



What can Open Source do for you

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Today's Topics

- Who?
- What?
- Why?
- How?



An abstract graphic on the left side of the slide, featuring a light grey vertical bar on the left, a dark blue circle in the upper right, and a medium blue curved shape below it. The background of the slide is a dark grey gradient.

Who?

About me

- Cloud Business Unit, Red Hat Czech, Brno
- working with Open Source communities on projects Katello, Pulp, Candlepin, Aeolus
- Fedora Project Member
- Linux Ambassador
- what I like: vim, bash, mutt, mc, grep



An abstract graphic on the left side of the slide, featuring a large, light grey shape that resembles a stylized letter 'F' or a similar symbol. This shape is set against a dark blue background that also contains a large, solid blue circle. The overall composition is minimalist and modern.

What?

What is Open Source

What is Open Source

philosophy or methodology

What is Open Source

promotes free redistribution and access to an end product's implementation details

What is Open Source

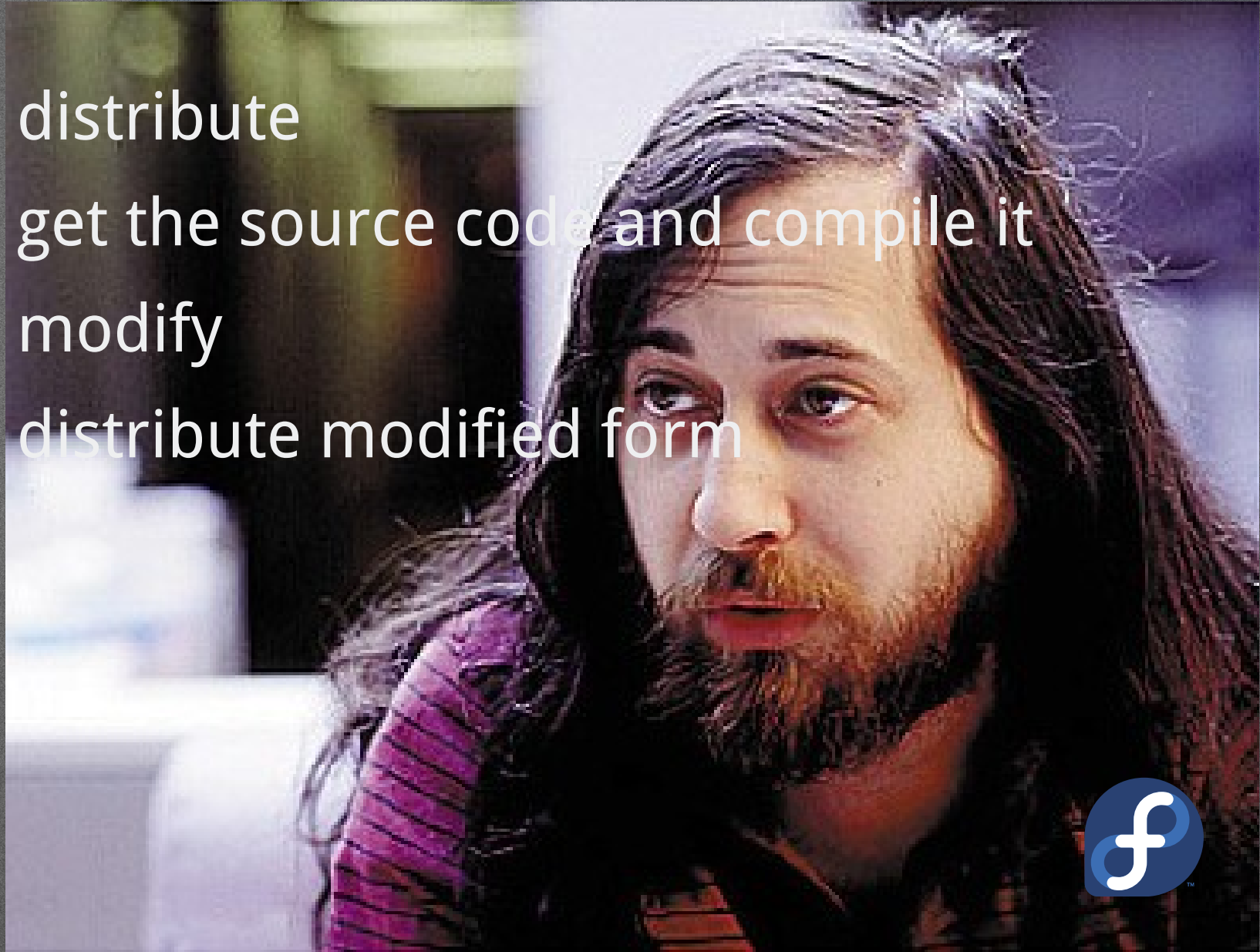
what an Open Source license gives you?

