

Open Source, Open Standards

OPEN MINDS

McCoy Smith

Intel Corporation, Law & Policy Group



In partnership with:



Washington, DC | April 15, 2016

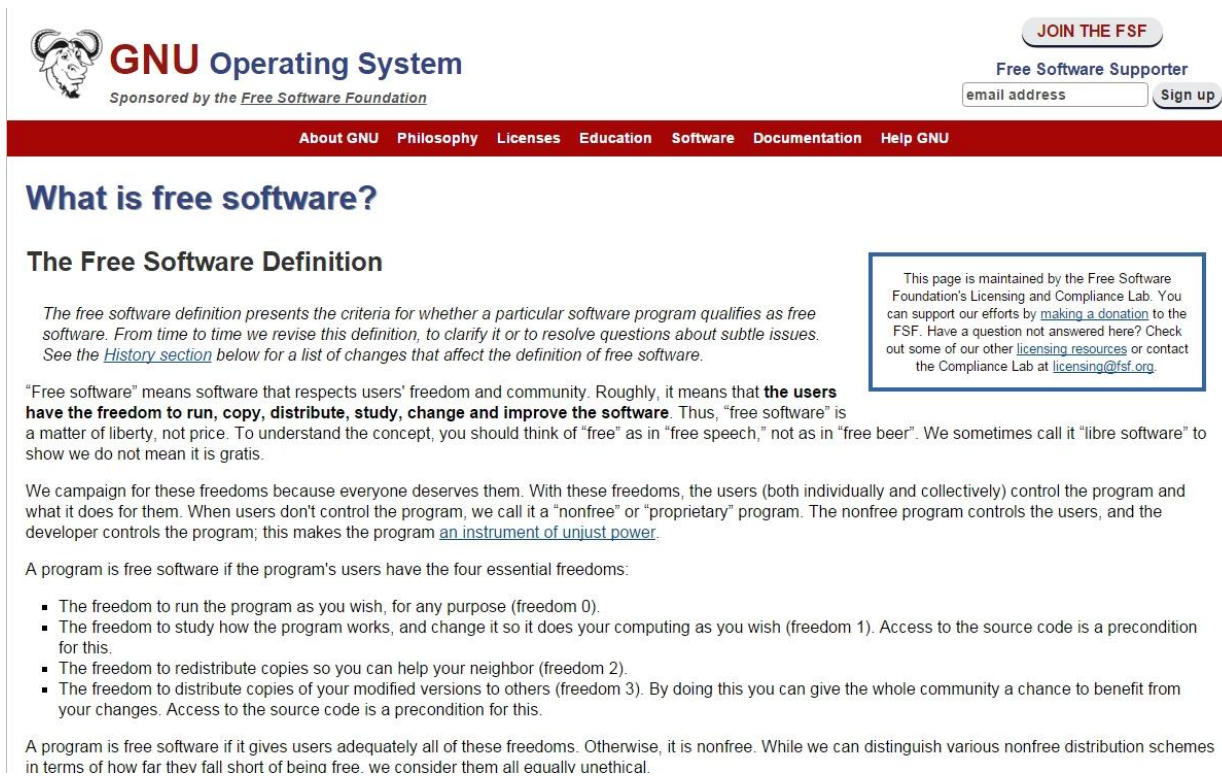
# Open Source

# Open Source


- A Philosophy
- A Standard for Evaluating Software Licenses
- A Set of Community Expectations

# Open Source

- A Philosophy



The screenshot shows the GNU Operating System website. At the top left is the GNU logo (a bull's head) and the text "GNU Operating System" with "Sponsored by the Free Software Foundation" below it. At the top right is a "JOIN THE FSF" button, a "Free Software Supporter" label, and an "email address" input field with a "Sign up" button. A red navigation bar contains links for "About GNU", "Philosophy", "Licenses", "Education", "Software", "Documentation", and "Help GNU". The main content area is titled "What is free software?" and "The Free Software Definition". It includes a paragraph about the free software definition, a quote from the FSF about the meaning of "free software", a paragraph about the campaign for these freedoms, and a list of four essential freedoms. A box on the right contains information about the page being maintained by the FSF's Licensing and Compliance Lab. At the bottom, a paragraph explains that a program is free software if it gives users all four freedoms, otherwise it is nonfree.

 **GNU Operating System**  
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## What is free software?

### The Free Software Definition

*The free software definition presents the criteria for whether a particular software program qualifies as free software. From time to time we revise this definition, to clarify it or to resolve questions about subtle issues. See the [History section](#) below for a list of changes that affect the definition of free software.*

"Free software" means software that respects users' freedom and community. Roughly, it means that **the users have the freedom to run, copy, distribute, study, change and improve the software**. Thus, "free software" is a matter of liberty, not price. To understand the concept, you should think of "free" as in "free speech," not as in "free beer". We sometimes call it "libre software" to show we do not mean it is gratis.

