and licensing in some projects and consortia*

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July 2020



code and source files without a license means  
**‘all rights reserved’**

# What do we actually want to achieve?



# A range of Open Source licenses to choose from

## BSD family

compact licenses  
(BSD 3-clause,  
BSD 2-clause, MIT)

re-use friendly no patent protection

contributions unspecified

## Apache-- family (GEANT4, EDG)

re-use friendly no patent protection

contributions auto-imported

## Apache family (Apache 2.0)

re-use friendly patent protection

contributions auto-imported

## Mozilla family (MPL, Perl Artistic)

re-use friendly patent protection

contributions unspecified

## copyleft family (GPL)

re-use unfriendly 3.0+patent protection

contributions auto-imported: N/A

## lesser copyleft (LGPL)

re-use unfriendly no patent protection

contributions auto-imported: N/A

# Listing contributors

‘a successful community has many contributors!’

‘... but listing them all will then be a challenge!’

- co-shipped ‘contributors’ file, or a web page listing contributors
- “members of the XXX consortium/collaboration” + a web page is commonly used
- some projects list main contributors and have just given up
- probably worst thing to do is to also accept changes *in the copyright license statement itself* (the “SymPy” case)

‘right to be identified as an author’ is a ‘moral’ right you cannot get rid of  
- but it can be (partially) waived, e.g. as part of employment, making it possible for an organisation to enter into an EC grant agreement  
Economic rights for ‘work for hire’ anyway typically go to the employer ...

# Dealing with contributors and joint development

## Amalgamate (all or most) IPR in one entity

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- easy to re-licensing under new terms - esp. if origin can no longer be contacted
- need to transfer copyrights *and* patent rights explicitly
- you need ...  
... a receiving entity ☺

## Collect contributors in one consortium, with IPR remaining with creators

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- participants requirements in consortium agreement (such as the EC's MGA)
- contributions implicitly managed
- will need a contributors list  
`'Copyright (c) Members of the EGEE Collaboration. 2006-2010. See http://eu-egee.org/partners/ for details on the copyright holders.'`

## Maintain list of all contributions online, in-file, or auto-generated

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- the IPR *must* be dedeed by each contributor
- through license agreement, with contributor agreement, or through both
  - GPL escapes this by 'virality'
- will need to maintain list
- harder to re-license

# Sure about your choice of license for the future, and forever after?

Yes

You are fine, and all three models will work for you

Not quite sure ...

- unless you put the IP in **one entity** - or can contact and get agreement from all IP owners - you *cannot* quite go from a 'full copyleft' (GPL) license to a more liberal license
- you can move from a liberal to a less liberal (and even to a copyleft!) license **for new code only**, *if* the initial license was liberal

## In an EC project context ...

‘Model Grant Agreement’ covers a *lot* of ground (and is kind-of a ‘given’)

each beneficiary owns its own generated foreground (& retains rights to own background)

individual employees should (preferably & usually) transfer ownership to the partner org

they can nevertheless exercise rights over foreground in a manner compatible with their obligations<sup>5</sup>. It is therefore advisable that each beneficiary assesses the potential personal rights of their personnel and, should these people be entitled to ownership, **reach an agreement for the transfer of ownership**. The agreement should take preferably (and if possible) the format of an assignment, but it could also be a licence agreement (with appropriate rights to sub-license).

pretty strong limits on *exclusive* licensing to third parties (but open source licenses are perfectly OK)

in practice, your consortium agreement will cover the specifics

[https://www.iprhelphdesk.eu/sites/default/files/newsdocuments/Fact-Sheet-Foreground-in-FP7-Projects\\_0.pdf](https://www.iprhelphdesk.eu/sites/default/files/newsdocuments/Fact-Sheet-Foreground-in-FP7-Projects_0.pdf)



# Outside of a grant agreement, you need an alternative

typically forgotten – some LHC experiments (e.g. ATLAS) are completely silent on this  
(and the CERN Convention, in II.1, does not help in case of IP from contributors)

**and e.g. LHCb collaboration addresses it implicitly ...  
... but locks it within the collaboration**

## **Matters for prior agreement**

7.2. Title to any patentable invention or any know-how arising from the preparation or execution of the experiment is vested in the Collaborating Institution(s) which is/are its author(s), who shall decide on the taking of measures, at its/their own expense, to protect such invention or know-how and who shall grant each Collaborating Institution and CERN a free, perpetual and irrevocable license to use such invention or know-how for its own purposes. Such license does not include the right to sub-license.

# Dealing with software patents in licenses

‘the LHCb MoU already mentioned patents, but these were on the detector ...’

Somewhat less of a problem in Europe than the US, but software that is used to (~) create material effects may still be granted a patent (and cause a lot of debate in the process ...) ... like software for embedded control systems that enable industrial applications ... or detectors.

