



Free and Open-Source Software (FOSS)

Karl Voit

This Talk

Motivation for Free Software as a valid alternative to closed/proprietary software products

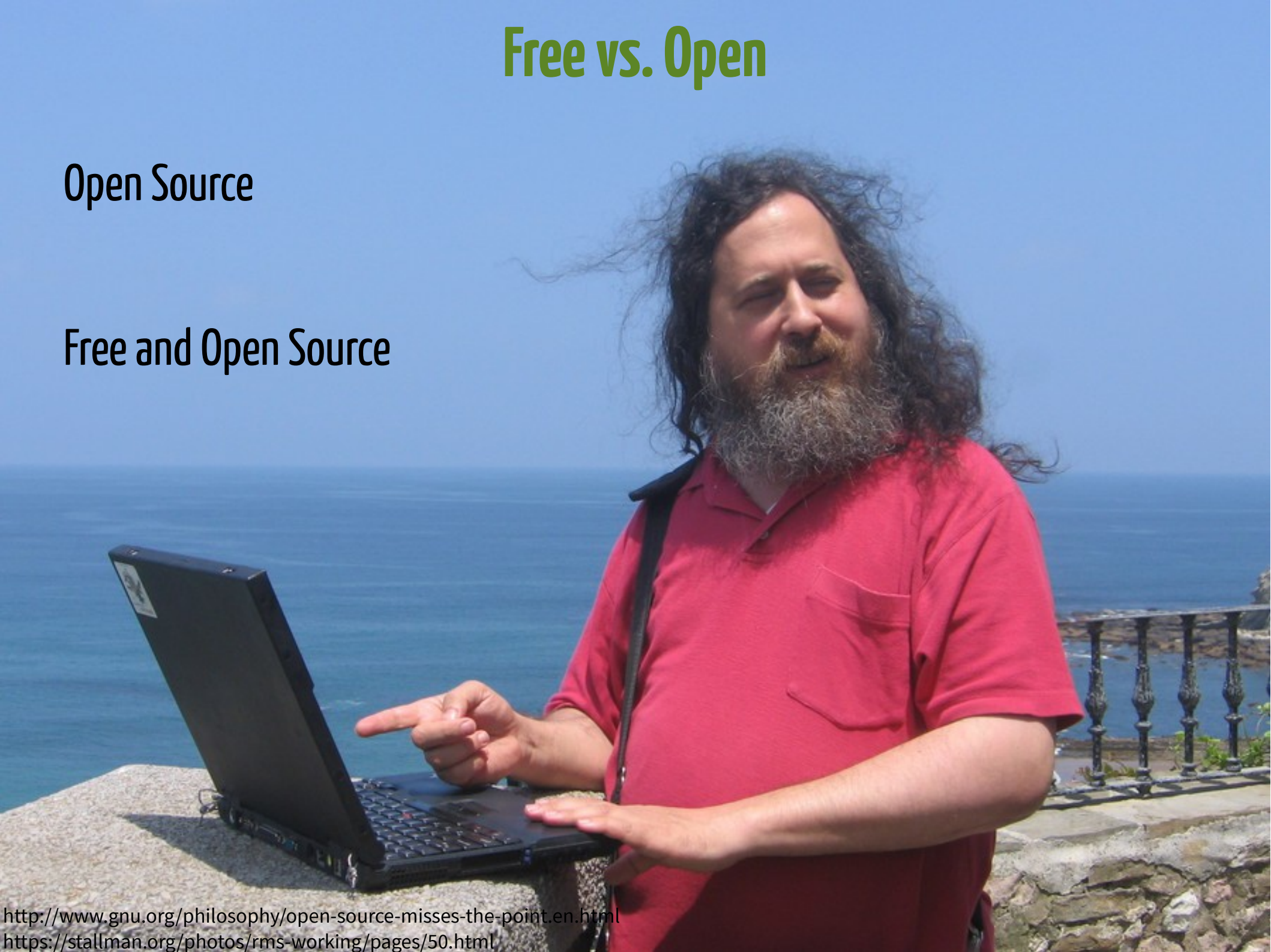
Endless Topic

- Emphasis on certain aspects

Free vs. Open

Open Source

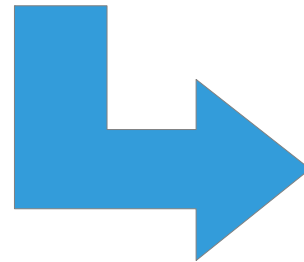
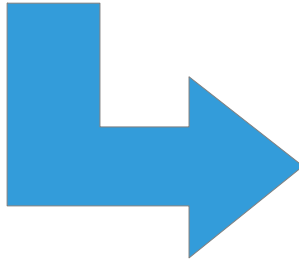
Free and Open Source



Point of View

Developers developing software

Company producing software



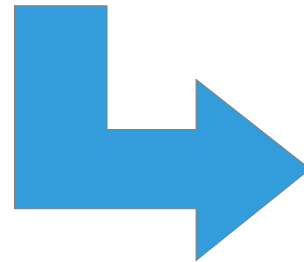
