Licensing of research outputs

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Centre for Digital Life & ELIXIR Norway
10 November 2023

Objectives

? **Questions**

- **What is intellectual property/copyright/derivative work?**
- **What is free software/data?**
- **What types of licenses exist?**
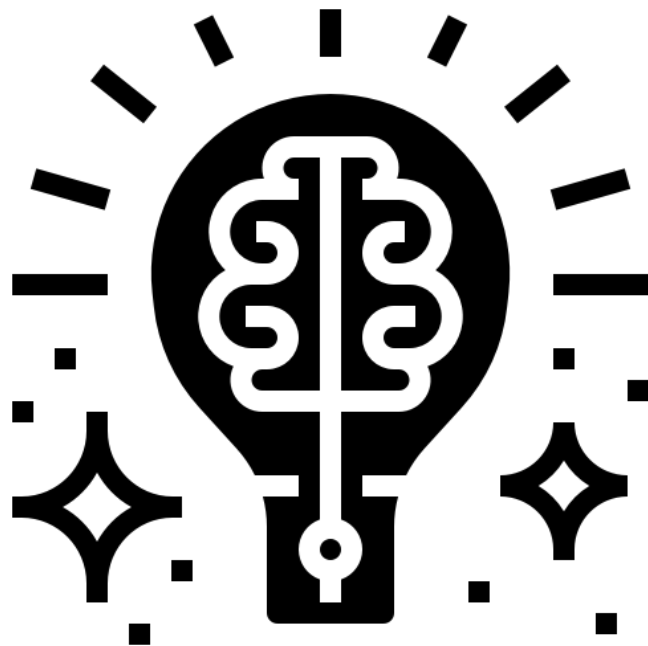
! **Objectives**

- **Get familiar with terminology around licensing**
- **Discuss what is and is not derivative work**

Intellectual property rights (IPRs)

Patent: Protects novel, non-obvious, inventions

Copyright: creative products: software, writing, figures, photos, some datasets, this presentation

Trademark: Protects a name/brand

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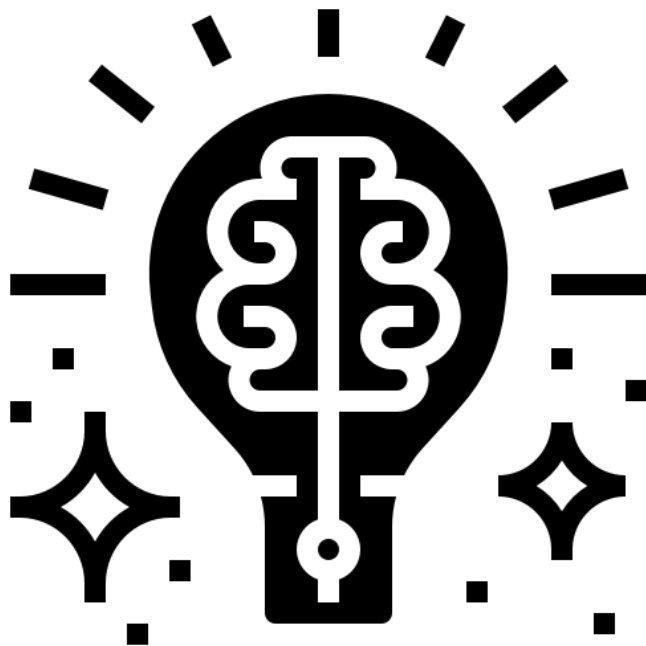**Trademark:** Protects a name/brand

IPR often regulated in work contract

Software patents in Europe

(it's complicated)

The European Patent Convention states that software is not patentable.
in contrast with e.g. the US

The European Patents Office (EPO) grants software patents by declaring them as "computer implemented inventions".

Erosions: VICOM 1986, COMVIK 2002, ML guidelines 2018, Bentley 2021

Patents in Europe

Active process

No prior disclosure

Apply only in limited geographical scopes

Fees (varying by business size and scope)

Apply for max 20 years after application

Copyright in Europe

Creative products: software, writing, figures, photos,…

Applies by default

Does not apply for facts

Economic rights vs. moral rights

Author lifetime + 70 years

https://www.mentimeter.com/app/presentation/fe969a5e9cdeeee514c347ef1458b89b/3e225f5834c4

Licensing

A licensor may grant a license under intellectual property laws to authorize a use (such as copying software or using a patented invention) to a licensee, sparing the licensee from a claim of infringement brought by the licensor.

Why should I licence my research outputs?

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Legal security for users (Accessibility)

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Increase of willingness to reuse outputs (Reusability)

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Increase of willingness to reuse outputs (Reusability)

Allows deposition/mirroring in 2nd databases (Findability)

Concepts in open licenses

Waive all your interests that may exist in your work

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Credit for the original creation