We campaign for these freedoms because everyone deserves them. With these freedoms, the users (both individually and collectively) control the program and what it does for them. When users don't control the program, we call it a "nonfree" or "proprietary" program. The nonfree program controls the users, and the developer controls the program; this makes the program [an instrument of unjust power](#).

A program is free software if the program's users have the four essential freedoms:

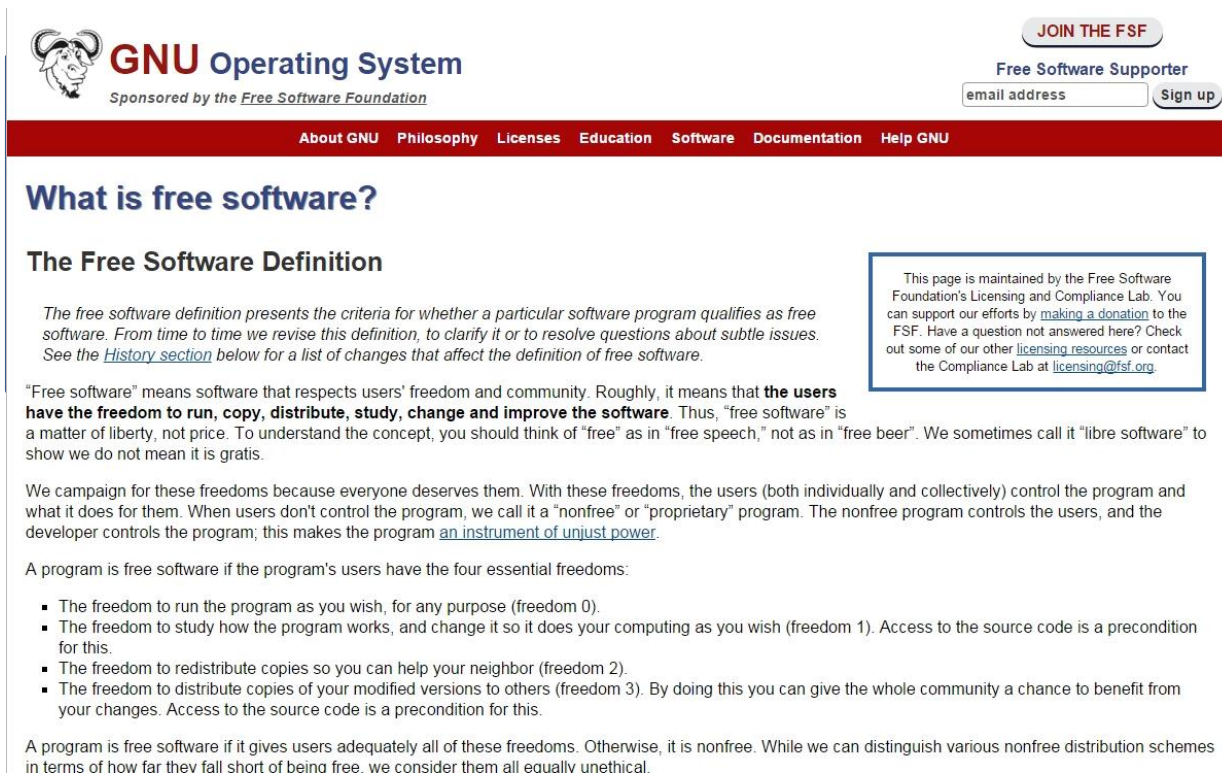
- The freedom to run the program as you wish, for any purpose (freedom 0).
- The freedom to study how the program works, and change it so it does your computing as you wish (freedom 1). Access to the source code is a precondition for this.
- The freedom to redistribute copies so you can help your neighbor (freedom 2).
- The freedom to distribute copies of your modified versions to others (freedom 3). By doing this you can give the whole community a chance to benefit from your changes. Access to the source code is a precondition for this.

A program is free software if it gives users adequately all of these freedoms. Otherwise, it is nonfree. While we can distinguish various nonfree distribution schemes in terms of how far they fall short of being free, we consider them all equally unethical.


This page is maintained by the Free Software Foundation's Licensing and Compliance Lab. You can support our efforts by [making a donation](#) to the FSF. Have a question not answered here? Check out some of our other [licensing resources](#) or contact the Compliance Lab at [licensing@fsf.org](mailto:licensing@fsf.org).

