

Take the Open Source road : learn, share, grow

by Paolo Patierno

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Linux Day Napoli 2018

Who am I ?

- Principal Software Engineer @ Red Hat
 - Messaging & IoT team
- Lead/Committer @ Eclipse Foundation
 - Hono, Paho and Vert.x projects
- Microsoft MVP Azure/IoT
- Dad of two
- VR46's fan (I don't like MM93)
- Try to be a runner ...



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“Someone” says ...

“Software is like sex: it’s better when
it’s free”

Linus Torvalds

* pay attention, he said free ... not free of charge :-)

The bottom of the slide features several horizontal red lines of varying thicknesses. On the right side, there is a stylized red graphic consisting of a series of connected horizontal and vertical segments, resembling a staircase or a circuit board trace.

... joking apart, the same person says

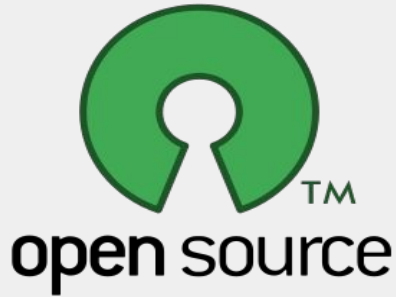
“In real open source, you have the right
to control your own destiny”

Linus Torvalds



Open Source vs Closed Source

- View and modify the source code
- Developed and released within a community not by an isolated team
- Large community to support and help
- It's more secure, bugs and vulnerabilities are fixed more often



Open Source: the freedom ...

- To run the program for any purpose
- To study and learn from the code
- To change the code for doing what you want
- To redistribute copies for helping others



Myths about Open Source

- It's "free"
- It isn't reliable or supported
- Anyone can change it
- Volunteer developers will fix all of your problems for free



Not only opening the Source code ...

... what about standards and
protocols ?



Proprietary and Closed protocols

- Difficult to port applications
 - Requires re-coding all applications
- Difficult to integrate
 - Application level bridge for translating formats
- Restricted platforms
 - Limited to whatever vendor provides



Open (standard) protocols

- Simple applications porting
 - Re-coding is no needed
- Simple integration
 - Well known messages format
- Broader platform support
 - Everyone can implement for a platform



The Open Source way

- Open exchange
 - free exchange of ideas helps, learn from each other
- Participation
 - solve problems all together
- Rapid prototyping
 - rapid prototypes, rapid failures, better solution
- Meritocracy
 - access to same information, best ideas win
- Community
 - bring together diverse ideas and share work



The Open Source won ...

- ... because it adapts better to a changing world
- ... because it makes interoperability simpler
- ... because of the new decentralized software development model
- ... because of the new networked software distribution
- ... because it involves more people
- ... because ... many more other reasons :-)



Rise of Open Source

- All big companies are releasing (part of) their software as Open Source
- Google: Kubernetes, Tensorflow, ...
- Facebook: RocksDB, GraphQL, React, ...
- Netflix: Netflix OSS suite
- Microsoft: .Net Core, VS Code, Azure tools, ...
- Red Hat:
 - ... well it's THE open source company :-)
 - ... do we have time for the loooong list ? :-)



Rise of Open Source

- There is a growing trend in the Industry
 - IoT, AI, blockchain ...
- Big companies have been joining foundations
 - Apache Foundation
 - Linux Foundation
 - CNCF (Cloud Native Computing Foundation)
 - Eclipse Foundation



The companies gain

- Companies can leverage on partnerships “opening” the code
- New “standard” platforms can be born in this way
- More interoperability
- Big customers can help you and drive the product
- ...




Who drives?

... but who is in charge to drive the
Open Source Software ?



