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Software Licensing

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Current Situation

- Currently ATLAS offline code has no license at all
 - This puts it in legal limbo regarding what can be done with it
 - It also has no clear copyright owner, so *de facto* it belongs to whoever wrote it
- This is mitigated by the fact that we don't openly share our code
 - Anything of mine that you steal isn't yours, even if I didn't write my name on it
- However, *the times they are a changin'*
 - More and more we recognise that community efforts to develop common software is the desirable, and probably necessary, model
 - Thus we need to be more open with our code
 - Thus we need to fix the copyright and licensing
 - Yeah, it's work, but it does not get any easier in the future...
 - And we have a fairly golden opportunity with the git migration to fix this now

Background Reading

- CERN Task Force report on software licensing
 - http://hepsoftwarefoundation.org/assets/OSL-TF_Final_Report-Main_Volume.pdf
- HSF report on software licensing
 - <https://github.com/HEP-SF/documents/raw/master/HSF-TN/2016-01/HSF-TN-2016-01.pdf>
- These reports are written with legal advice taken into account, but are not written in legalese

Copyright

- Grant of exclusive rights to use and distribution to the creator of a work
 - Restricts what anyone else can do with the work
 - Restrictions can be relaxed by adopting an *open source software* license
- Works without copyright are in the *public domain*
 - Anyone can do anything with such works, no restrictions can be imposed

Copyright Solution

- Copyright can only be held by a legal entity
 - Which ATLAS is not
- Can be assigned to CERN, for the experiment's benefit:
 - © Copyright 2000-2016 CERN, for the benefit of the ATLAS Collaboration

License

- Copyleft
 - e.g., GPL, grant rights but prevent additions and modification from changing license downstream
 - Commercial exploitation possible only through selling services and the like
 - Note that all derivative works including GPL code must be GPLed themselves
- Lesser Copyleft
 - e.g., LGPL, protects the original code under GPL, but allows for distribution with other software that is not GPLed
 - Used commonly for libraries (e.g., GNU C libraries)
- Permissive
 - e.g., Apache, grant rights without requiring that additions and modifications need use the same license
 - Commercial exploitation possible with closed source modifications: someone could make an *AthenaPro* in this way

Questions we should decide

- Do we agree that it would be beneficial to make ATLAS code more publicly accessible?
 - If we do, we need a clear license
- Can we conclude on the license that the ATLAS software community would like to see on the offline software code?
 - Are there restrictions imposed by our employers?
- Do we think there is code that needs to be non-public?

Next Steps

- Propose to the collaboration that we assign all copyright for ATLAS (offline) software to CERN
 - *...for the benefit of the ATLAS collaboration*
- Propose that the software is uniformly licensed under GPL/ Apache*
- Work on a technical migration of all our code to insert the appropriate license
 - Either in SVN
 - Or as part of the git migration
- Write a pre-commit hook that detects license violations and prevents code from leaking out of our license policy