# Open Source

- A Philosophy



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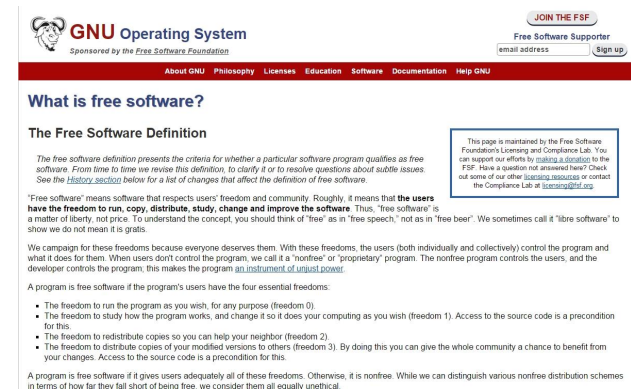
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# Open Source

- A Philosophy

“Roughly, it means that **the users have the freedom to run, copy, distribute, study, change and improve the software.**”

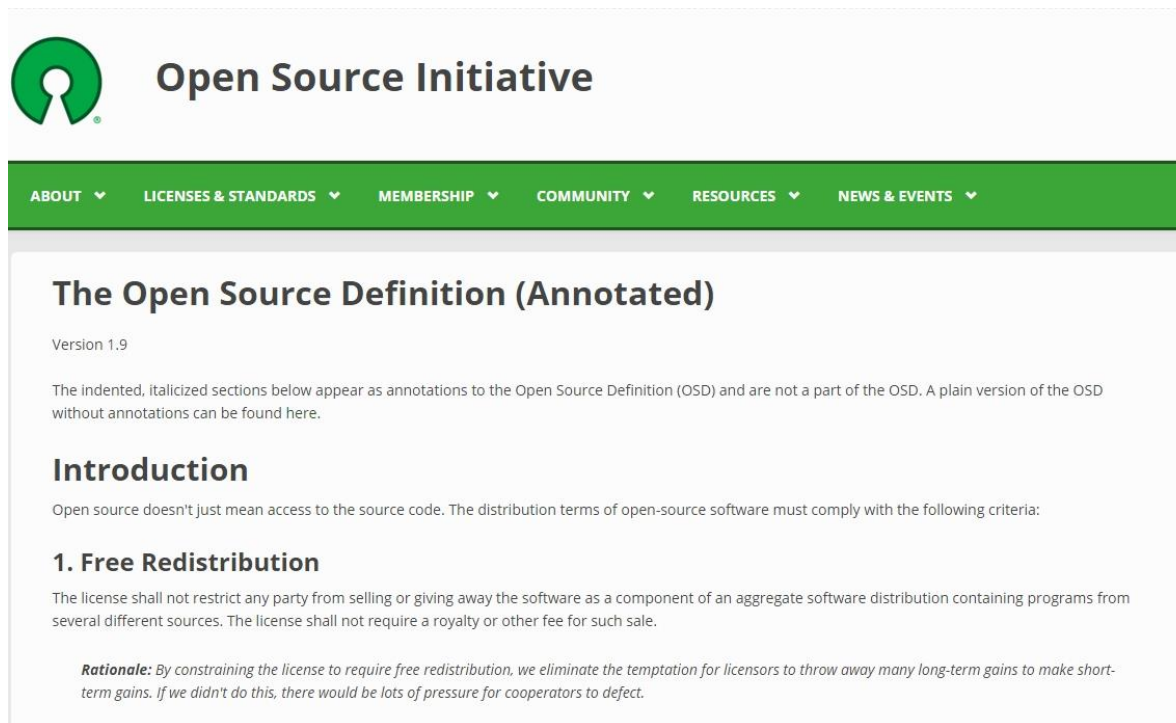


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# Open Source

- A Standard for Evaluating Software Licenses



The screenshot shows the Open Source Initiative website. The header features the OSI logo (a green circle with a white keyhole) and the text "Open Source Initiative". Below the header is a green navigation bar with white text and dropdown arrows for "ABOUT", "LICENSES & STANDARDS", "MEMBERSHIP", "COMMUNITY", "RESOURCES", and "NEWS & EVENTS". The main content area has a white background with a grey border. The title "The Open Source Definition (Annotated)" is in bold black text. Below it is "Version 1.9". A paragraph explains that indented, italicized sections are annotations to the OSD. The "Introduction" section follows, stating that open source doesn't just mean access to source code and that distribution terms must comply with certain criteria. The first criterion is "1. Free Redistribution", which states that the license shall not restrict any party from selling or giving away the software as a component of an aggregate software distribution. A *Rationale* section explains that this criterion eliminates the temptation for licensors to throw away long-term gains for short-term gains.

**The Open Source Definition (Annotated)**

Version 1.9

The indented, italicized sections below appear as annotations to the Open Source Definition (OSD) and are not a part of the OSD. A plain version of the OSD without annotations can be found [here](#).