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Non-commercial

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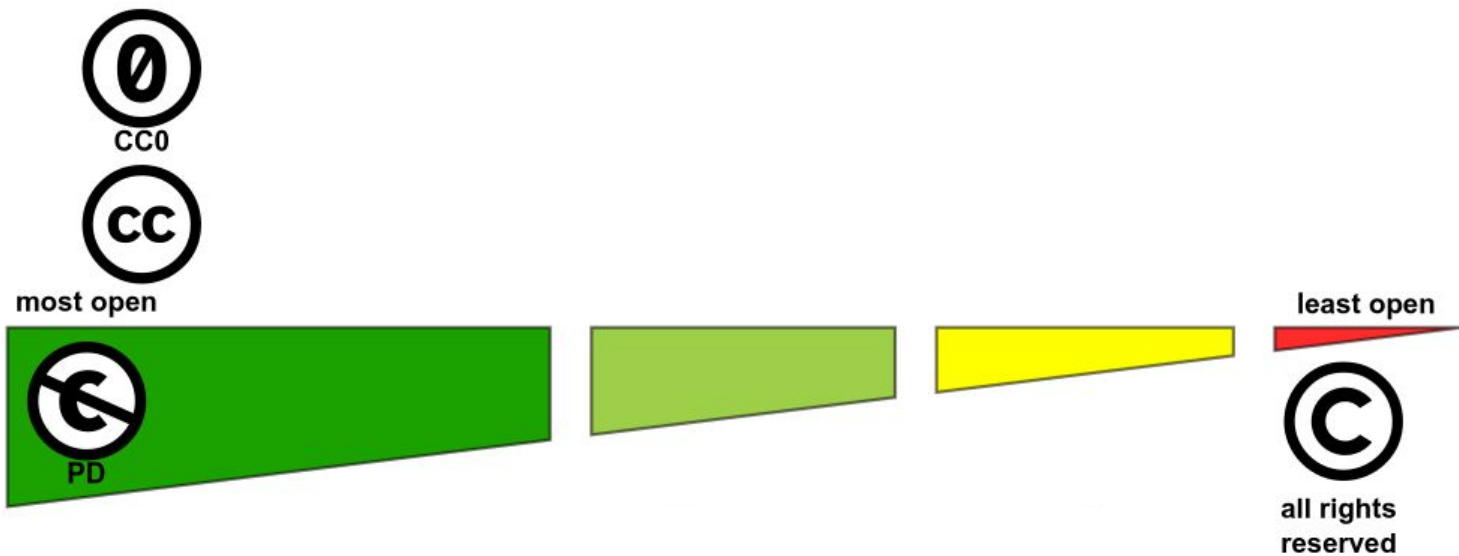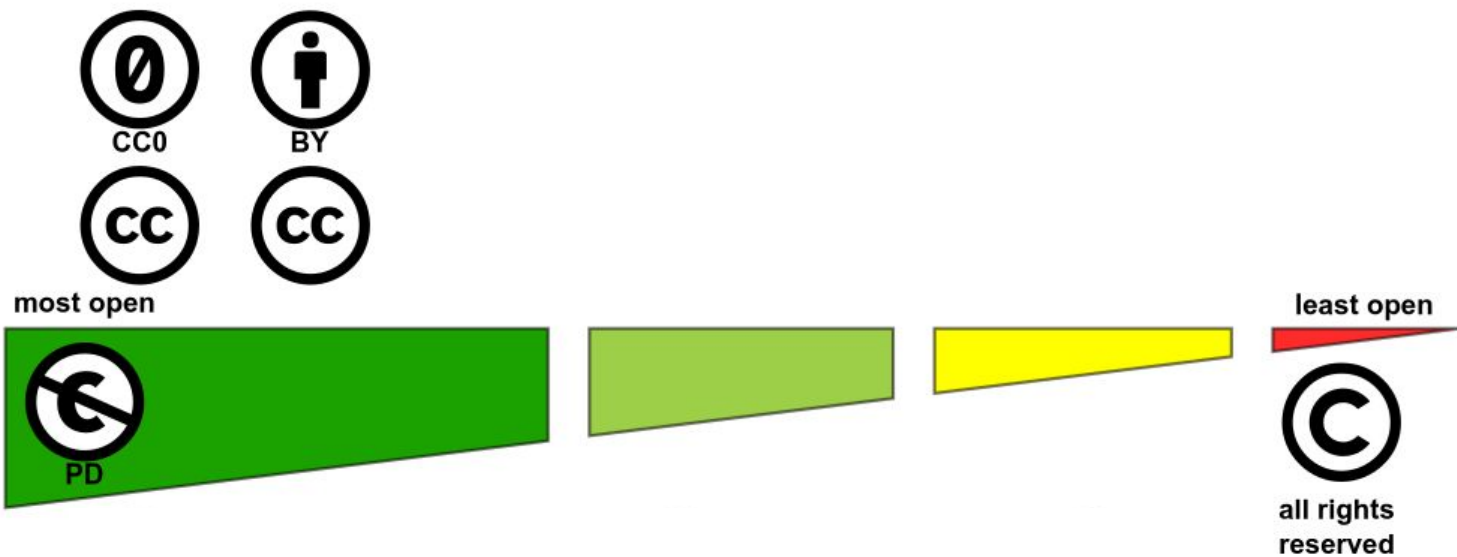Cannot be shared with others in adapted form