What is Open Source

rights

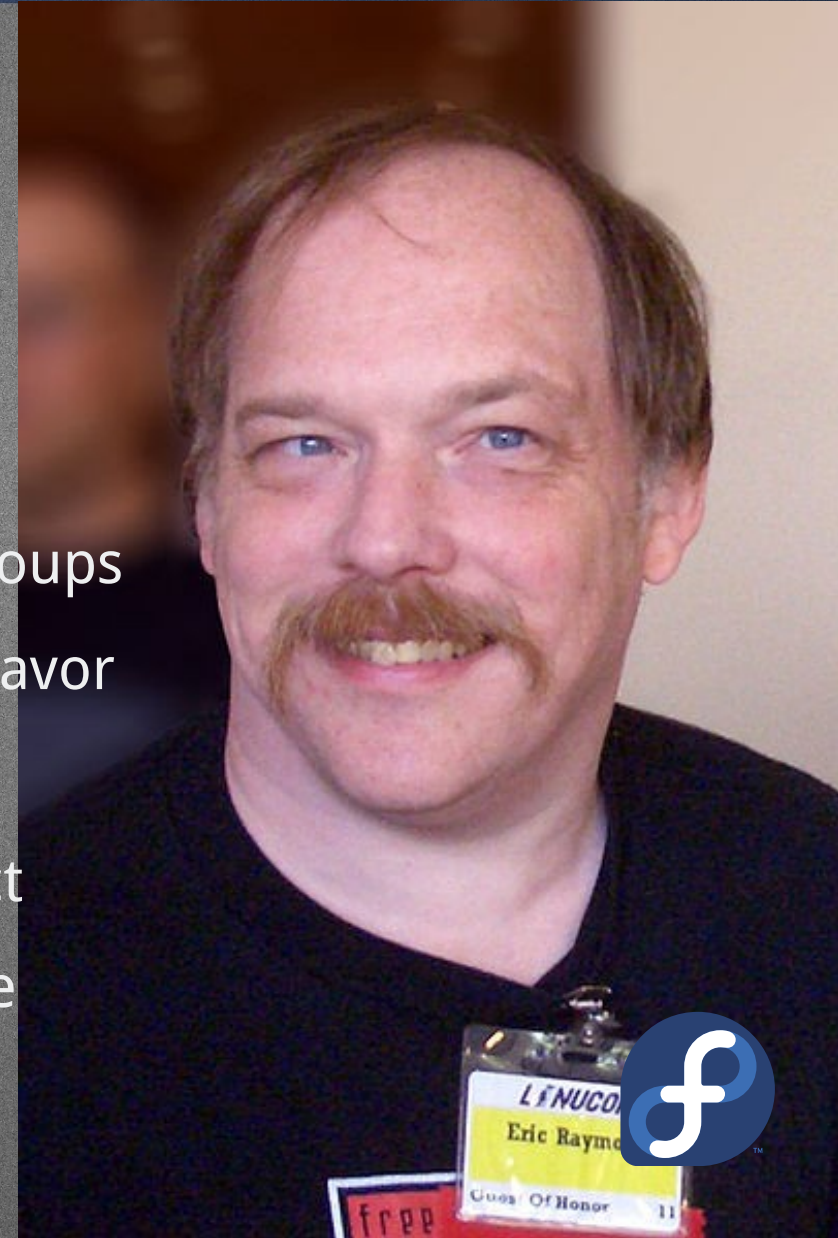
What is Open Source

- right to distribute
- right to get the source code and compile it
- right to modify
- right to distribute modified form
- ...



What is Open Source

- Free Redistribution
- Source Code
- Derived Works
- Integrity of The Author's Source Code
- No Discrimination Against Persons or Groups
- No Discrimination Against Fields of Endeavor
- Distribution of License
- License Must Not Be Specific to a Product
- License Must Not Restrict Other Software
- License Must Be Technology-Neutral



What is Open Source

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What is Open Source

copyleft vs permissive

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Why?

Why should I care

in 2008 Gartner made a survey about use of
Open Source in 274 software companies

Why should I care

how many of them use Open Source now?

Why should I care

100 % *

Why should I care

* 85 per cent of companies surveyed currently using OSS in their enterprises and the remaining 15 per cent expecting to in the next 12 months

Why should I care

- every single software company use it
- ...