## Introduction

Open source doesn't just mean access to the source code. The distribution terms of open-source software must comply with the following criteria:

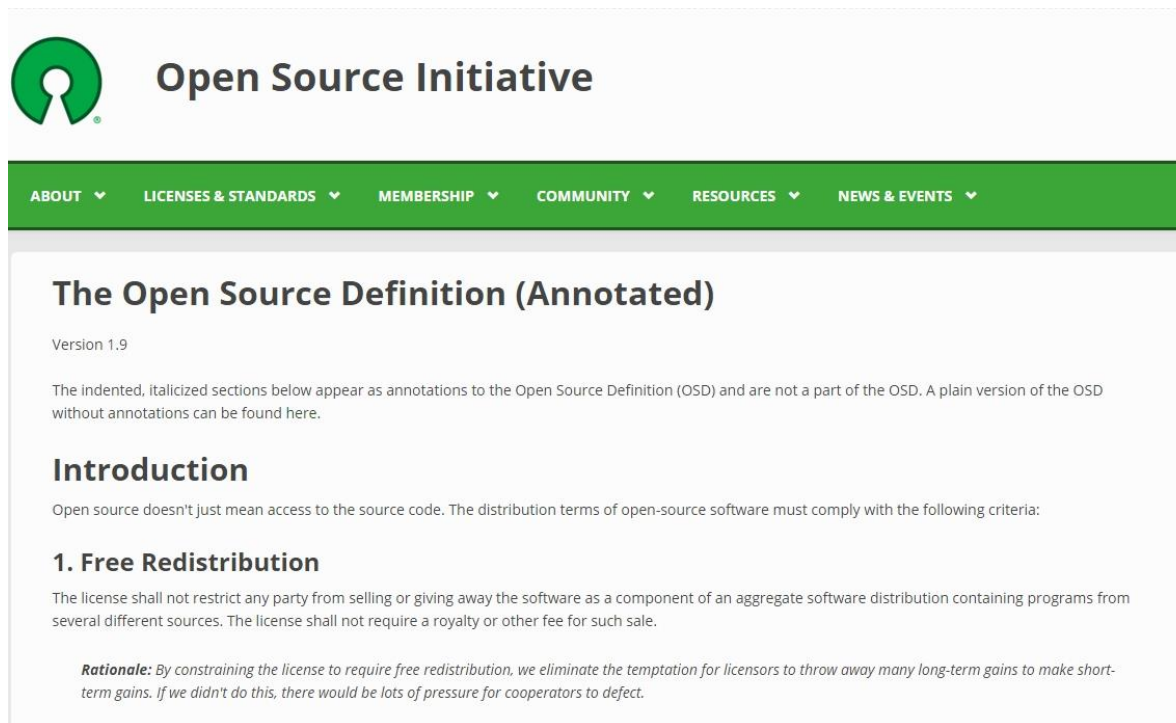
### 1. Free Redistribution

The license shall not restrict any party from selling or giving away the software as a component of an aggregate software distribution containing programs from several different sources. The license shall not require a royalty or other fee for such sale.

***Rationale:** By constraining the license to require free redistribution, we eliminate the temptation for licensors to throw away many long-term gains to make short-term gains. If we didn't do this, there would be lots of pressure for cooperators to defect.*

# Open Source

- A Standard for Evaluating Software Licenses



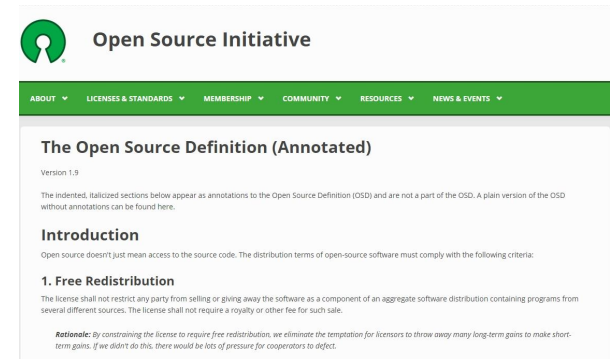
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# Open Source

- A Standard for Evaluating Software Licenses

“The distribution terms of open-source software must comply with the following criteria”



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# Open Source

- A Standard for Evaluating Software Licenses

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## 5. No Discrimination Against Persons or Groups

The license must not discriminate against any person or group of persons.

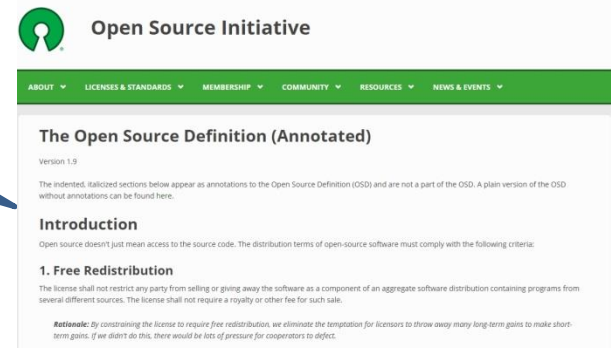
## 6. No Discrimination Against Fields of Endeavor

The license must not restrict anyone from making use of the program in a specific field of endeavor. For example, it may not restrict the program from being used in a business, or from being used for genetic research.