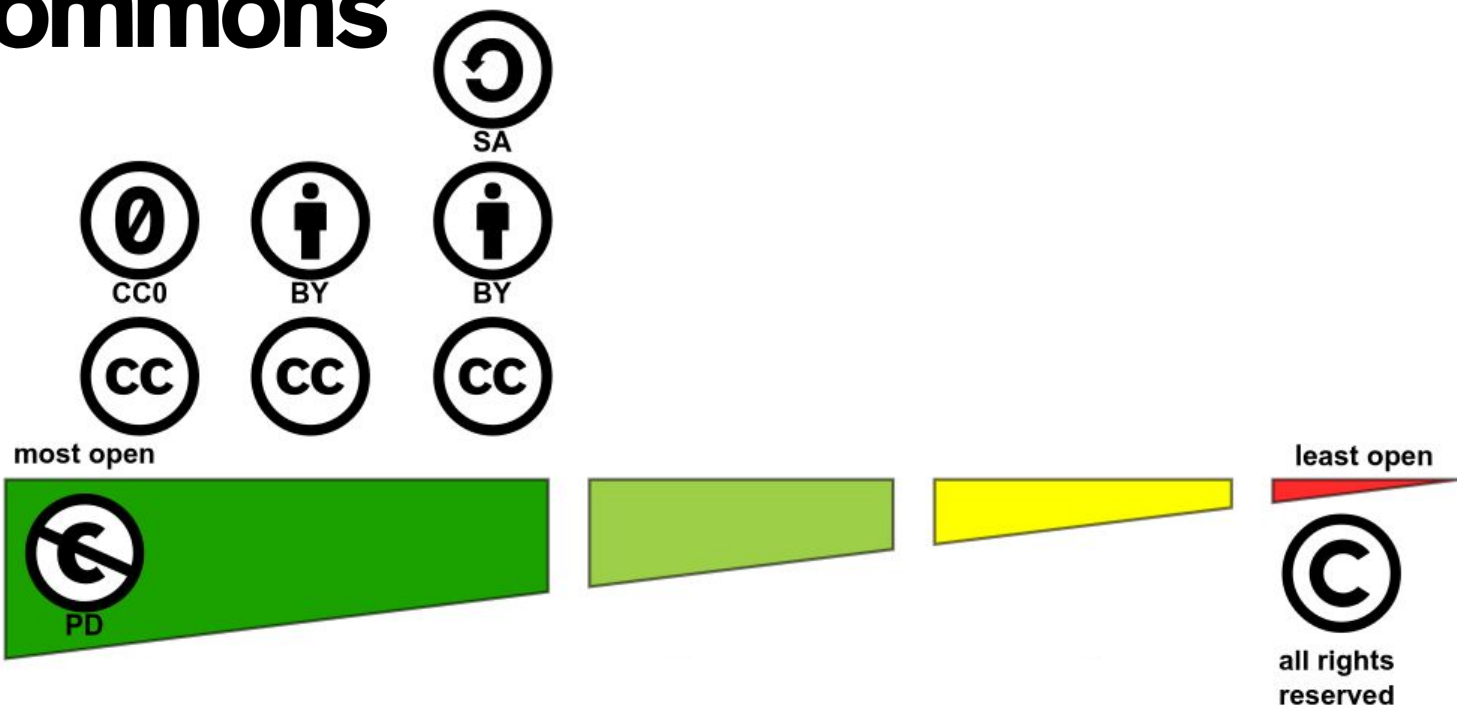
most open   least open
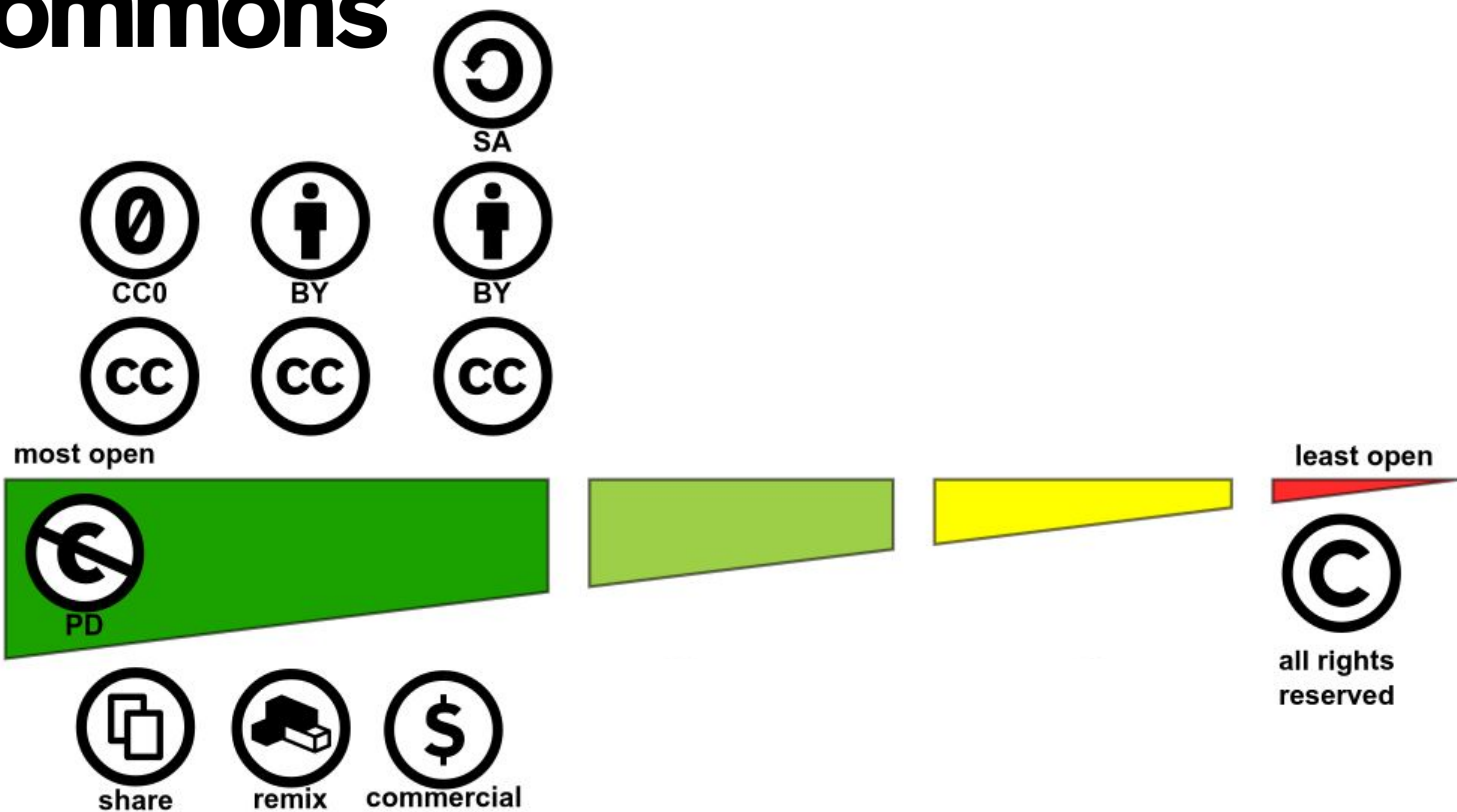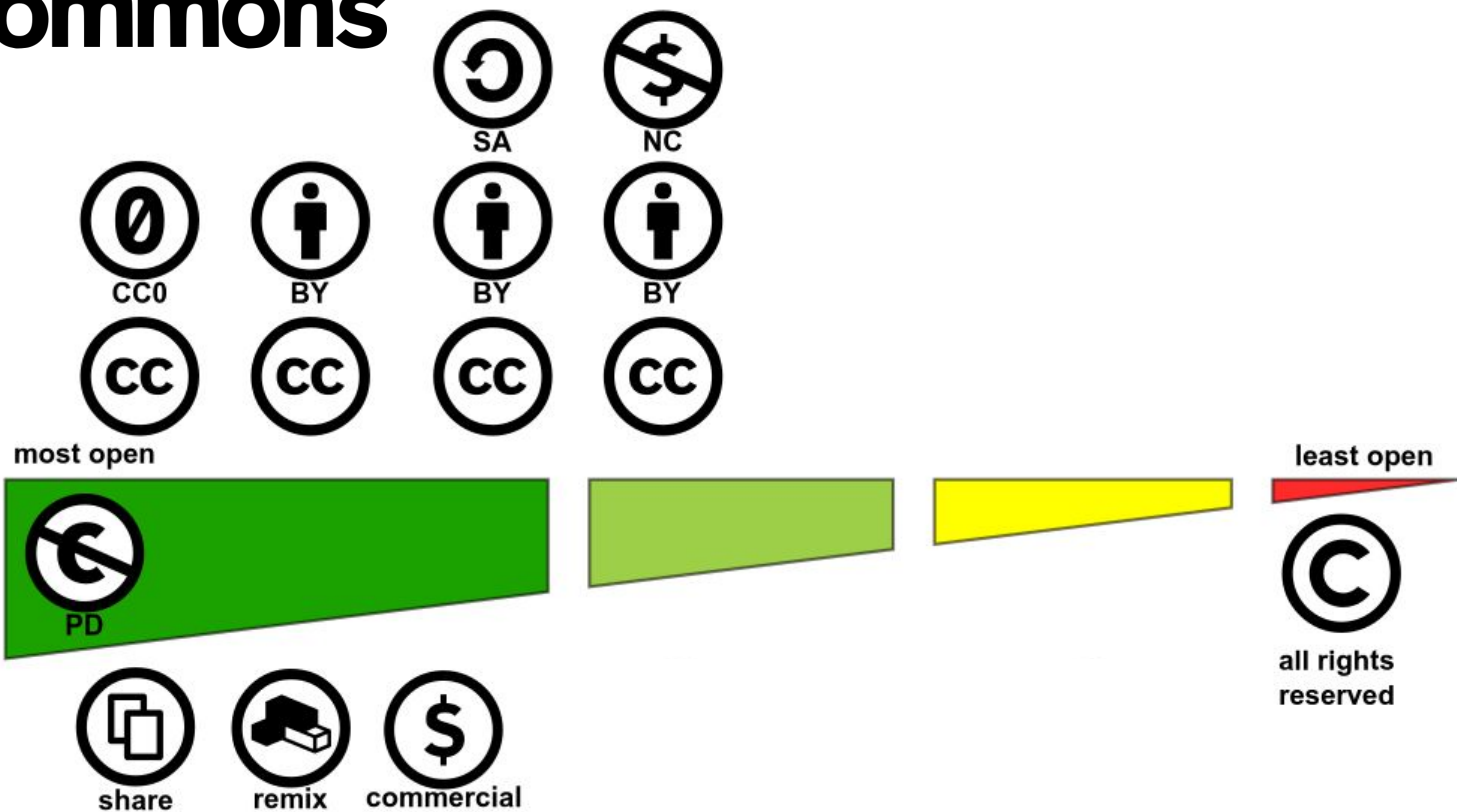
PD   all rights
                            reserved