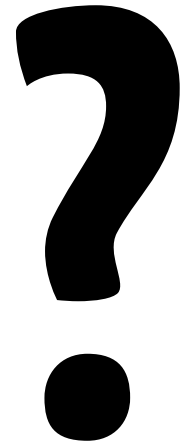
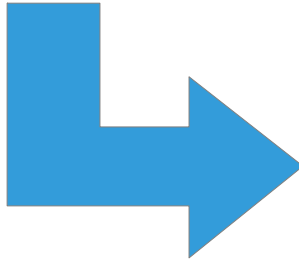
Company using software

End-user using software

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Company using software

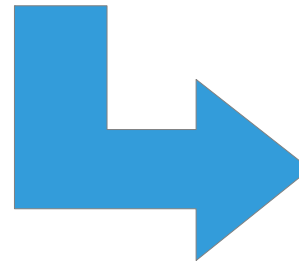
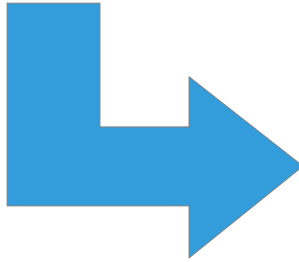
End-user using software

Point of View

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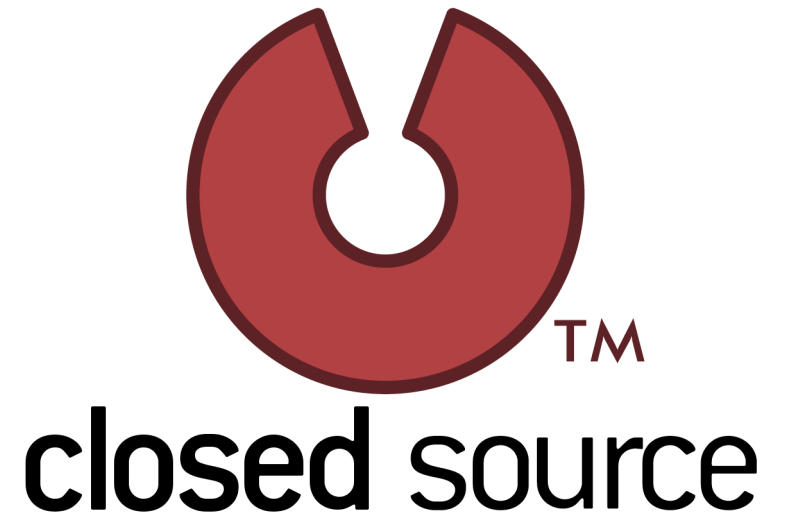
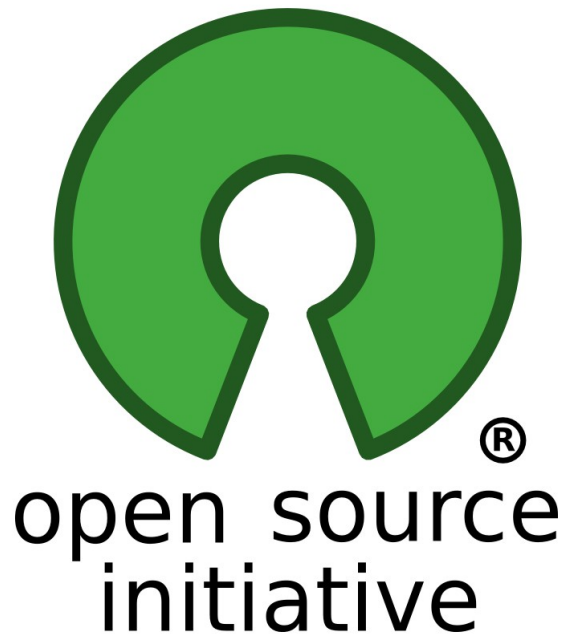
Not focus of
this talk