\*\*\*

## 10. License Must Be Technology-Neutral

No provision of the license may be predicated on any individual technology or style of interface.



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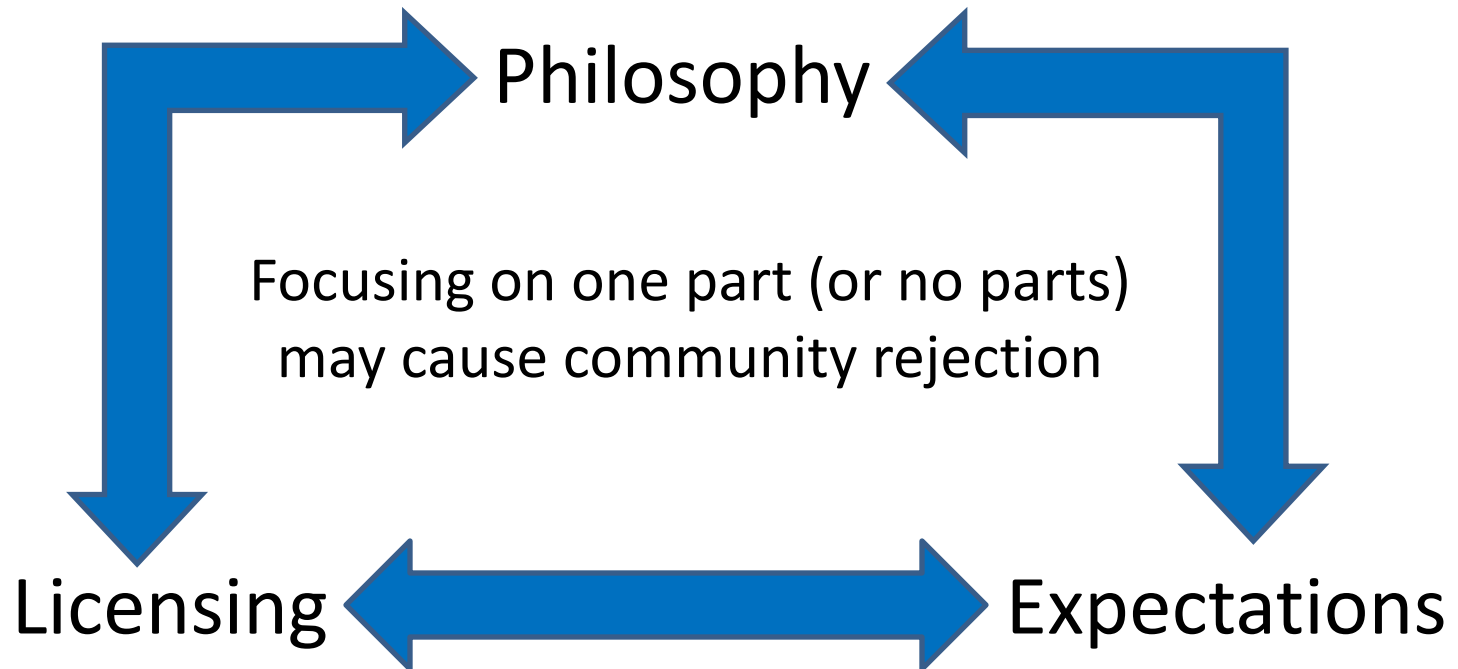
# Open Source

- A Set of Community Expectations
  - Collaborative development
  - Right to “fork”
  - Acceptance on technical merit

