IoT-NGIN

Next Generation IoT as part of Next Generation Internet

Open Source

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Disclaimer

- I'm not a lawyer! No guarantees on anything said here.

Definition Open-Source

- License - not code availability!

- Required rights
  - The **use** of the software must be allowed without restrictions to a specific duration,geography, field, product, or group of people.
  - **Sharing** of the software must be possible without additional fees.
  - **Modification** and improvement of the software must be enabled by making the original source code available

- (This does not prohibit commercial use)

General Notes

- Major organizations
  - Open Source Initiative (OSI)
  - Free Software Foundation (FSF)
- Basically no open-soruce license provides warranty or liability
- OSI lists > 100 open-source licenses

License Categories

- Permissive
- Copyleft
  - Strong
  - Weak
- *("Soft categories")*
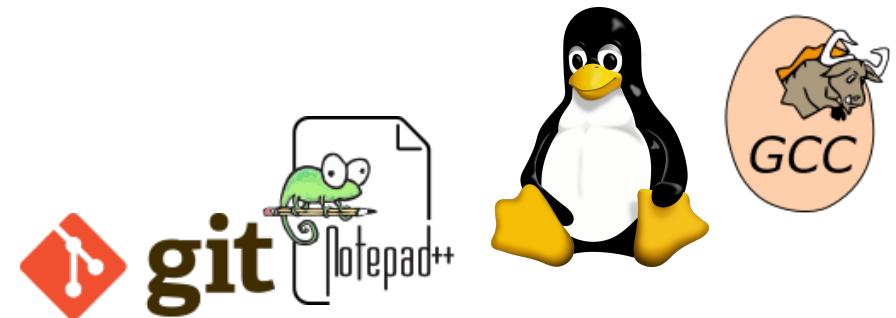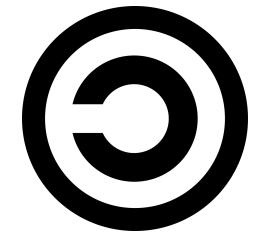
Permissive Licenses

- Must include copyright and license notice
- Popular examples
  - MIT
    - use, copy, modify, merge, publish, distribute, sublicense, and/or sell
    - include copyright notice
  - BSD
    - Different flavours
    - Mostly the same as MIT
  - Apache
    - explicit patent license grant
    - modifications must be listed

Copyleft

- Rights must be preserved in derivatives
  - No further license restrictions in derivates
  - => SW using Copyleft licensed SW must be copyleft as well
  - also if only parts are derived
- "viral" license
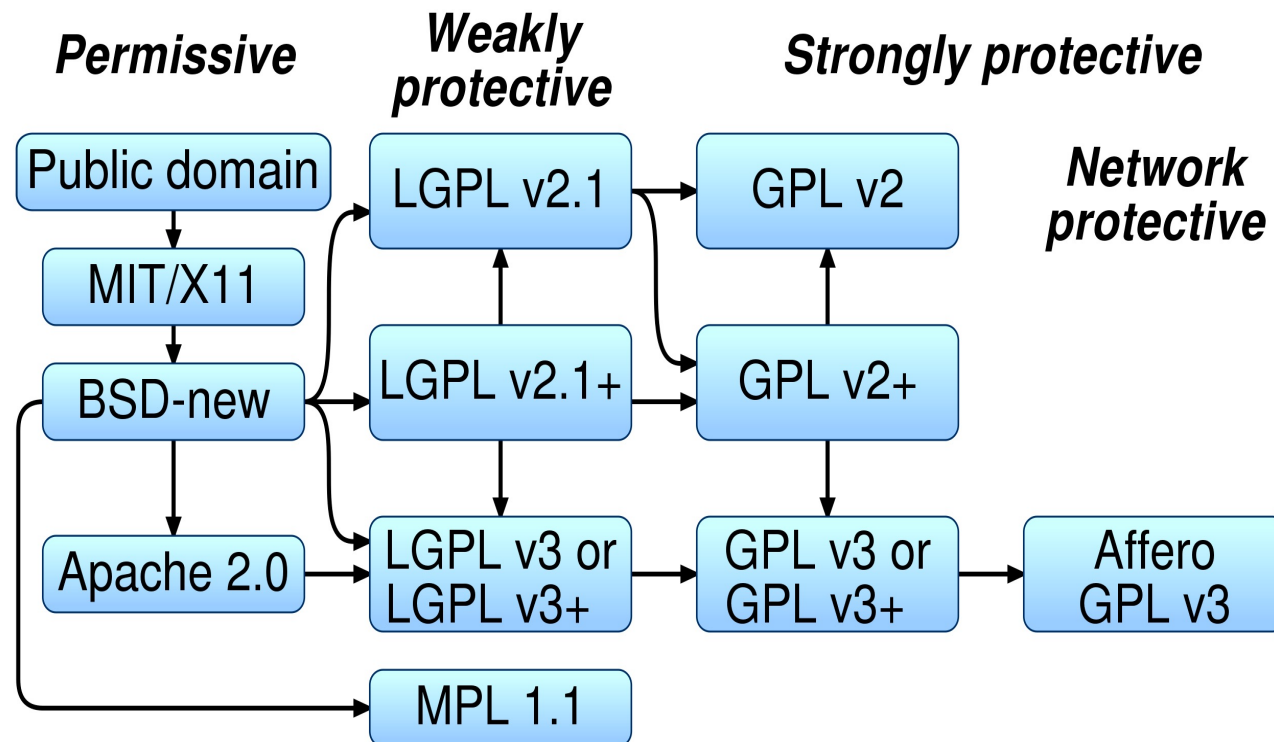- Popular examples:
  - GPL
  - EUPL

