

# The Influence of the Generator's License on Generated Artifacts


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# Agenda

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1. Introduction
  2. The Licenses
  3. The Influence of a Copyleft License
  4. The Influence of a Strong Copyleft License
  5. Shaping the Influence of the License
  6. Conclusion

# Introduction I

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- Open Source becomes more and more important
  - In 2008 85% of all enterprises were using open source software
  - 76% of all developers have used open source technology for some of their tasks
  
- There are many different licenses for different needs
  
- Multi Licensing
  - Provide the software under two or more licenses
  - Dual-Licensing is common often as a means of monetization

# Introduction II

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- Reasons to make software open source
  - Companies
    - **Grow** user base
    - **Create** industry standard
    - **Allow** users own audit
    - Monetization with Dual- or Multi-Licensing
  - Individuals
    - Show off **skills**
    - **Give** something back (Altruism)
  - Academia
    - **Prove** a concept
    - **Make** one work **available** for evaluation

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# License Classification

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- Permission of the License
  - Permissive
  - Weak Copyleft
  - Strong Copyleft
  
- License Grant
  
- Enhanced Attribution
  
- Privacy Loophole/Provider Loophole

# The Licenses

License	Reuse	Patent License	Enhanced Attribution	Privacy Loophole
Apache License	Permissive	Grants	No	No
3-Clause BSD License	Permissive	Doesn't grant	No	No
MIT License	Permissive	Doesn't grant	No	No
Eclipse Public License	Weak Copyleft	Grants	No	No
Lesser GPL	Weak Copyleft	Grants	No	No
GNU Public License	Strong Copyleft	Grants	No	No
AGPL	Strong Copyleft	Grants	Enhanced <sup>1</sup>	Yes

<sup>1</sup>Allows adding an enhanced attribution clause.