*and very likely*

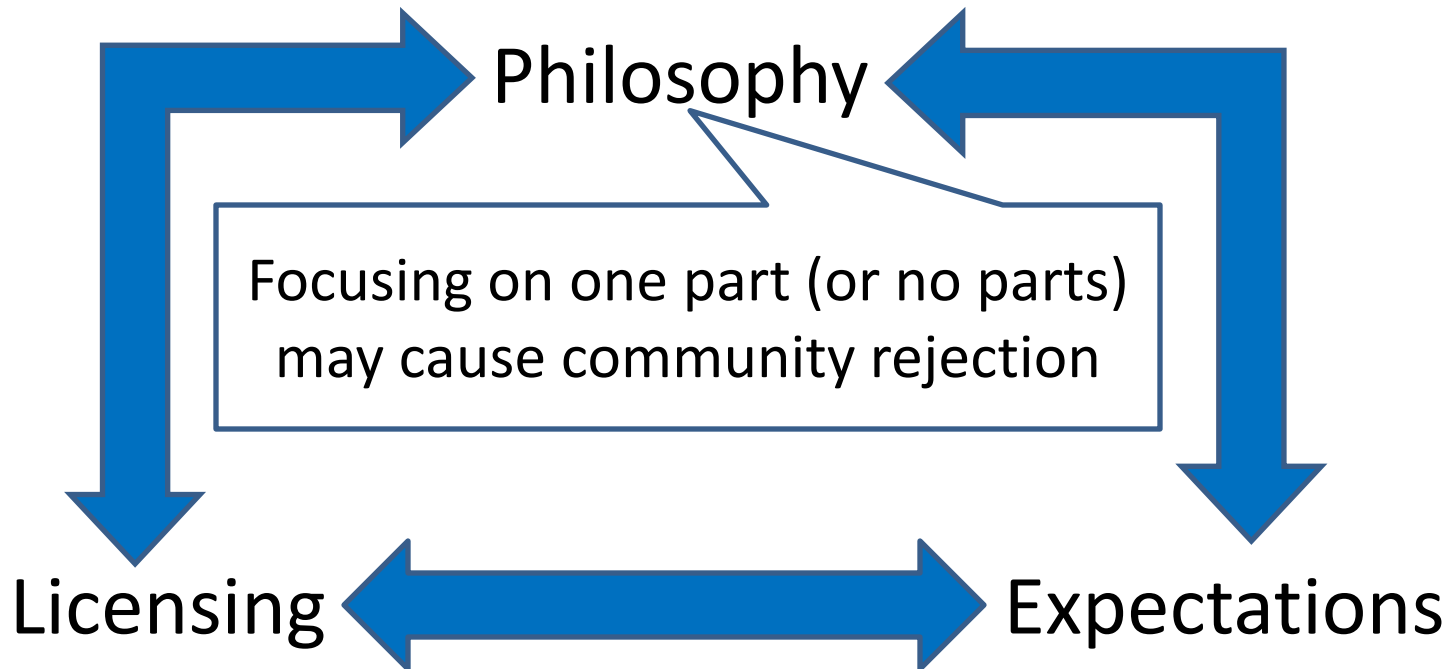
  - Contributors’ intellectual property won’t thwart project
    - See: newer OSI license patent grants
  - Don’t have to join or sign anything else