Company using software

End-user using software

Symbols



Subjective!

Aspects of FOSS

Costs



Once-only Purchase



Recurring Fees



Support



Cost of Training

- IT

- End-User



Cost of Downtime (Availability)



Risk of Security Issues

- Loss of Customer Data

- Loss of Reputation

- Loss of Company Secrets



Integration



Customization



Lock-in Costs



Sustainability of Knowledge/Skills/Training

Knowledge learned today last much longer for FOSS

Invest in your knowledge vs. ship \$\$\$ to USA



Support

Quick test 1:



«call your Microsoft/Oracle/... support hotline»



VS.

«ask a question on GitHub, in the Usenet/IRC, or in a forum»



Quick test 2:

«consult your Microsoft/Oracle/... product documentation»



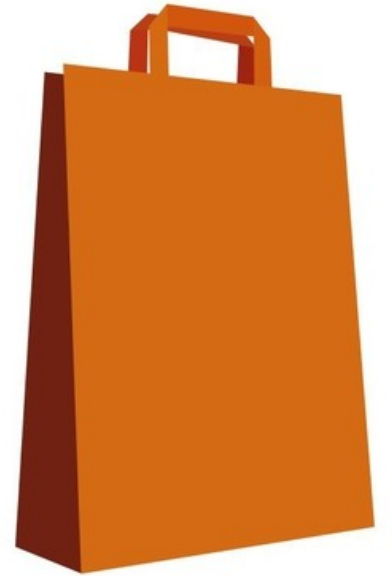
VS.

«look it up in your FOSS documentation»



Drilled to Success

- «We need to have X new features every Y months»
 - Get consumers to buy new version
- Revolution vs. Evolution (FOSS)
- Improving the current featureset is only OK for FOSS
- Forced upgrade cycles



Although: subscription model is a game-changer here

Future-proof, Extensability, Maintenance

«Make it so»



Quality

A recent study [1] of >1500 projects states:

- less errors per LOC
- better quality
- faster bug-fixing



⚡ No guarantee: **Majority** of FOSS projects:

- Depending on one developer
- Bad quality
- Insecure
- Questionable future



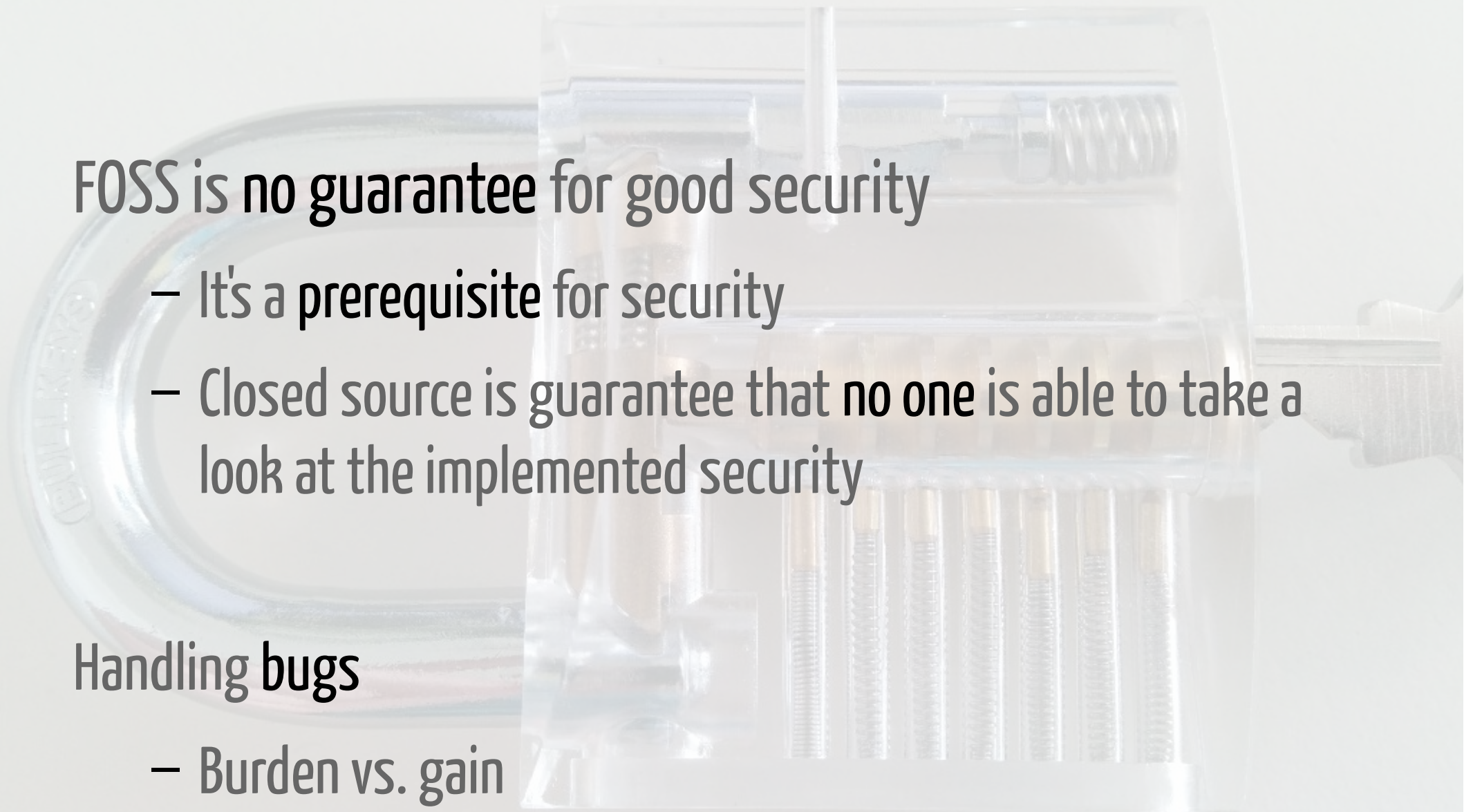
Security

FOSS is no guarantee for good security

- It's a prerequisite for security
- Closed source is guarantee that no one is able to take a look at the implemented security

Handling bugs

- Burden vs. gain



Lock-In Effect, Open Standards

- Openness of data is even more important than license of SW
- Lock-in Effect
 - Vendor dictating price, upgrade cycles, featureset, ...
 - Discontinued products result at least in data loss
 - Hard to switch to alternatives
 - Restricted business strategy
- Munich switched to FOSS[1]
- Italian military switches to FOSS[2]
- France switches to FOSS[3]
- Great Britain switches to FOSS[4]