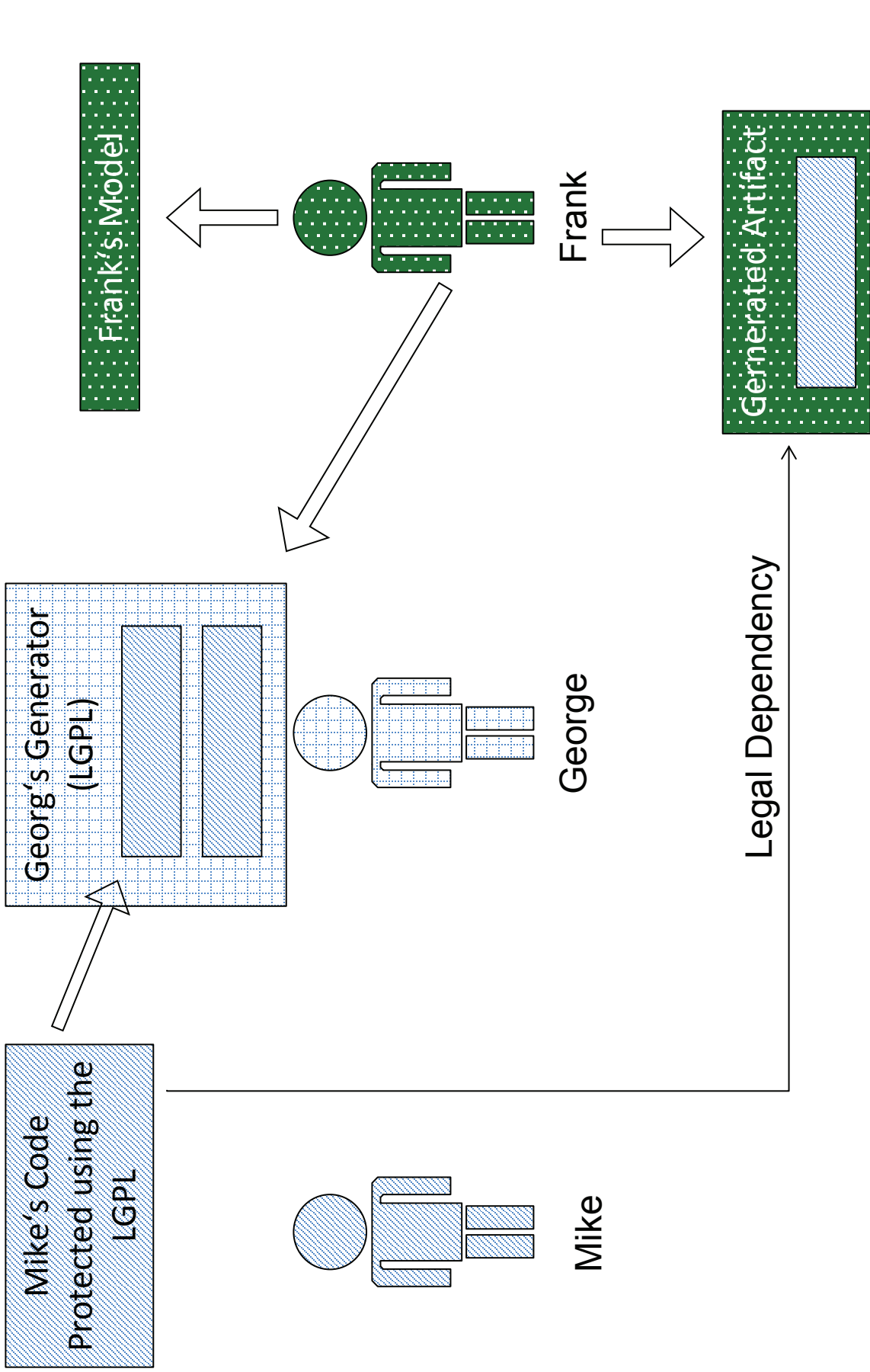
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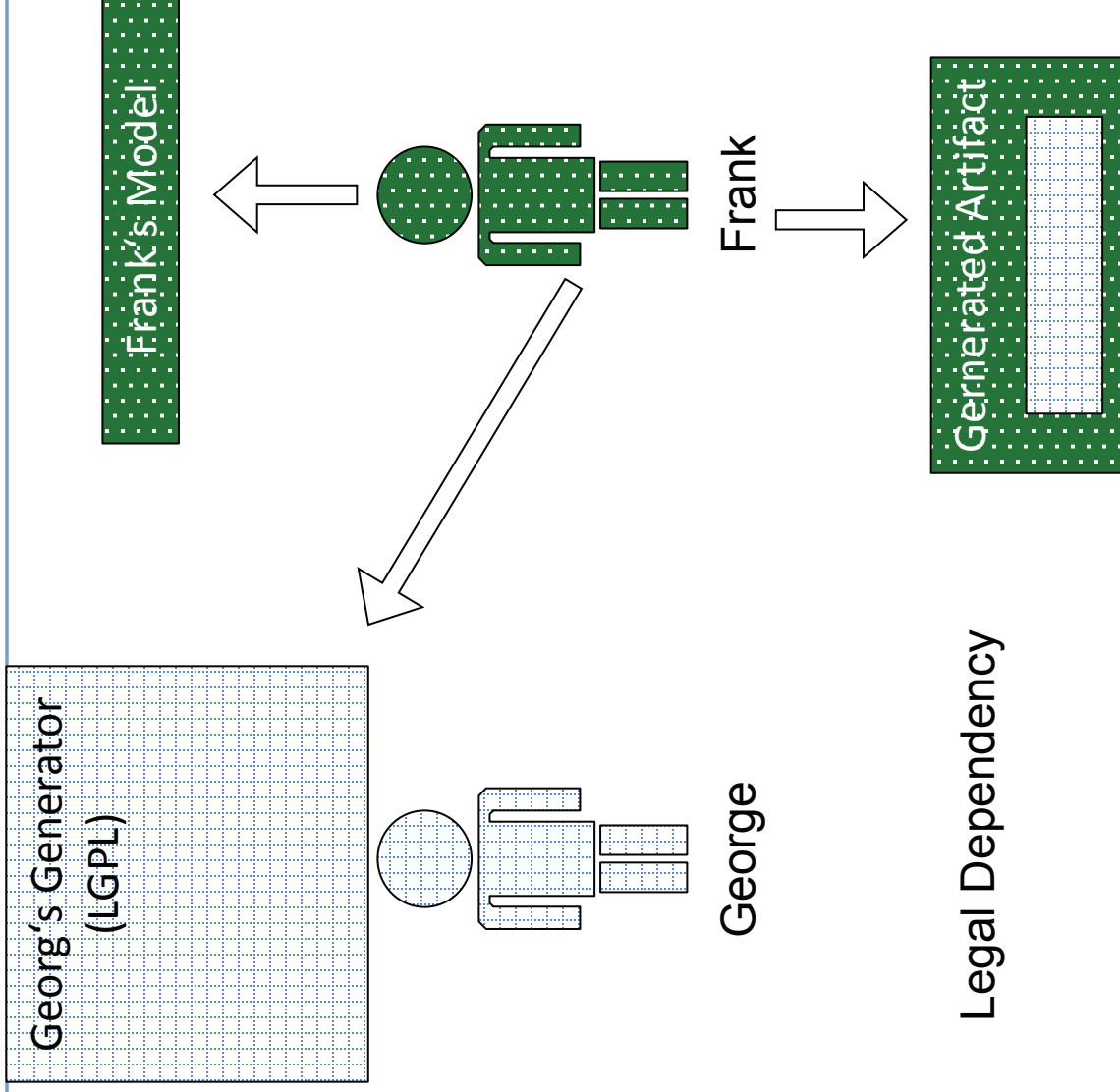
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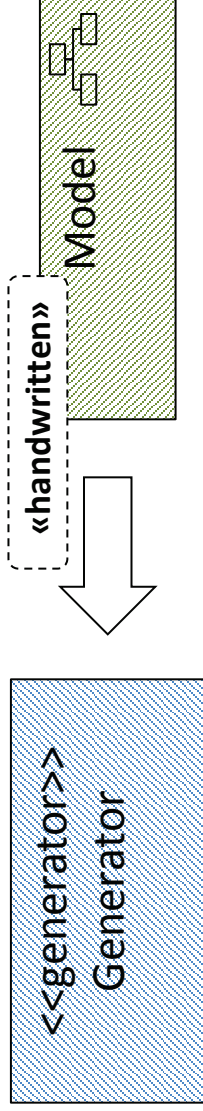
# Influence of the License