# Open Source

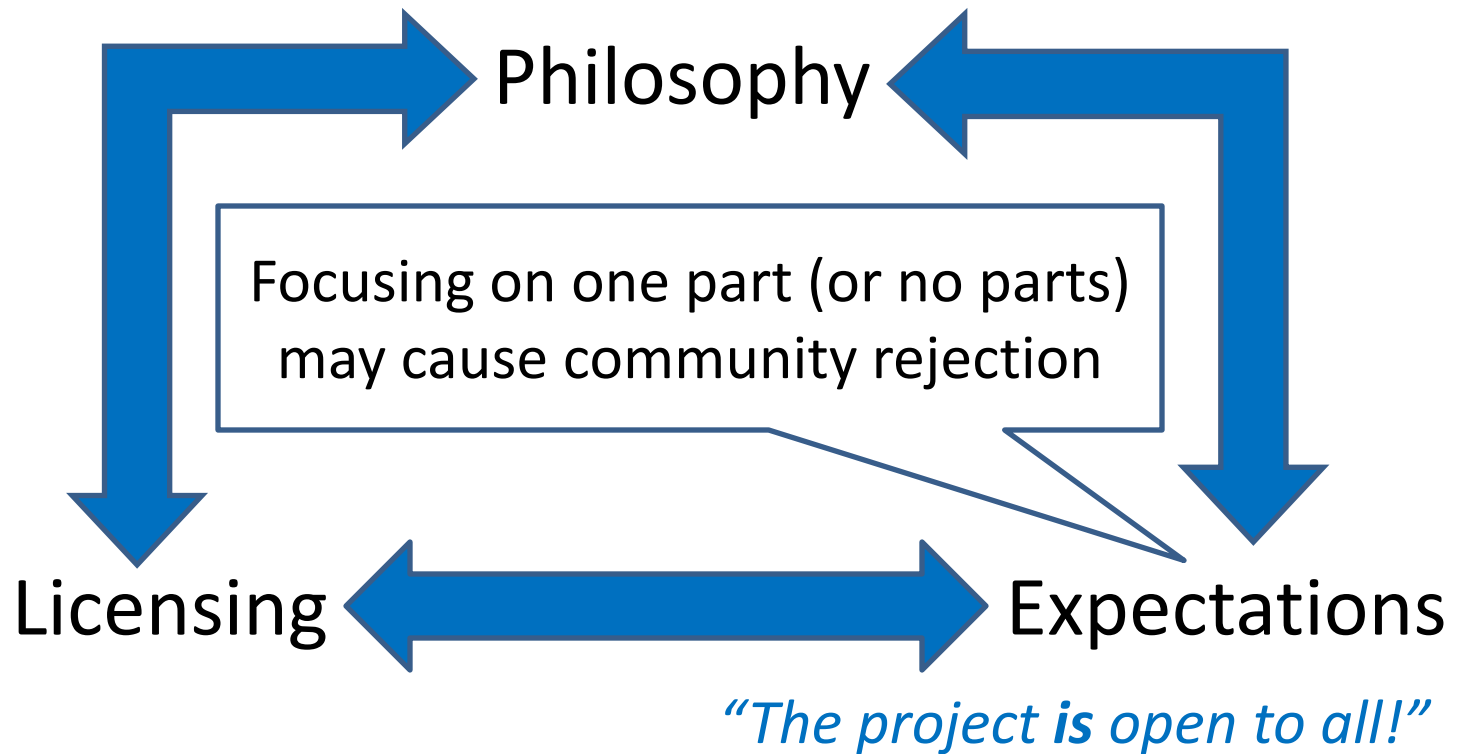


# Open Source

*"The source code is available!"*

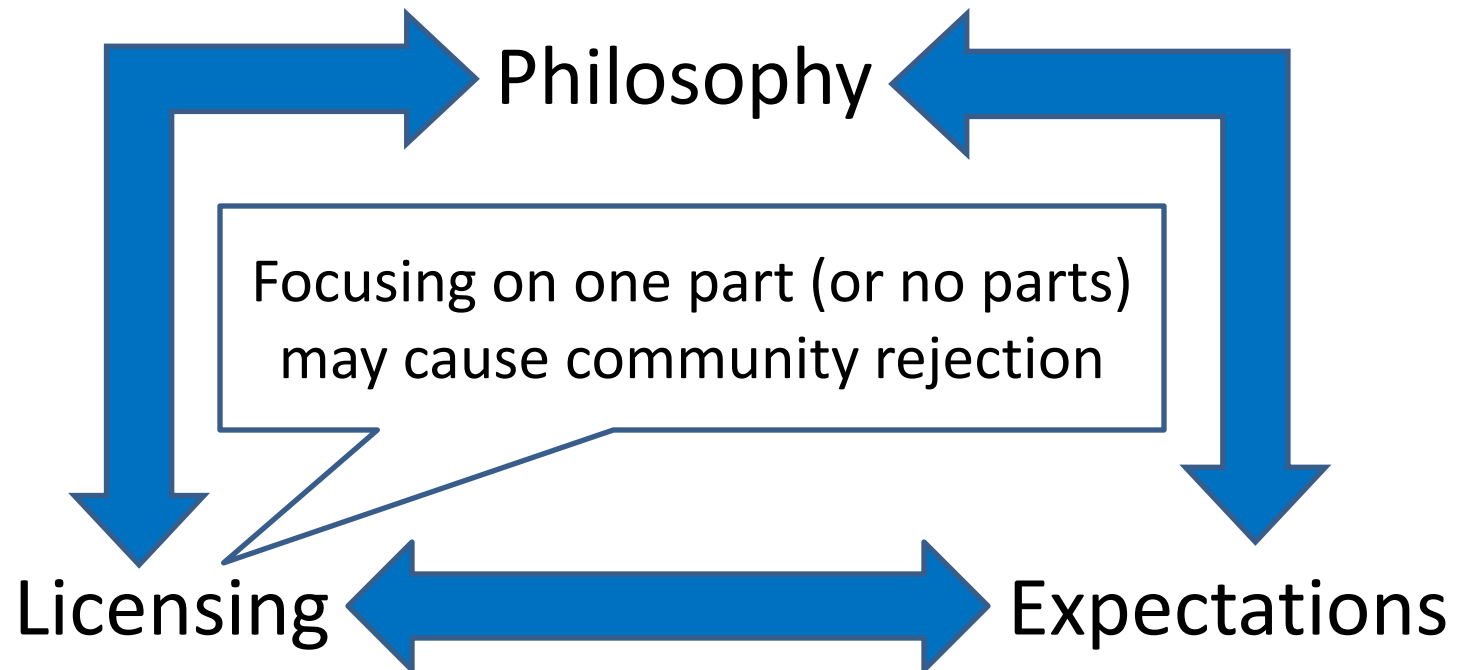


# Open Source





# Open Source



*“We are using an OSI-, or FSF-, -approved license!”*

# Open Standards

# Open Standards

- Process-Based
- Outcome-Based

# Open Standards

- Process-Based
  - ANSI Essential Requirements
    - Consensus
    - Public Review
    - Comments & Changes
    - Appeal
      - <http://www.ansi.org/essentialrequirements>

# Open Standards

- Outcome-Based
  - European Interoperability Framework
    - Consensus
    - Specification freely available
    - Non-profit organization
    - No constraints on reuse
    - ***Patents irrevocably available royalty-free***
      - <http://ec.europa.eu/idabc/servlets/Docd552.pdf?id=19529>

# Open Standards

Process-Based

The Middle Ground

Outcome-Based



# Open Minds

# Open Minds

The Middle Ground

# Open Minds

“As long as the source code is available, the standard’s code *is* ‘open’”

The Middle Ground

“The standard *must* be royalty-free, for any use”