Weak Copyleft

- As strong copyleft, but additional use
  - e.g. use in non-copyleft or proprietary SW
- Popular examples:
  - LGPL
    - allows only dynamic linking
  - Mozilla Public License
    - allows static linking
  - Eclipse Public License
    - Simmilar to MPL but not GPL compatible

Compatibility

Permissive

Weakly protective

Strongly protective

Network protective

Public domain → MIT/X11 → BSD-new → Apache 2.0

LGPL v2.1 → GPL v2

LGPL v2.1+ → GPL v2+

LGPL v3 or LGPL v3+ → GPL v3 or GPL v3+ → Affero GPL v3
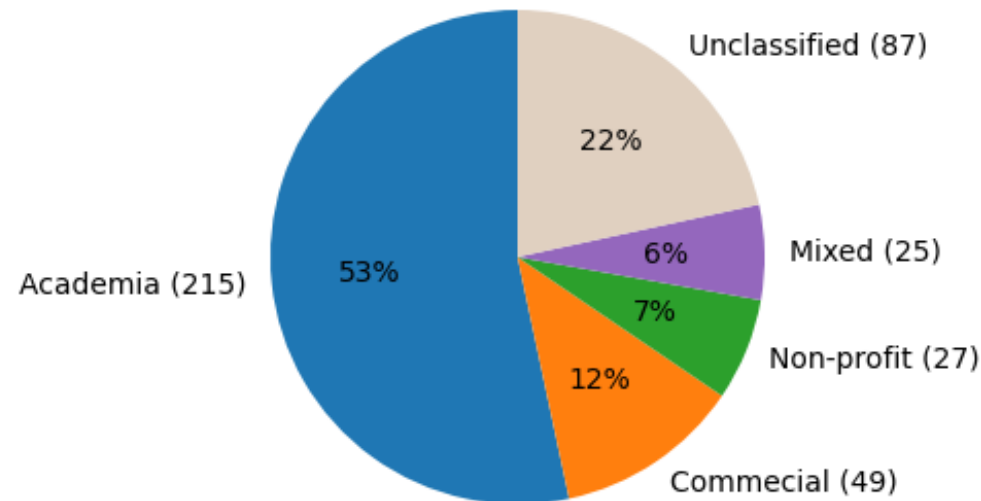
MPL 1.1

Topics not discussed here

- Non-Code licenses (e.g. Creative Commons)
- Sublicensing
- Split licenses
- Contributors License Agreements
- Intra-version compatibilities
- Trademarks

Example: Open-Source in Energy Domain

- Classification of >300 energy-related open-source projects

Helpful links

- https://choosealicense.com/licenses/
- https://opensource.org/licenses/alphabetical