# Influence of the License II

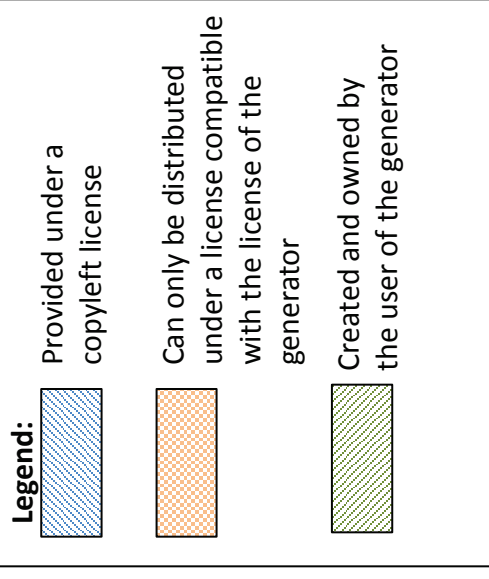
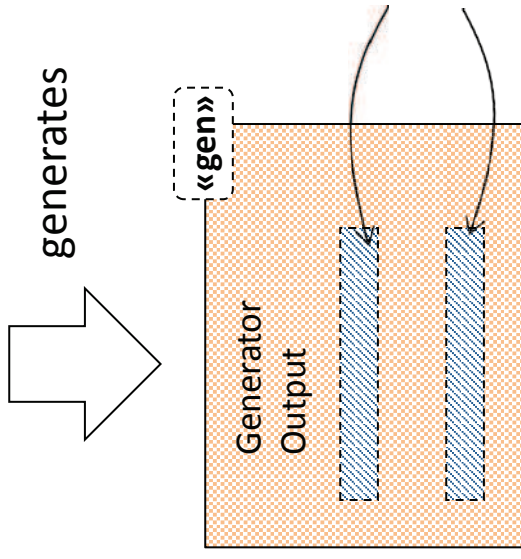


# The Influence of a Copyleft License



The restrictive license of the generator causes the output to be derivative work which needs to be distributed under the same or a compatible license as the generator.

Parts that are direct copies from generator sourcecode or from templates that are part of the generator