Some licenses try to address that by voiding themselves if the licensee institutes patent litigation involving (parts of) the work against anyone else

- Apache 2.0, GPL 3.0, Perl Artistic
- while others are silent on the issue

# We know patents can be for anything ...

*... usually for mutual litigation,  
but have been used against  
open source (although rejected)*

Some licenses try to address that  
by voiding themselves if the licensee  
institutes patent litigation involving  
(parts of) the work against anyone else:

- Apache 2.0, GPL 3.0, Perl Artistic

(11) Application No. <b>AU 2001100012 A4</b>			
(19) <b>AUSTRALIAN PATENT OFFICE</b>			
(54) Title	<b>Circular transportation facilitation device</b>		
(21) Application No:	2001100012	(22) Date of Filing:	2001.05.24
(43) Publication Date:	2001.08.02		
(71) Applicant(s)	John Keogh		
(72) Inventor(s)	Keogh, John Michael		
(74) Agent/Attorney	Sandercock Cowie 69 Robinson Street Dandenong Victoria AU		

Australian (light-weight) Innovation Patent #2001100012,  
from 2001, since voided after international upheaval ☹  
<http://pericles.ipaustralia.gov.au/ols/auspat/applicationDetails.do>  
plus the 2001 Ig Nobel prize, of course!

# Beyond projects – managing a community

A (good) community brings contributions to software

- reporting (small) bugs with suggestions for fixes
- patches and merge requests
- core contributions with new functionality
- supplementary packages that could be co-distributed with the core

and your contributors may not necessarily want licensing ‘overhead’

# Dealing with contributions

Many licenses incorporate a 'contributions' clause

- Apache 2.0
- EU DataGrid (which drafted its own license just for this in 2001)
- GEANT4 (identical to EU DataGrid, given its CERN background)

**5. Submission of Contributions.** Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

Source: EU DataGrid License, via <https://opensource.org/>

4. You are under no obligation to provide anyone with any bug fixes, patches, upgrades or other modifications, enhancements or derivatives of the features, functionality or performance of this software that you may develop. However, if you publish or distribute your modifications, enhancements or derivative works without contemporaneously requiring users to enter into a separate written license agreement, then you are deemed to have granted participants in the EU DataGrid a worldwide, non-exclusive, royalty-free, perpetual license to install, use, reproduce, display, modify, redistribute and sub-license your modifications, enhancements or derivative works, whether in binary or source code form, under the license conditions stated in this list of conditions.

Exploring licensing frameworks for collaborative software

# GEANT4 clause – a bit larger

## Implicit licensing by contributors – unless otherwise stated

4. You are under no obligation to provide anyone with any modifications of this software that you may develop, including but not limited to bug fixes, patches, upgrades or other enhancements or derivatives of the features, functionality or performance of this software. However, if you publish or distribute your modifications without contemporaneously requiring users to enter into a separate written license agreement, then you are deemed to have granted all Members and all Copyright Holders of the Geant4 Collaboration a license to your modifications, including modifications protected by any patent owned by you, under the conditions of this license.

*whether you trust this enough is a risk analysis. On the tin, it says it's fine - and: it has worked great for the research community 😊*

Source: <https://geant4.web.cern.ch/license/LICENSE.html>

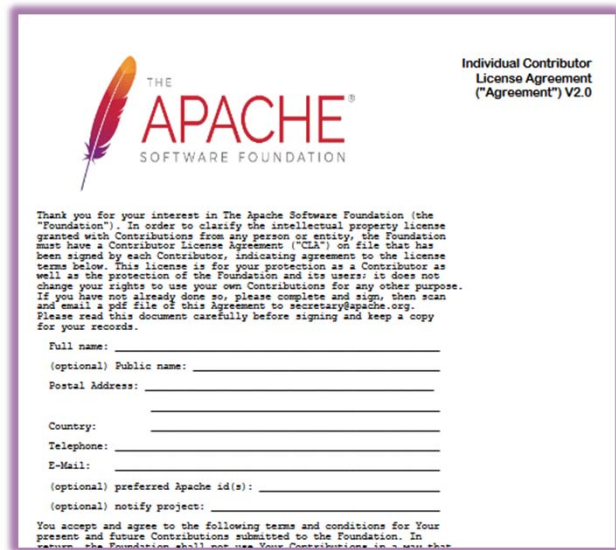
# Contributor License Agreements

<http://apache.org/licenses/icla.pdf>

Apache Foundation is  
'better safe than sorry'

- contributors retain their IPR
- formally release under the license
- and a central entity (the Foundation) retains proof of that

*so you need a 'central' legal entity for this ...*



The image shows the top portion of the Apache Software Foundation Individual Contributor License Agreement (ICLA) form. It features the Apache logo (a feather) and the text 'THE APACHE SOFTWARE FOUNDATION'. To the right, it says 'Individual Contributor License Agreement ("Agreement") V2.0'. Below the logo, there is a paragraph of introductory text explaining the purpose of the agreement and the need for contributors to sign it. This is followed by a series of form fields for personal information: Full name, (optional) Public name, Postal Address, Country, Telephone, E-Mail, (optional) preferred Apache id(s), and (optional) notify project. At the bottom, there is a section for the contributor to accept and agree to the terms and conditions.