Why should I care

Dice/LSF asked 2000 ICT-HR managers around the world about Linux positions

Why should I care

finding those talents is difficult; companies are investing to attract them; Linux developers and administrators are the most in-demand

Why should I care

for **81 %** respondents
hiring a Linux talent is a priority in 2012

Why should I care

average salaries for Linux professionals are
\$5,105 higher than IT worldwide average
(7 943 CZK per month)

Why should I care

- every single software company use it
- you get paid well
- ...



Why should I care

in 2011, Coverity reports OSS projects have significantly better defect density than the software industry average

Why should I care

- every single software company use it
- you get paid well
- you work with high-quality code and products
- ...



Why should I care

redhat.com | google.com | apple.com

Why should I care

- redhat.com ___ Open Source
- google.com ___ Open Source
- apple.com ___ Open Source
- modern IT industry ___ Open Source



Why should I care

- redhat.com is Open Source
- google.com is Open Source
- apple.com is Open Source
- modern IT industry is Open Source



Why should I care

- redhat.com _is_ Open Source
- google.com _love_ Open Source
- apple.com ____ Open Source
- modern IT industry ____ Open Source



Why should I care

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- google.com _love_ Open Source
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- modern IT industry ____ Open Source



Why should I care

- redhat.com _is_ Open Source
- google.com _love_ Open Source
- apple.com _use_ Open Source
- modern IT industry *_ _ Open Source

* raise and fall with



Why should I care

- redhat.com _is_ Open Source
- google.com _love_ Open Source
- apple.com _use_ Open Source
- modern IT industry *_ Open Source

bonus: microsoft.com _use_ Open Source too
(but Steve Ballmer wasn't told)



Why should I care

Linux/UNIX is the winner on whole server market, cloud and mobile devices

Why should I care

- Linux/UNIX server share is 55.6 %
(IDC, 2011, revenue methodology)
- Linux/UNIX webserver share is 63.9 %
(W3Techs, 2011)
- Linux TOP500 supercomputers share is 91.4 %
- Android (=Linux) mobile share is 52.5 %
(Gartner, 2011)
- Android tablets take 40 % and rising



Why should I care

adopt Open Source or retire

-- Lukáš Zapletal, 2012

Why should I care

- every single software company use it
- you get paid well
- you work with high-quality code and products
- dominating technology on servers and mobile
- ...



Why should I care

unofficial Amazon EC2 instance report from
december 2010: 7,051 instances running Linux,
1,117 instances running Windows

Why should I care

- every single software company use it
- you get paid well
- you work with high-quality code and products
- dominating technology on servers and mobile
- future for the cloud



Why should I care

- every single software company use it
- you get paid well
- you work with high-quality code and products
- dominating technology on servers and mobile
- future for the cloud
- **bonus points** during your interviews



Why should I care

- every single software company use it
- you get paid well
- you work with high-quality code and products
- dominating technology on servers and mobile
- future for the cloud
- **bonus points** during your interviews
- you can't go wrong & it's fun!



An abstract graphic on the left side of the slide, featuring a dark blue background with a large, light blue circle and a white, stylized shape that resembles a lowercase letter 'f' or a similar character. The shapes are layered and partially overlapping.

How?

How do I start

- find **your** project



How do I start

- find **your** project
- **use it** for a while



How do I start

- find **your** project
- **use it** for a while
- **stay connected** with upstream



How do I start

- find **your** project
- **use it** for a while
- **stay connected** with upstream
- **ask** before starting some work



How do I start

- find **your** project
- **use it** for a while
- **stay connected** with upstream
- **ask** before starting some work
- **get familiar** with current bugs and requests



How do I start

- find **your** project
- **use it** for a while
- **stay connected** with upstream
- **ask** before starting some work
- **get familiar** with current bugs and requests
- write doco, fix bugs or code features



How do I start

- find **your** project
- **use it** for a while
- **stay connected** with upstream
- **ask** before starting some work
- **get familiar** with current bugs and requests
- write doco, fix bugs or code features
- **be prepared** for code review



How do I start

larger community projects have many roles
you can apply for

How do I start

- content writer
- designer
- people person
- developer
- translator
- web developer
- administrator





How do I start

it's vital to speak English via appropriate
communication channels

How do I start

- mailing lists (most popular)
- irc channels (old-but-awesome technology)
- bug trackers (valuable information)
- wiki pages (usually best technical resources)
- user forums (not so popular in communities)
- social webs
- other means