[1] <https://en.wikipedia.org/wiki/LiMux>

[2] <http://www.libreitalia.it/chi-siamo/>

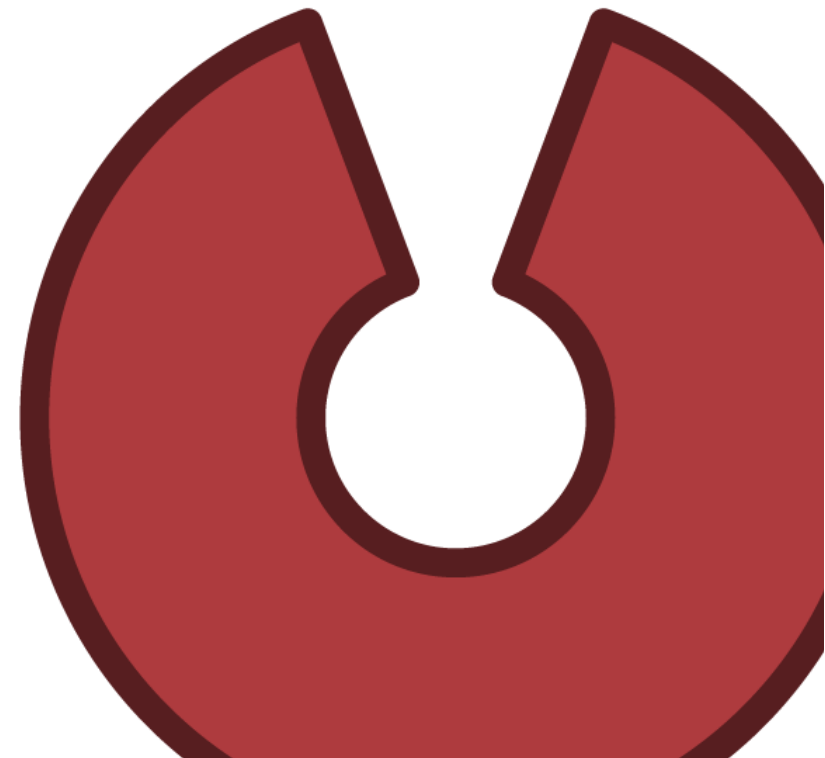
[3] <http://business.lesechos.fr/directions-numeriques/technologie/open-source/021204971064-informatique-l-administration-tente-de-reduire-le-poids-de-microsoft-201160.php>

[4] <https://www.gov.uk/government/policies/government-transparency-and-accountability>

<http://www.freeimages.com/photo/prisoned-leaf-1469432>

Reasons for Closed Source

- Niche applications
- Topics with not enough motivation/know-how of FOSS developers
- When you depend on proprietary software or hardware
- Unskilled users avoiding learning steep curves
- For software as a service (SAAS) model
- When you need special kind of support
- When you need to avoid license hell
- When you need someone to sue