<https://www.apache.org/licenses/icla.pdf>

# Dealing with many contributors

When you have many contributors, you do get a long list

Source: from the GEANT4 web pages at

<https://geant4.web.cern.ch/license/LICENSE.html>

- common in projects because of jointly developed foreground, (example from FP7+H2020)

```
#  
# Copyright (c) Members of the EGEE Collaboration. 2006-2010.  
# See http://www.eu-egee.org/partners/ for details on the copyright  
# holders.  
#  
# Licensed under the Apache License, Version 2.0 (the "License");  
# you may not use this file except in compliance with the License.  
# You may obtain a copy of the License at
```

but also in successful communities

Source: from the GEANT4 web pages at

<https://geant4.web.cern.ch/license/LICENSE.html>

- And e.g. for the GEANT4 collaboration

## Geant4 Software License

Version 1.0, 28 June 2006

Copyright (c) Copyright Holders of the Geant4 Collaboration, 1994-2006.

See <http://cern.ch/geant4/license> for details on the copyright holders. All rights





# Request transfer (assignment) of software IP to a central place?

Transfer of (all transferable) rights is mainly important when

- you have many contributors
- and**
- you may desire to change license conditions later,
- or**
- when you want to publish your IP under multiple licences

*the Perl language reference implementation, and much of CPAN, is famously double-licensed under both GNU GPL as well as under the Perl Artistic License*

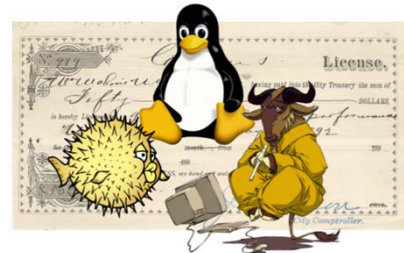
# What you should transfer (or hold) centrally

Software is more than just code, also the ‘branding’ is a unique feature

- when you install Eclipse, you probably want the ‘real’ IDE, not a fork
- as the ‘owner’ of a brand, you want forks to be non-confusing

Likely keep your ‘brand materials’ under a private exclusive license

- *and if you do release them under CC, at least pick CC-BY-NC-ND to prevent them from being made intentionally confusing*
- *BSD 3-clause include this for name of authors, but you want this probably more generally*



some of the few FOSS logos that can be re-mixed, see  
see <https://arstechnica.com/gadgets/2020/02/how-to-choose-an-open-source-license/>

# Open Source 'aggregation' foundations

If you have your own legal entity, it's easier to put it all there

Otherwise, there are some 'conservancies' or foundations to help manage your rights and your project, with naming, and such. Non-exhaustive sample:

- **Apache Foundation** is the most famous one  
<https://www.apache.org/foundation/how-it-works.html>
- **GEANT NLnet Commons Conservancy**  
(for those in the community, can also help manage sponsor funding)  
<https://wiki.geant.org/display/GREEN/Commons+Conservancy>
- **Linux Foundation**  
<https://www.linuxfoundation.org/projects/hosting/>

# FileSender

- 3-clause BSD, listing all contributors in the copyright line
- all rights assigned to the organisations (not individual employee)

