



# The Coming Collision: Open Source Development vs. Consumer & Public Protection

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# Open Source: Extra-Legal “Laws”

- Linus’ Law

- “Given enough eyeballs [ $\rightarrow\infty$ ], all bugs are shallow”
  - From Eric Raymond’s “The Cathedral & The Bazaar”

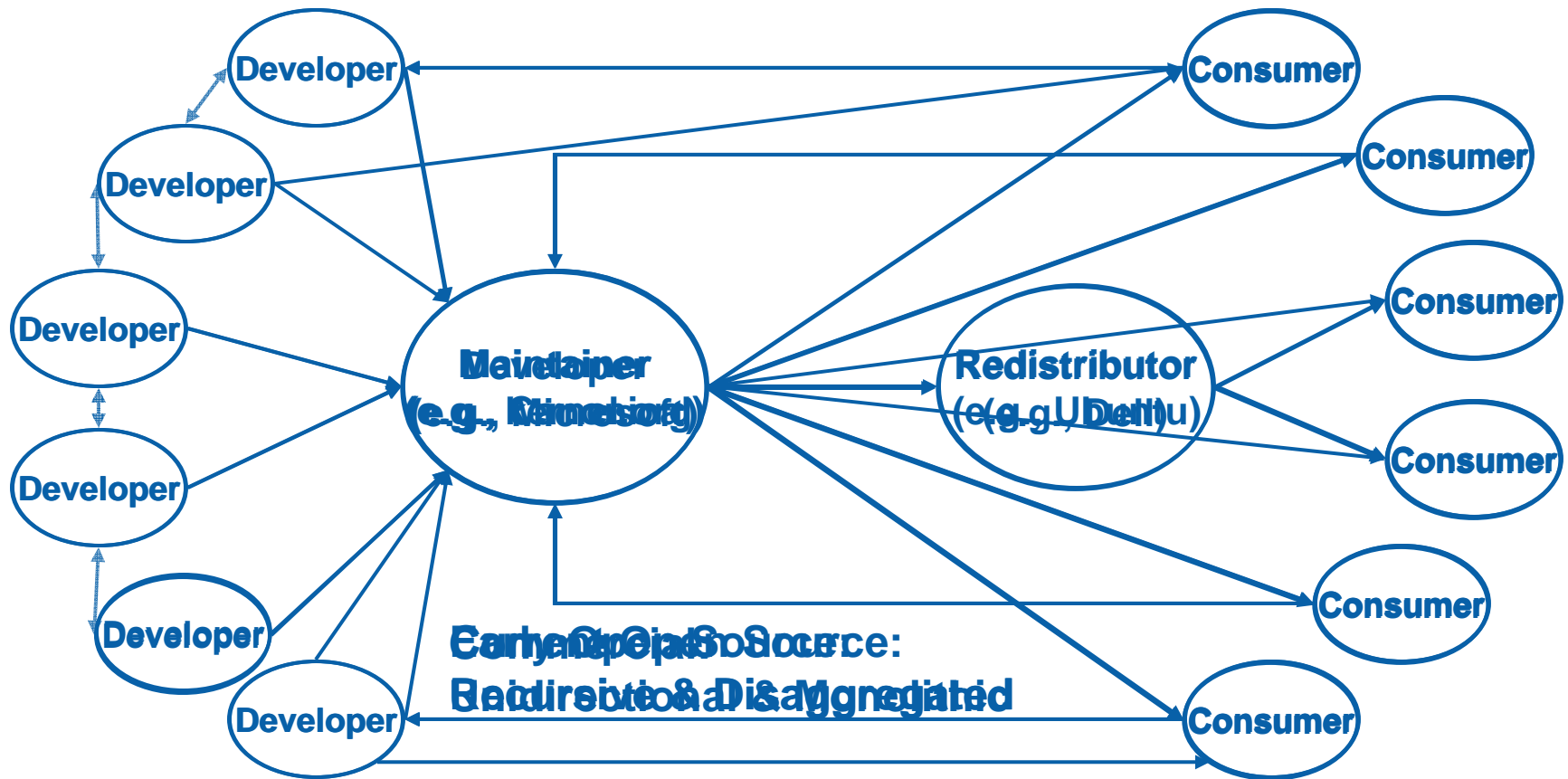
- Absolute “Freedom to Tinker”

- Corollary (condition precedent?) to Linus’ Law
- Codified in Open Source Definition Nos. 3, 5 & 6:
  - “Derived Works [Allowed]”
  - “No Discrimination Against Persons or Groups”
  - “No Discrimination Against Fields of Endeavor”
  - <http://www.opensource.org/docs/osd>

- “Schneier’s Law”

- “If people who write [open source] software ... are forced to assume liabilities, they will simply not be able to and [open source] software would disappear. ”
  - [http://www.schneier.com/blog/archives/2008/07/software\\_liabil.html](http://www.schneier.com/blog/archives/2008/07/software_liabil.html)