most open

least open

PD

all rights reserved

share   remix   commercial

"open"

Legal code, harmonized for national/international law
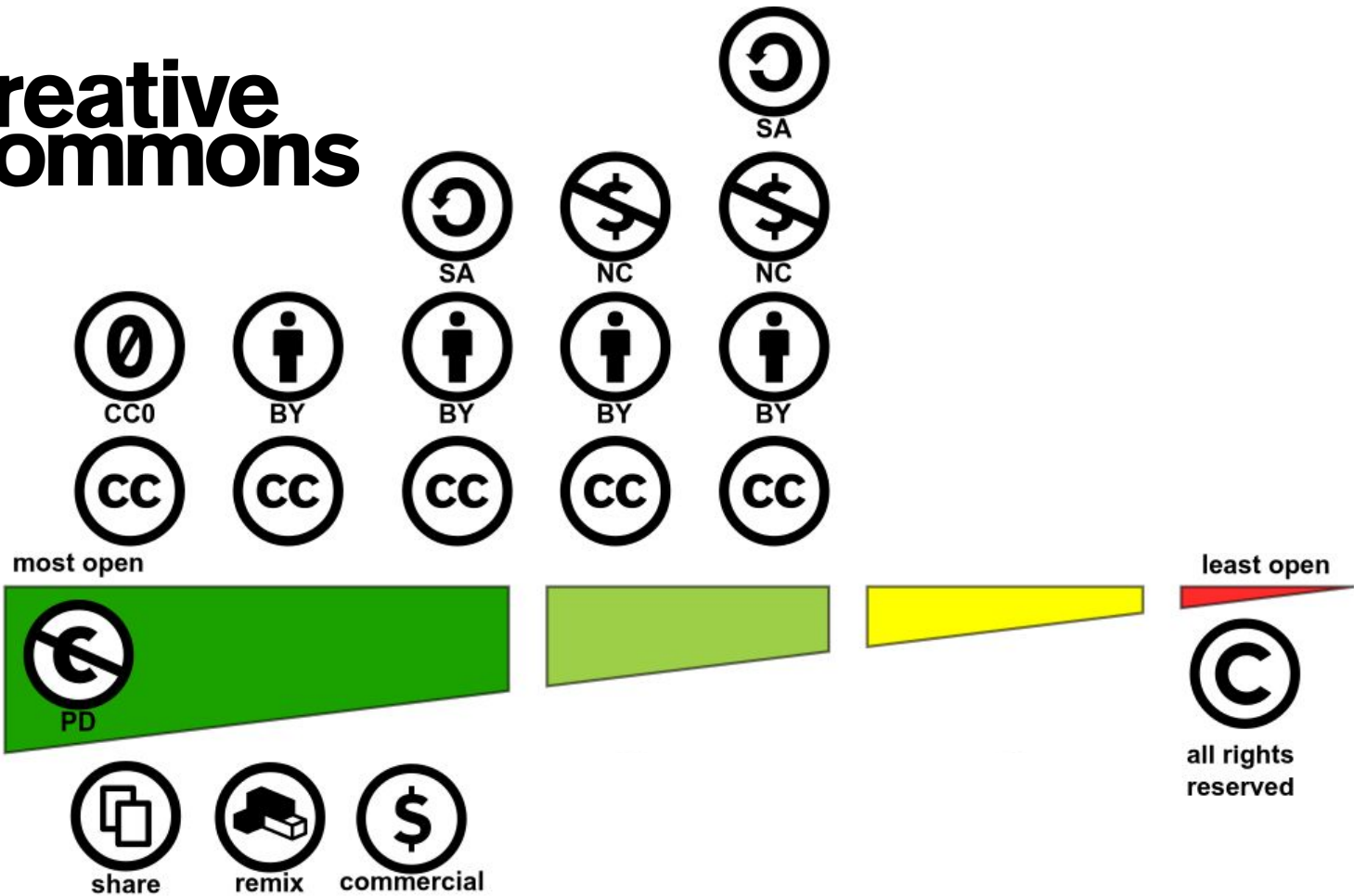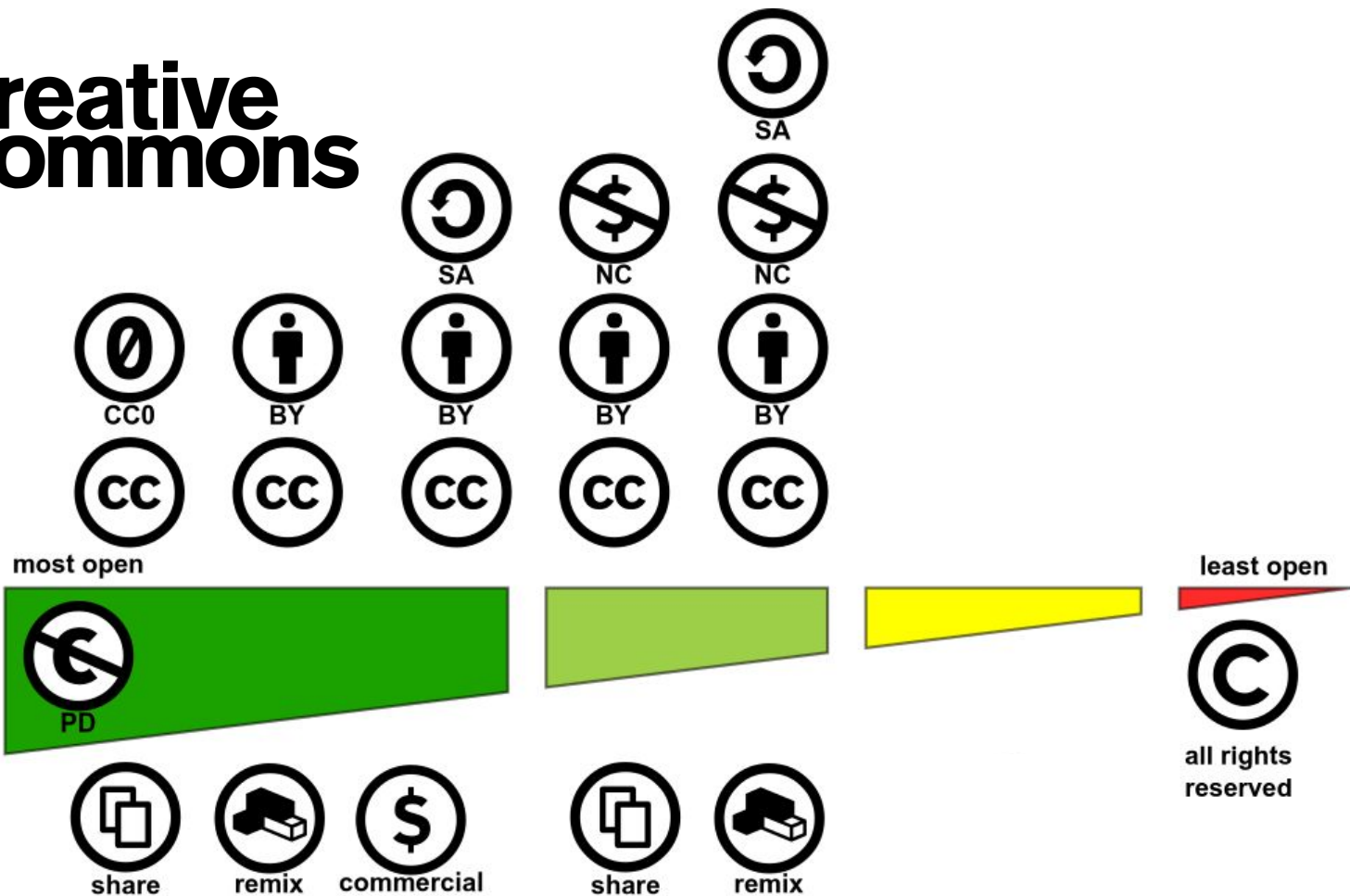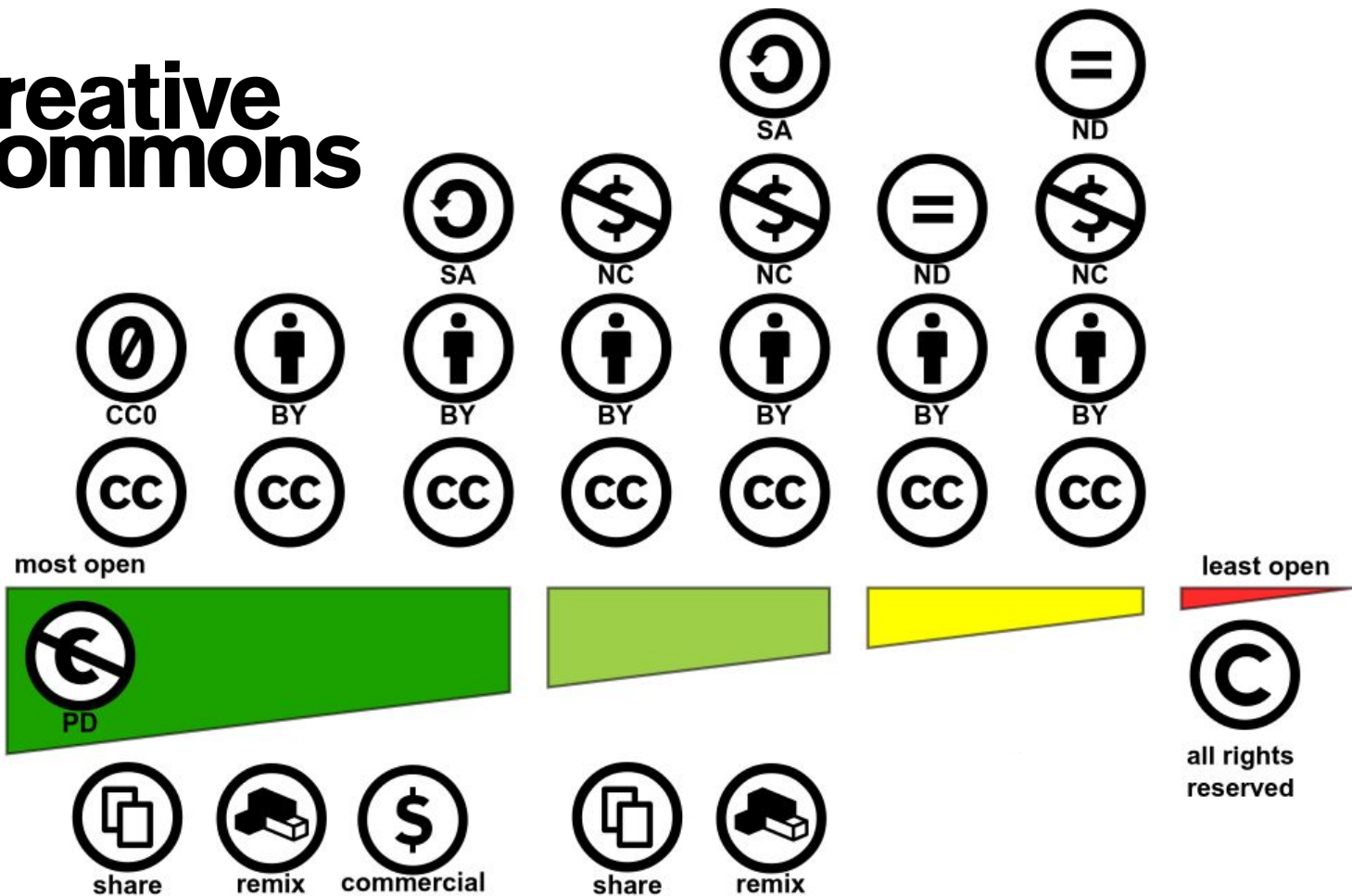
creative commons