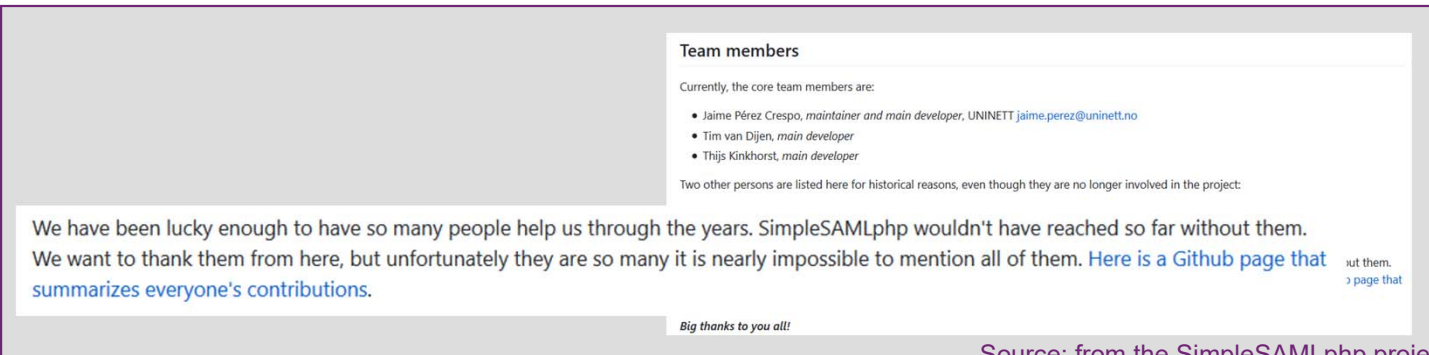
29 lines (23 sloc) | 1.51 KB

```
1  BSD 3-Clause License
2
3  Copyright (c) 2009-2017, AARNet, Belnet, HEAnet, SURFnet, UNINETT
4  All rights reserved.
5
6  Redistribution and use in source and binary forms, with or without
7  modification, are permitted provided that the following conditions are met:
8
9  * Redistributions of source code must retain the above copyright notice, this
10     list of conditions and the following disclaimer.
11
12  * Redistributions in binary form must reproduce the
```

<https://github.com/filesender/filesender/>

# SimpleSAMLphp

- LGPL 2.1 – to allow re-use of the library but force contributions back and prevent full incorporation into proprietary products
- Rights stay with the developers (who are usually under contract)
- List of contributors was too long already ...



The screenshot shows a section titled "Team members" with the following content:

Currently, the core team members are:

- Jaime Pérez Crespo, *maintainer and main developer*, UNINETT [jaime.perez@uninett.no](mailto:jaime.perez@uninett.no)
- Tim van Dijen, *main developer*
- Thijs Kinkhorst, *main developer*

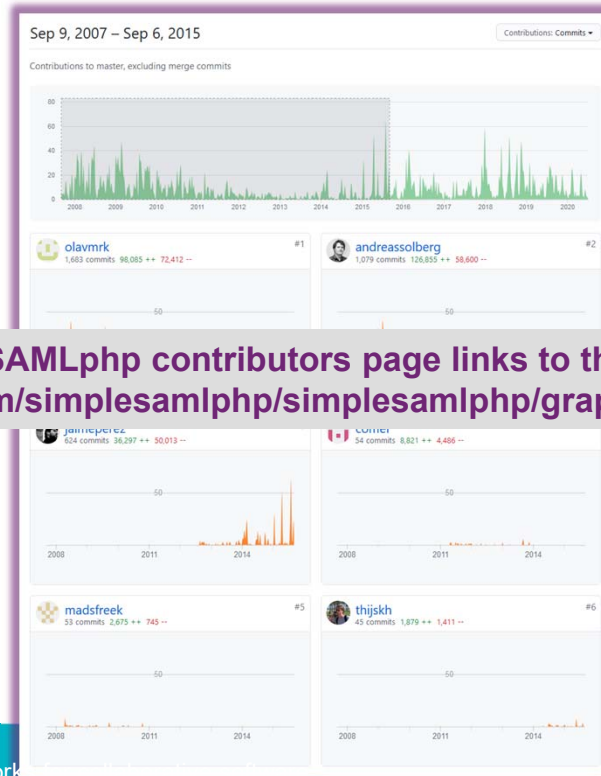
Two other persons are listed here for historical reasons, even though they are no longer involved in the project:

We have been lucky enough to have so many people help us through the years. SimpleSAMLphp wouldn't have reached so far without them. We want to thank them from here, but unfortunately they are so many it is nearly impossible to mention all of them. [Here is a Github page that summarizes everyone's contributions.](#)

*Big thanks to you all!*

Source: from the SimpleSAMLphp project

But github/gitlab  
do help here ...



SimpleSAMLphp contributors page links to this one  
<https://github.com/simplesamlphp/simplesamlphp/graphs/contributors>

# Have your pick ...

## Popular Licenses

The following OSI-approved licenses are popular, widely used, or have strong communities:

- Apache License 2.0
- BSD 3-Clause "New" or "Revised" license
- BSD 2-Clause "Simplified" or "FreeBSD" license
- GNU General Public License (GPL)
- GNU Library or "Lesser" General Public License (LGPL)
- MIT license
- Mozilla Public License 2.0
- Common Development and Distribution License
- Eclipse Public License version 2.0



from: <https://opensource.org/licenses>



“IANAL” + “IANYL” DISCLAIMER – I Am Not A Lawyer (and certainly not your lawyer 😊)

# Too many options?



Nikhef

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 <https://orcid.org/0000-0003-1026-6606>

