

Linux-libre and the prisoners' dilemma



<http://linux-libre.fsfla.org/>

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<http://www.fsfla.org/svn/fsfla/site/blogs/lxo/pres/linux-libre/>

<http://www.fsfla.org/blogs/lxo/pub/linux-libre>

Summary

- History
- “Be Free!” campaign
- Liberating Linux (again)
- Adoption
- Challenges

History

1983 GNU

1991 Linux (not Free)

1992 Linux (GPLv2), Yggdrasil Linux/GNU/X

???? Linux (not Free again)

2006 gNewSense's find-firmware and
gen-kernel

2007 BLAG's deblob and Linux-libre

2008 FSFLA's deblob-check

Be Free!

- Promoting Free Software?
- Promoting Software Freedom!
- Social responsibility

*You must **be** the change you wish to see in the world.*

Mahātmā Mohandas Karamchand **Gandhi**

*The more people resist [non-Free Software],
the more people will be Free, and
the more people will be free to be Free.*

Free Software Foundation Latin America

<http://fsfla.org/se-libre/>

But how could we “Be Free”?

- GNU et al are Free, but Linux isn't!
- Code without sources, various licenses



*This [GPLed] file contains firmware data derived from **proprietary unpublished source code**, Copyright (c) 2004, 2005, 2006, 2007 [vendor] Permission is hereby granted for the distribution of this firmware data in hexadecimal or equivalent format, [...]*

Network driver, 100+Kb of actual binary executable code

Notwithstanding the [GPLv2 terms] above, under no circumstances may you combine this software in any way with any other [vendor] software provided under a license other than the GPL, [...]

2008's network driver **from the same vendor**, 300Kb “data”

Liberating Linux

- Remove sourceless code
- Remove incompatibly-licensed data/code
- Remove requests for non-Free Software
- Remove corresponding info from docs
- **“Holy”** Free systems
- Remove incomprehensible code/data?



Liberating Linux

- Shell scripts `deblob-*`
- `-main`: `Untar`, `deblob-kver`, `tar`, `xdelta`
- `-kver`: `deblob-check -d` known files, adjust
- `-check`: blob hunter and killer
 - Can check sources, patches and tarballs
 - Heuristically recognize suspected blobs
 - Leave alone known false positives
 - Recognize known unsuitable sequences

Linux-libre downloads

- Source tarballs tracking upstream Linux
 - `linux-2.6.*-libre*.tar.bz2`
- Pristine builds for popular distros
 - Ali Gündüz's Freedom Shoppe
- Builds tracking upstream distros
 - Freed-ora (used by BLAG)
 - Freed-ebian! Huru-buntu? etc

Help? linux-libre@fsfla.org

Adoption

- gNewSense
- BLAG and FREEEEE
- Trisquel, Venenux, Dragora GNU/Linux
- Ututo
- Musix GNU+Linux
- Dyne:bolic
- Users of other distros

Challenges

- Distros want/need popularity
- Blobs attract more users?
- Incentive to betray users, weaken communities
- Prisoners' dilemma, iterated
- Defection feeds the aggressors
- Tragedy of the commons

How can we change this picture?

- Break the myth of breakage
- Lead by example, “**Be Free!**”
- Educate users, to shift the incentives
- Seek credible commitment among distros
- Take it upstream, uphill?



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