Legal code, harmonized for national/international law
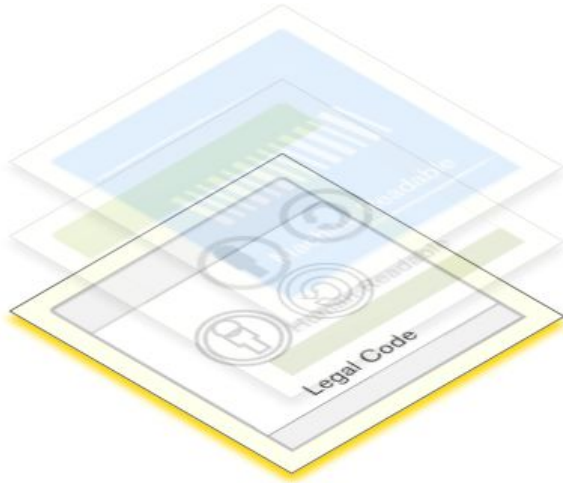
Creative Commons **- What is licensed?** Human readable, understandable text

Nathan Yergler, Alex Roberts **- Who is to be attributed?**

Licensed to the public under CC BY 3.0 Unported **- Which license?**

Legal code, harmonized for national/international law

Human readable, understandable text

Machine readable html tag attachable to metadata

Challenges

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Multiple Attributions for several sources (license stacking)

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Multiple incompatible source licenses

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Legal commercial definition (e.g. use by journals)

Challenges

- **Multiple Attributions for several sources (license stacking)**

- **Multiple incompatible source licenses**

- **Legal commercial definition (e.g. use by journals)**

- **Unintentional restrictive**

![Open Knowledge Foundation logo] **OPEN KNOWLEDGE FOUNDATION**   # Open Data Commons

Databases are different to simple data (e.g. EU-copyright)

Open Data Commons

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Open Source Software licenses

Special considerations for Software

Liability

Warranty

Modifications

Network use = Distribution?