# Distribution & Development Models



# Commercial Model & Rules

- Development by professional programmers working for corporations or themselves:
  - Copyrights owned by corporation or business
  - Money made in variety of ways:
    - License fees
    - Support contracts
    - Ancillary product sales (e.g., hardware)
    - Work-for-hire contracts
  - Small risk of government scrutiny
    - National security (encryption software)
- Business & Legal rules:
  - Copyright owner gives restricted licenses and charges fees for licenses
    - Fee could be:
      - Direct (copyright license; support contract) or
      - Indirect (ancillary sales)
  - Sometimes – but not always – corporation or business provides a legal assurance (warranty or indemnity) for risks to customers
    - And possibly secures up-stream protection in the same way from suppliers
    - N.B. – this practice is not universal or even commonplace
  - Fees and/or license restrictions can be used to mitigate or insure against risks taken on by legal assurances
    - Although most commonly used to defray development and support costs

# Open Source Model & Rules

- Historically, software developed by, & exchanged between, hobbyists and/or academics:
  - Copyrights individually owned or owned by not-for-profit entity
  - Not a money-making enterprise
  - Almost no government scrutiny
- Now, more mixed:
  - Both not-for-profit, and for-profit, enterprises involved
    - For-profit enterprises offset costs through indirect fees (copyright license fees not allowed):
      - Support contracts
      - Ancillary product sales (e.g., hardware)
      - Work-for-hire contracts
- Legal rules:
  - Parties give each other liberal license to copyrights (and perhaps other IP)
  - Each party responsible for its own legal risks; no pass down of risk (via warranty or indemnity)
    - N.B. – this practice is “baked in” to virtually every open source license
    - No party has the capacity to take on the risks of any other party, particularly where there are no restrictions on other party’s activities
      - Risk-multiplier effect of unlimited copyright licenses
  - No party has right to demand monetary compensation from any other party to account for incremental risks and/or development costs
    - License fees prohibited
    - Can optionally charge fee for support or warranty

# Potential Clash: Consumer Protection

- American Law Institute, Principles of Software Contracts (draft, 2004- )
  - Proposes that all software licenses come with upstream warranties (no material defects) and indemnity (IP infringement)
    - Likely intended as a consumer protection measure in view of commercial development model
  - IP indemnity somewhat mitigated in applying to transferor that:
    - Deals in software of the kind transferred or holds itself out by occupation as having knowledge or skill particular to software, and
    - Receives money or right to payment in exchange for software
    - Nevertheless, many individual or low-profit developers not excluded
  - In case of injunction, transferor must:
    - Purchase right of continued use (i.e., buy a license to infringed IP);
    - Replace or modify software so it is non-infringing and works the same; or
    - Cancel the agreement, refund fees, and reimburse for replacement costs
      - N.B. – virtually all open source licenses are non-terminable
    - Likely none of these are practical for small or individual developers
- Does this proposal violate “Schneier’s Law” such as to harm or kill open source development model in the name of consumer protection?
  - Or forces a “commercial” development model, thereby violating Linus’ Law?

# Potential Clash: Public Protection

- FCC Regulations (47 C.F.R. §15.15)
  - Requires that devices that emit electromagnetic radiation (e.g., cell phones, Wi-Fi modems) “be constructed such that the adjustments of any control that is readily accessible by or intended to be accessible to the user will not cause operation of the device in violation of the regulations.”
    - Device maker can’t make a device with software that could be modified to run device out-of-band
    - Note, obligation imposed on manufacturer, not on proposed regulation violator
  - Very likely that F.D.A. (medical devices) and perhaps other regulatory agencies will impose similar restrictions in the future, all in interest of protecting the “public interest”
  - Private actors operating with similar restrictions, for non-public reasons:
    - Network service providers (cell and/or internet networks)
    - Content providers (music, movies)
- Inherent conflict between open source license terms (recipient may modify without any restriction) and governmental regulations (recipient must not be able to modify in certain defined areas)
  - Additionally complicated in view of GPLv3 obligation to provide “Installation information” necessary to reinstall modified software on devices
    - Software license says you must allow modification; governments says you must not – how is this resolved satisfactorily?
- Will government stifle the open source development model by imposing rules intended to protect the “eggshell common sense” consumer?
  - I.e., absolute freedom to tinker become “freedom to tinker except when government says you ought not tinker?”
    - Note that BXA faced a similar dilemma around encryption software several years ago, which it resolved in favor of open source

# New “Laws”

- Don't shoe-horn 20<sup>th</sup> Century legal regimes on 21<sup>st</sup> Century business & creative models
  - I.e., rules that assume that the small consumer must be protected from the big developer
    - The consumer is the developer
- Government and courts should protect the egghead individual equally – or more – than the eggshell skull individual
  - Tinkerers can make mistakes, even big ones – perhaps they should be allowed to without impediments
    - The egg-shell skull individual is unlikely to be a tinkerer
- Avoid solutions in search of a problem
  - In general, open source licenses and extra-legal enforcement regimes have been effective as-is