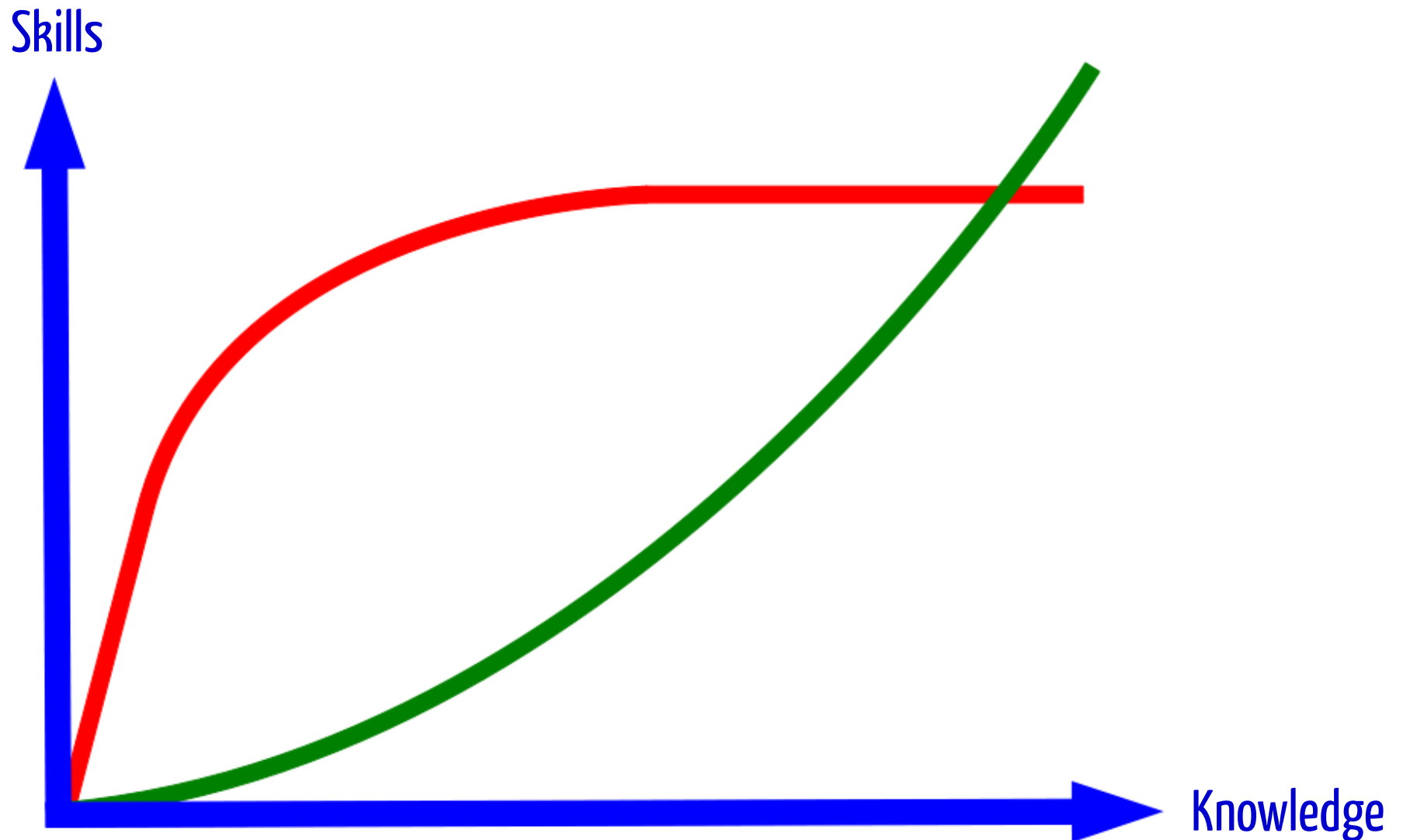


Far Future: My Prediction

- FOSS will be the default license model for everyday software such as
 - Operating system
 - Word processing
 - Web browsers
 - And so forth
- Closed source software is found only for niche markets



Short Term vs. Long Term Focus



Aspects Not Covered Here

- Try Before You Buy
- License hell
- Local FOSS knowledge vs. foreign license fee
- Economics such as RoI limitations
- Open hardware
- And many more ...

Lessons Learned

«Free» is more than just «open»

If you love your data, use FOSS

If you need security or privacy, use FOSS

Invest in your knowledge rather than foreign license fees



Some FOSS advantages emerge only after years (the long run)

Don't get yourself (or your data) locked-in

Please do give me some **feedback** on this talk: <https://glt16-programm.linuxtage.at/events/113.html>

Follow my Blog: <http://Karl-Voit.at/>

Use-Case: Aras (PLM)

- Enterprise SW
- Started as proprietary SW 
- Since 2007: as Microsoft Public License and BSD 
 - Updates via subscription model
 - Support via subscription model

Colophon

- Software used:
 - LibreOffice Impress
 - Debian GNU/Linux
- Fonts:
 - Yanone Kaffeesatz
 - Source Sans Pro
 - **Arial Rounded**
- Photographs, Logos:
 - See included URLs

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