How do I start

knowing the programming language
is simply not enough

How do I start

- working with revision control systems
- understanding processes
- analyzing and reproducing bugs
- release engineering
- communicating with other roles
- getting things done (planning)
- project management



How do I start

knowing your revision control system
can save you **massive amount** of time

How do I start

- git
- bzd
- svn
- hg
- CVS
- RCS



How do I start

make use of **cloud**
when creating your own Open Source project

How do I start

- github.com | git
- [launchpad.com](https://launchpad.net) | bazaar
- code.google.com | git, hg, svn
- sourceforge.net | git, svn, bazaar, hg, cvs
- gitorious.org | git
- bitbucket.org | hg
- fedorahosted.org | git, hg, bazaar



How do I start

- generate your ssh key (one command)
- set your name & e-mail in git (two commands)
- register on github.com (few clicks)
- upload your public ssh key (few clicks)
- create a project on github.com (two clicks)
- `git clone git@github.com:lzap/project.git`
- start working, `git commit` & `git push`



How do I start

myth: open-source communities do not have strict rules aka “anybody can do anything”

How do I start

- **example:** bug report life-cycle
 - new
 - need more info / triaged / planned
 - assigned / rejected / postponed
 - build/release pending
 - test pending / verified / re-assigned
 - custom states, flags, options



How do I start

processes can be complicated
when working on large community project

How do I start

- **example:** getting your work upstream
 - patch into a bug tracker
 - patch into a mailing list
 - merge request
 - review tool
 - pastebin
 - irc
- **do test** and prevent regressions



How do I start

release engineering can be also challenging when working on a project with some history

How do I start

- **read** first, push then
- learn **branching strategies**
- follow **rcs** guidelines
- set proper **flags** in bug trackers
- **help** release engineers to do their jobs
- or became a **release engineer**





How do I start

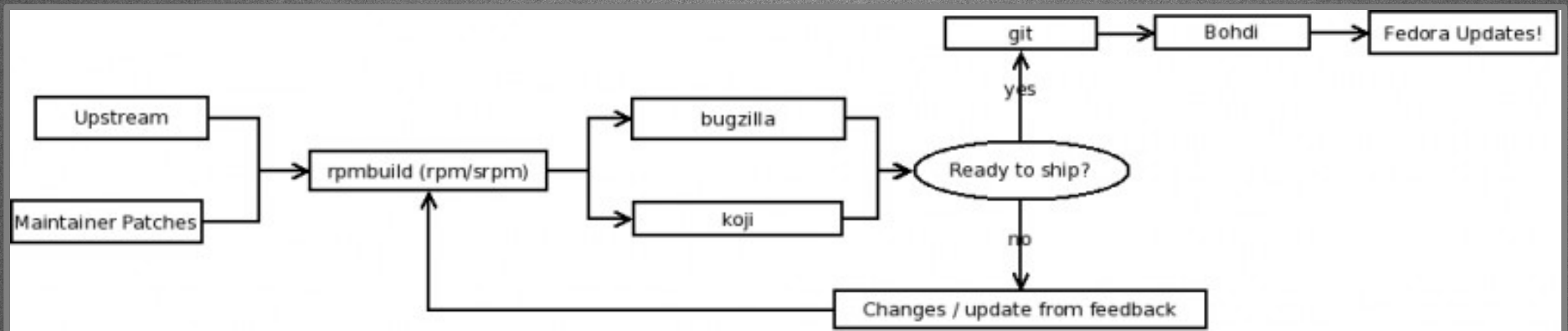
join Fedora Project and apply for
Fedora Package Maintainer

How do I start

- go to **join.fedoraproject.org**
 - > OS Developer > Packaging
- create bugzilla.redhat.com account
- join fedora mailing lists (packaging, devel)
- ensure your package is suitable
- make your package
- upload into bugzilla and set FE-NEEDSPONSOR



How do I start



A stylized graphic of a hand with the index finger pointing to the right. The hand is composed of several overlapping shapes in shades of blue and grey. The background is a dark blue gradient.

Questions?

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References

- http://en.wikipedia.org/wiki/Open_source
- <http://www.opensource.org/osd.html>
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- <http://fedoraproject.org/join-fedora>
- <http://progit.org/>
- <http://help.github.com/linux-set-up-git/>
- <https://fedoraproject.org/wiki/PackageMaintainers/Join>
- http://en.wikipedia.org/wiki/Richard_Stallman
- http://en.wikipedia.org/wiki/Eric_S._Raymondxxx

