

Proposal for the application of a copyright and licensing regime for LHCb centrally managed software

This document sets out a proposal for the application of a software copyright statement and license conditions to the software comprising the centrally managed application software of the LHCb experiment.

Motivation

Software developed within the LHCb collaboration currently consists of several million lines of source code. However, up until now, this code has carried neither a copyright statement nor any form of license.

Given the many institutes in the collaboration contributing to the experiment software, there is a need to establish an effective and sustainable solution in respect of both attributing copyright notice to the software as well as applying a licensing regime.

LHCb software is a collaborative intellectual effort by its contributors, similar to that of the LHCb scientific publications. As CERN's experiment publications are currently typically published with the copyright statement "Copyright CERN for the benefit of the [XYZ] collaboration", there is a logic in applying the same approach to the software being published by CERN's experiments.

Scope

The scope of this document encompasses software centrally distributed within LHCb for the purpose of the experiment's data processing and simulation (see Appendix A). Any new software package to be centrally distributed within LHCb will be examined and approved by the LHCb Computing Project before being included into the scope of this document.

Copyright

Copyright can only be held by a legal entity (a person or a corporate entity). As the LHCb collaboration is not a legal entity, it has no recognized legal status and consequently cannot, as a collaboration, hold copyright. Instead, copyright lies with the individual authors of the software code or their employer. By transferring the copyrights in this code to a single entity acting for the benefit of the collaboration, LHCb will be able to ensure the efficient and effective management not only of the copyright in its software, but also the licensing regime(s) applying to its software. CERN, as the host lab of the LHCb experiment and as a recognized legal entity under international and national laws, has agreed (as it has with other LHC experiments) to act as this single copyright administering entity for the benefit of the LHCb collaboration. This arrangement will assist LHCb in achieving the widest possible dissemination and use of its software [1]. The copyright statement that will be applied to all LHCb centrally distributed application software shall therefore be:

“(C) Copyright CERN for the benefit of the LHCb collaboration”

Behind this statement is a recognition by CERN and the LHCb collaboration that CERN will handle all copyright and licensing matters pertaining to centrally distributed application software, and that this will take place in close consultation with the LHCb Collaboration Board (i.e. CERN will handle the day-to-day aspects of copyright and license management in respect of the software, but any changes in approach to copyright or the licensing of the software will be carried out in conjunction with input from the LHCb Collaboration Board).

This copyright statement proposal is fully in line with the intellectual property statements in the MoU between CERN and LHCb institutes (see Appendix B).

Although CERN will hold the copyright in the software, acknowledgements for contributions to the software will be available either from version control history of the software repository, or via an acknowledgement statement in the root directory of the software projects.

Licensing

The LHCb software depends on packages licensed under the “GNU General Public License (GPL)”. The terms of GPL require that derivative works be licensed under the same license that governs the original software when distributed. Accordingly, the LHCb software stack also needs to be licensed under the

“GNU General Public License v3” [2]

In the event part or all of the LHCb software needs to be made available under a different license, CERN, as the centralized copyright holder in the LHCb software, is best placed to manage this change, for the benefit of the LHCb collaboration. Under exceptional circumstances, the LHCb collaboration – acting through CERN as the copyright holder – can re-license or distribute the software under a dual license scheme, always taking into account dependencies and license compatibility.

The issue of compatibility of licenses will be managed by the LHCb Computing Project.

Appendix A: LHCb centrally distributed software

A non-exhaustive list of LHCb centrally distributed software as of April 2018 in the scope of this document is provided in Fig. 1.

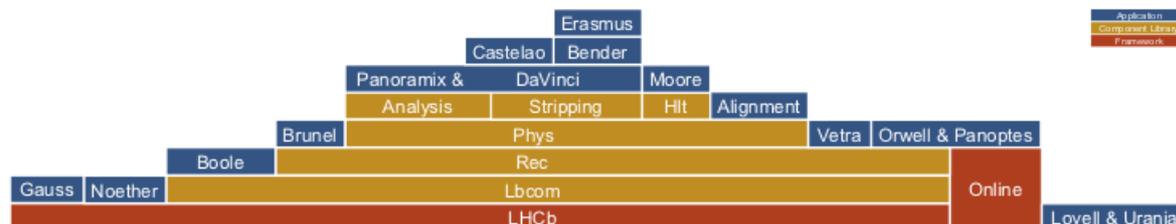


Figure 1 LHCb Centrally Distributed Software

Appendix B: Relevant extracts from the CERN General Conditions of Experiments [3]

Publication and use of data and knowledge

7.1. CERN is bound by its Convention to publish or otherwise make generally available the results of its experimental and theoretical work.

7.2. The Collaborating Institutions shall strive to publish any data and knowledge resulting from the experiment through Open Access journals. Where the copyright in an article shall be transferred to the publisher, each Collaborating Institution shall ensure that it has the necessary internal authorisations to approve such a transfer.

7.3. Subject to Articles 7.4 and 7.5, each Collaborating Institution and CERN as Host Laboratory shall be entitled to use any data and knowledge resulting from the Experiment for its own scientific non-military purposes.

Contribution of proprietary information

7.4. A Collaborating Institution contributing proprietary information to the Collaboration shall ensure that it has or has procured the rights to use, and to contribute to the Collaboration for use by the other Collaborating Institutions, such proprietary information for the execution of the Experiment. The term “use” shall include any integration, modification, enhancement and redistribution.

Where the use of proprietary information is subject to restrictions, the contributing Collaborating Institution shall disclose them in writing when making its contribution available to the Collaboration. The obligations defined in this article shall apply whether or not the proprietary information is pre-existing or developed in the execution of the Experiment, and whether or not it was developed individually or jointly with one or more other institution(s).

Use of proprietary information

7.5. The contribution by a Collaborating Institution of any proprietary information, including information protected by trademark, patent or copyright, shall not create any right in respect of such information for the other Collaborating Institutions, other than a free, irrevocable and non-exclusive licence to use such information in the execution of the Experiment.

Publication and disclosure of proprietary information

7.6. Subject to the intellectual property rights of the Collaborating Institutions having contributed the proprietary information and taking into account any potential for commercial exploitation, the Collaborating Institutions shall strive to publish and make publicly available all proprietary information contributed to the Collaboration. In particular, they shall consider making any software available under Open Source licence conditions.

Limitation of liability

7.7. The Collaborating Institutions provide no warranties or representations of any kind to each other. Each Collaborating Institution shall use the data and knowledge resulting from the Experiment and the proprietary information contributed to the Collaboration at its own risk.

The Collaborating Institutions shall have no liability to each other with respect to the subject matter of this Article 7.

References

- [1] <http://legal.web.cern.ch/licensing/software>
- [2] <https://www.gnu.org/licenses/gpl-3.0.txt>
- [3] <http://committees.web.cern.ch/Committees/GeneralConditions.pdf>