# Open Minds

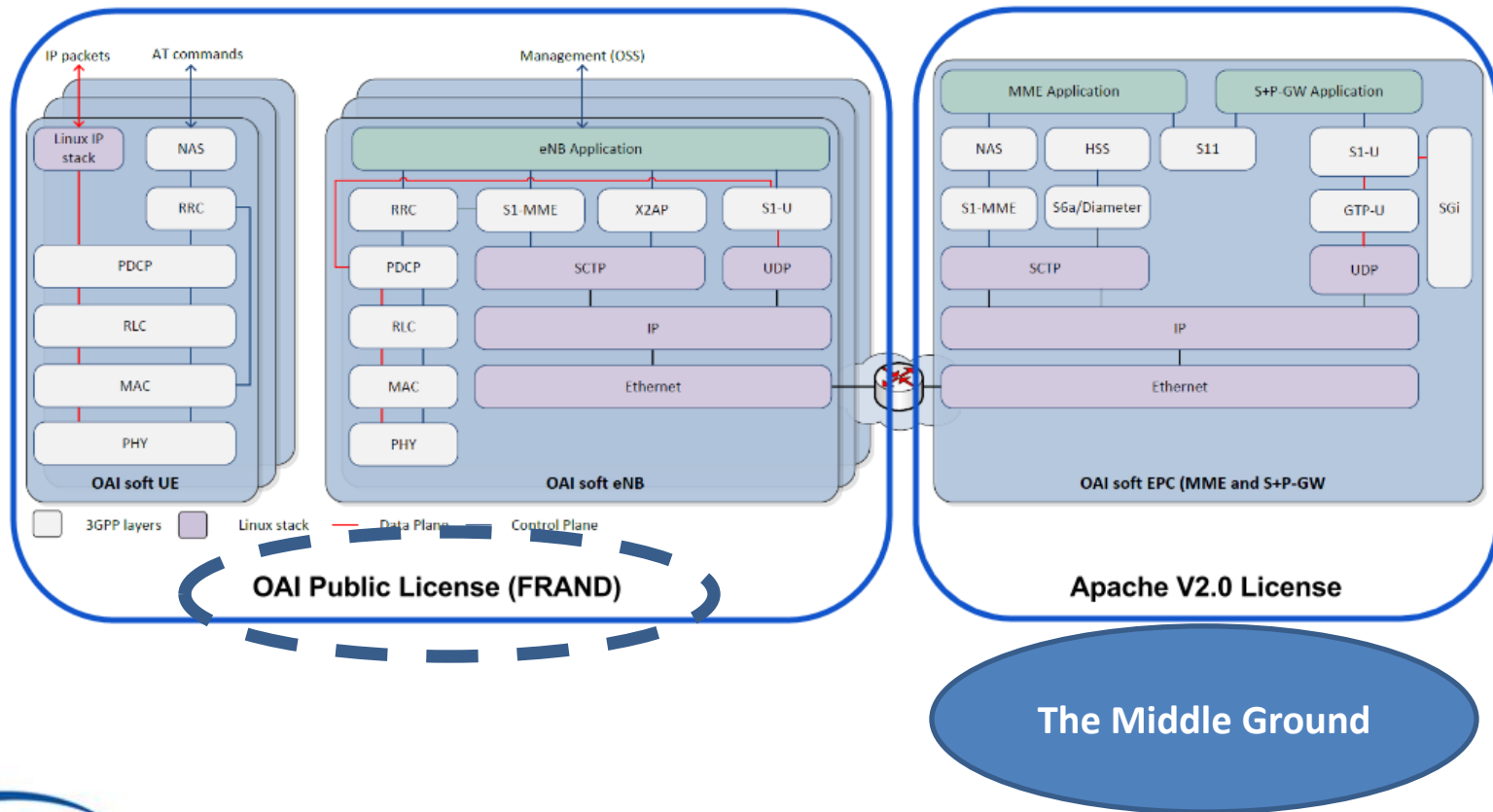
- Use an OSI-approved license, unmodified
- With express patent grants to contributions
  - E.g., not BSD & MIT-type
- RAND doesn't cover open source software



The Middle Ground

# Open Minds

- Open Air Interface



# Open Minds

- Open Air Interface
  - “Open Air Interface Public License”
    - Apache 2.0, modified
      - Patent grant only for “study and research purposes”
      - Otherwise, contributors commit to FRAND
  - Is interface “open,” & is license “public”?
    - “The OpenAirInterface™ Software Alliance (OSA) is a ... consortium to develop ... **open source** software....”



# Open Minds

- Hypothetical
  - Hardware + software standard
    - Hardware: specification document
    - Software: code developed by standards body
    - RAND IPR Policy
    - Software released under BSD or MIT
      - No express patent grant, or express grants disclaimed
  - Outcome?

# Open Minds – Open for Questions