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Limitations

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🔴 Warranty

weak

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LGPL
MPL

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- 🟢 Distribution
- 🟢 Modification
- 🟢 Patent use
- 🟢 Private use

Conditions
- 🔵 Disclose source
- 🔵 License and copyright notice
- 🔵 Same license (library)
- 🔵 State changes

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strong

Copyleft

GPL
AGPL

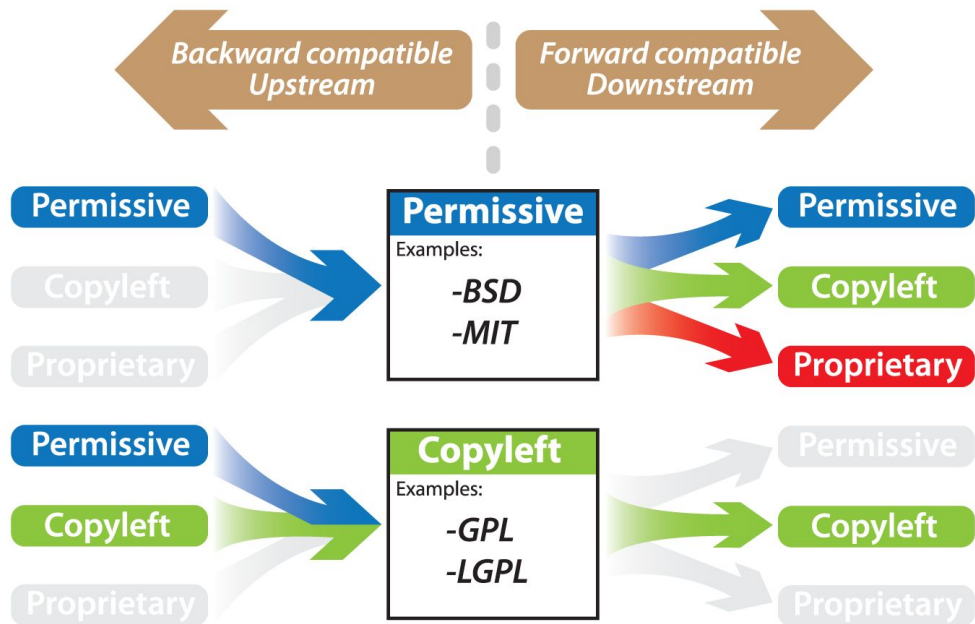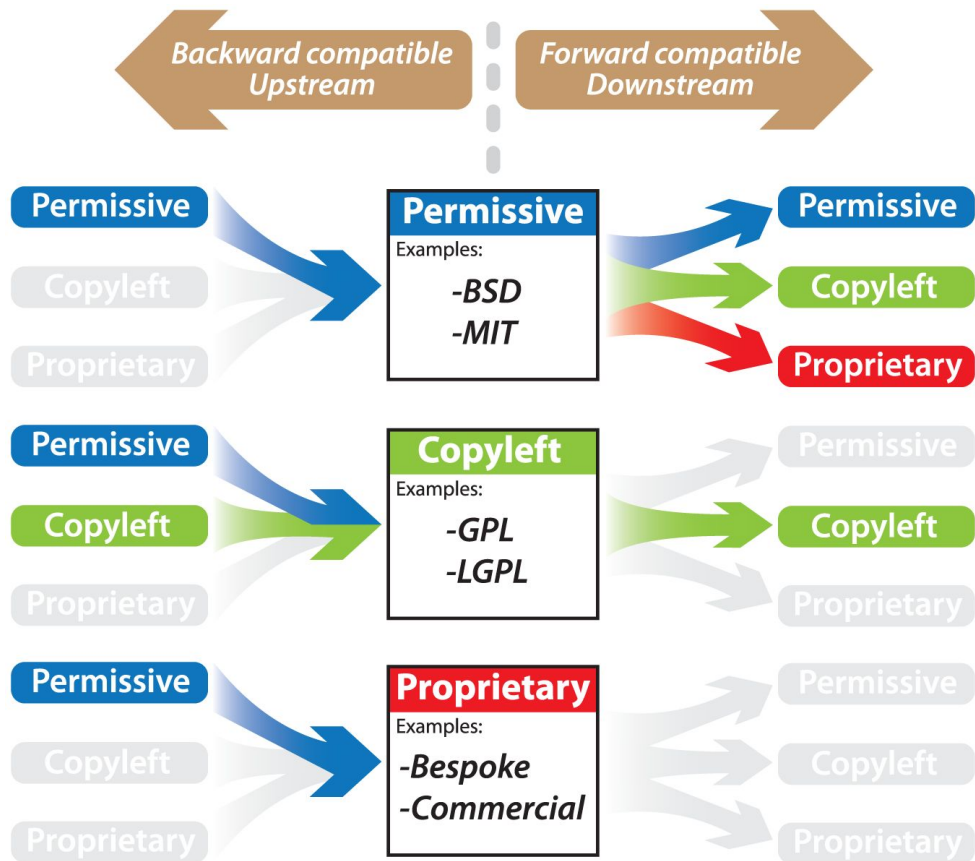| Permissions	Conditions	Limitations
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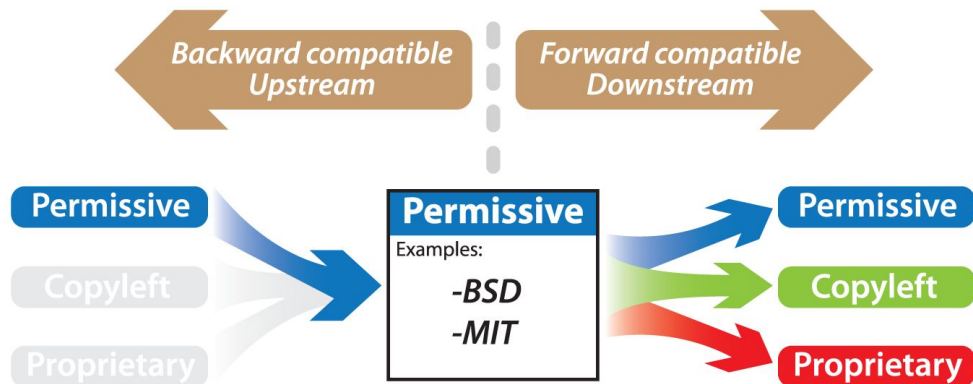
Open Source Software licenses

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Does it hold in court?

Yes!

Busybox GPL lawsuits 2007-2009

Free Software Foundation, Inc. v. Cisco Systems, Inc., 2009

...

Does it hold in court?

Yes!