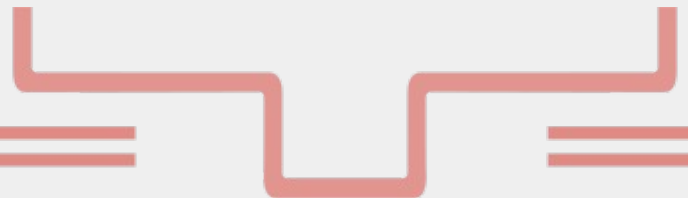
Community: Wikipedia says ...

community

/kə'mju:nɪti/ 

noun

1. a group of people living in the same place or having a particular characteristic in common.
"Montreal's Italian community"
synonyms: [group](#), [section](#), [body](#), [company](#), [set](#), [circle](#), [clique](#), [coterie](#), [ring](#), [band](#), [faction](#); [More](#)
2. the condition of sharing or having certain attitudes and interests in common.
"the sense of community that organized religion can provide"



Community: noble principles

“The community which has neither poverty nor riches will always have the noblest principles”

Plato



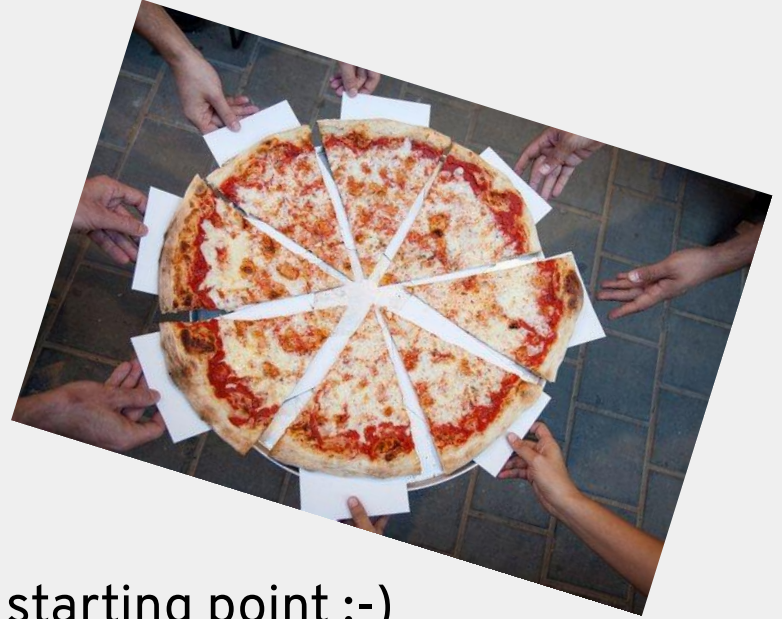
Community: recipe and ingredients

- Project
 - An idea and a topic for discussion ...
 - ... for building “something” around that
- Noble principles
 - For having an “healthy” community
- People
 - Who share passion and common interests
 - No matter what’s your skills level



Community: sharing, sharing, sharing

- Sharing knowledge
- Helping each other
- Sharing ideas
- Discussing all together



* The pizza is not needed ... but it's a good starting point :-)



Community: how to get involved?

- Different areas to get involved on a project
 - Development
 - Documentation
 - Support
 - Testing
 - Evangelism



Community: the individual is the core



Red Hat Summit 2016, Boston



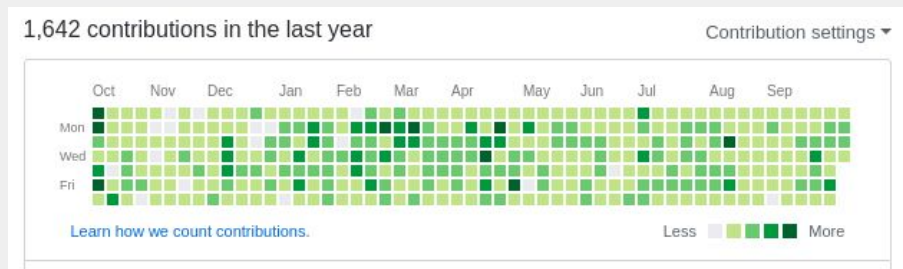
Now it's up to you, from your passion ...

- Invest your time and your passion in the Open Source
- Engage with a community about a project of your interest
- ... or ...
- Start a new Open Source project
- Try to create a community around it



... to your career

- The Open Source changed the way to hire
- Companies are really interested in Open Source
- What you have done is always valuable
- GitHub can be your best friend!



You feel like a superhero

... with great power, comes
great responsibility ...



Thanks !



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