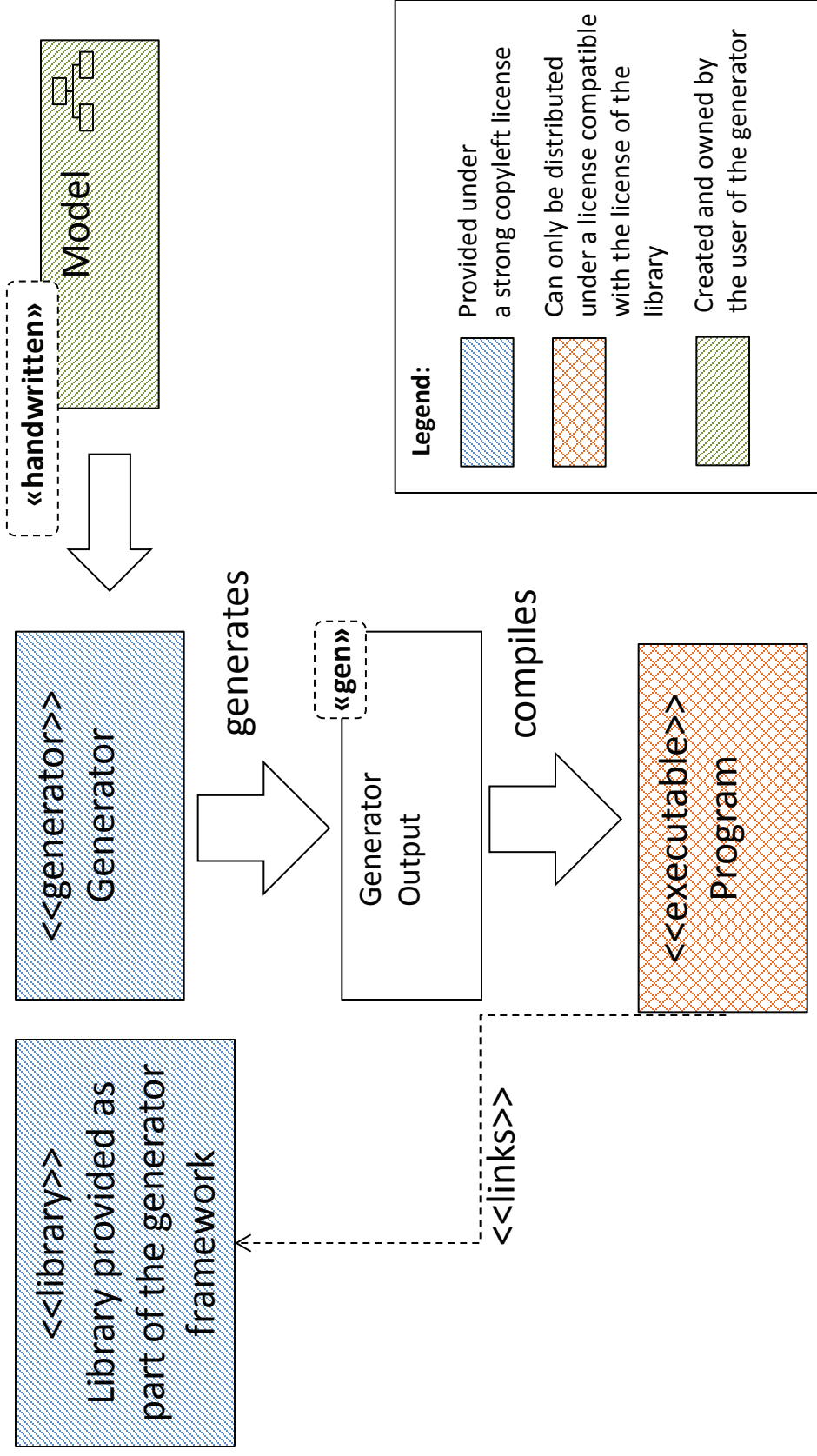
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# Shaping the Influence of the License

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- It is easy to create a legal dependency:
  - [Link](#) to code of a strong copyleft license
  - [Copy](#) code from a weak or strong copyleft license into the generated artifact
  
- [Reasons for creating a dependency](#)
  - To support ones own dual license model by forcing the user to license the generated artefacts restrictively
  - To foster the use of Open Source licenses
  
- [Reasons for not doing so](#)
  - The generator should be usable by a wide variety of projects including commercial ones
  - Give the users of the generator legal security about its artifacts

# Ways to prevent the influence of the generators License

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- **Adding an exception** to the license of the generator
  - This solution is used by Bison
  - **Disadvantage:** It creates a new license which causes difficulties for software distributors
- **Dual licensing** the code that creates the dependency under a more permissive license
  - **Example:** Put the code generator templates under the MIT-License or make them Public-Domain
  - No bad side effects
- **Use a more permissive license** that prevents the problem in the first place



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# Conclusion

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- The license of the generator can have an influence on the generated artifacts
- The effects can be positive and deliberate but also cause problems if their impact is not estimated correctly
- It is therefore important to know the impact of the license

# Thanks! Questions?

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