CREATIVE COMMONS ATTRIBUTION-SHAREALIKE LICENSE ENFORCED IN GERMANY

by mike

The Creative Commons Attribution-ShareAlike 3.0 Unported license (BY-SA) has been enforced by a judicial injunction in Germany. Legal analysis will be added to our case law database in the coming days. Till Jaeger reported the case (in German; English machine

Unintended consequences

klmr commented on 10 Jul 2018 · edited ▾

The GPLv3 license creates some nontrivial problems for use of this code in scientific software. This might be reason enough to **reconsider whether GPL is the best fit for this project**, and whether its restrictions are intended by the authors, or merely accidental.

For reference, Titus C Brown has argued forcefully and influentially that copyleft licenses are non-open, and therefore impede Open Science.

In fact, Lior Pachter, one of the major proponents of non-free software in bioinformatics has subsequently conceded that he was wrong about the non-free licensing of the Kallisto software.

(This is related to, but distinct from #478.)

👍 10

Unintended consequences

Nextflow
@nextflowio

Replying to @karinlag

The proper license for Nextflow pipelines is GPL because your program (the pipeline) is dynamically linked with the Nextflow runtime that's distributed as GPL. gnu.org/licenses/gpl-f...

9:42 AM · Jul 10, 2018 · Twitter Web Client

However, this was not our original intention. We don't consider workflow applications to be subject to the GPL copyleft obligations of the GPL even though they may link dynamically to Nextflow functionality through normal calls and we are not interested to enforce the license requirement to third party workflow developers and organizations.

https://www.nextflow.io/blog/2018/clarification-about-nextflow-license.html

Unintended consequences

Goodbye zero, Hello Apache!

👤 Paolo Di Tommaso   📅 24 October 2018

Today marks an important milestone in the Nextflow project. We are thrilled to announce three important changes to better meet users' needs and ground the project on a solid foundation upon which to build a vibrant ecosystem of tools and data analysis applications for genomic research and beyond.

Apache license

Nextflow was originally licensed as GPLv3 open source software more than five years ago. GPL is designed to promote the adoption and spread of open source software and culture. On the other hand it has also some controversial side-effects, such as the one on derivate works and legal implications which make the use of GPL released software a headache in many organisations. We have previously discussed these concerns in this blog post and, after community feedback, have opted to change the project license to Apache 2.0.

This is a popular permissive free software license written by the Apache Software Foundation (ASF). Software distributed with this license requires the preservation of the copyright notice and disclaimer. It allows the freedom to use the software for any purpose, to distribute it, to modify it, and to distribute modified versions of the software without dictating the licence terms of the resulting applications and derivative works. We are sure this licensing model addresses the concerns raised by the Nextflow community and will boost further project developments.

https://www.nextflow.io/blog/2018/goodbye-zero-hello-apache.html

1. What is the StackOverflow license for code you copy and paste?
2. A journal requests that you release your software during publication. You have copied a portion of the code from another package, which you have forgotten. Can you satisfy the journal's request?
3. You want to fix a bug in a project someone else has released, but there is no license. What risks are there?
4. How would you ask someone to add a license?
5. You incorporate MIT, GPL, and BSD3 licensed code into your project. What possible licenses can you pick for your project?
6. You do the same as above but add in another license that looks viral. What possible licenses can you use now?
7. Do licenses apply if you don't distribute your code? Why or why not?
8. Which licenses are most/least attractive for companies with proprietary software?

DO

Alway add a (standard) license

Be aware of the IPR situation of the code you (re-)use

DON'T

Invent your own license

Compliance monitoring

Costs of data management

Data analysis

Data brokering

Data management coordination

Data management plan

Data organisation

Data security

Data sensitivity

Data provenance

Data publication

Data quality

Data storage

Data transfer

Documentation and metadata

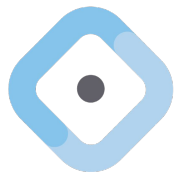Ethical aspects

Existing data

GDPR compliance

Identifiers

Licensing

Machine actionability

Link to RDMkit:
https://rdmkit.elixir-europe.org/

Data Management Expert Guide (DMEG)

Licensing your data

If you publish your data in a data repository of your choice, a licence agreement will be applied to your data. A licence agreement is a legal arrangement between the creator/depositor of the data set and the data repository, signifying what a user is allowed to do with the data. Stating clear re-use rights is like having a warm 'Welcome' on the doormat of your dataset. It is an important aspect of making sure your data meet the R (Reusable) in FAIR data management.

To make re-use as likely as possible we advise you to choose a licence which:

- Makes data available to the widest audience possible;
- Makes the widest range of uses possible.

About Creative Commons licences

The main attributes of using Creative Commons (2017) licences for the licensing of data, datasets, and databases (Korn and Oppenheim, 2011) are:

https://dmeg.cessda.eu/Data-Management-Expert-Guide

Further reading

- [Digital Life 2021: Know-how workshop on IPR in digital biotech](#)
- [Data life cycle: Sharing | RDMkit](#)
- [Your tasks: Licensing | RDMkit](#)
- [EUDAT license chooser for data and software](#)
- [Choose a License](#)
- [Licenses & Standards | Open Source Initiative](#)

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4. As mentionned in 3., the easiest is to fill an issue and explain the reasons why you would like to use this software (or update it).
5. Combining software with different licenses can be tricky and it is important to understand compatibilities (or lack of compatibilities) of the various licenses. GPL license is the most protective (BSD and MIT are quite permissive) so for the resulting combined software you could use a GPL license. However, re-licensing may not be necessary.
6. Derivative work would need to be shared under this viral license (e.g. AGPL or GPL), unless the components are only plugins or libraries.
7. If you keep your code for yourself, you may think you do not need a license. However, remember that in most companies/universities, your employer is "owning" your work and when you leave you may not be allowed to "distribute your code to your future self". So the best is always to add a license!
8. The least attractive licenses for companies with proprietary software are licenses where you would need to keep an open license when creating derivative work. For instance GPL and and AGPL. The most attractive licenses are permissive licenses where they can reuse, modify and relicense with no conditions. For instance MIT, BSD and Apache License.

Thank you!

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