How to choose

Viable Open Source solution



Agenda

License: Is it true Open Source

Community: Size, (Open) Governance, Diversity

(Open) Brand

Apache Ignite

Dmitriy Pavlov



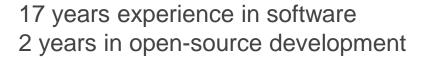
PACHE Committer, PMC member



Apache Training (Incubating) Committer, PPMC member



GridGain Lead Software Engineer,
Community Manager





dpavlov@apache.org







Disclaimer

- This presentation represents my own personal opinion.

It does not necessarily reflect the official stance of The Apache Software Foundation/any company/any other entity the author might be affiliated with at the moment of presenting.

Not a lawyer

How to choose project?

To Contribute

Community

Clear how to start

Clean code

Goal: secure open-source reputation, protect investment of own time

To Use

Features

Quality

Open Source

Goal: long-term stability, maintained, developed platform

The Open Source Definition

"Open source", has a specific definition that was written years ago and is stewarded by the Open Source Initiative, which approves Open Source licenses:

- not specific for a project
- allows derivative works
- does not limit areas for using project



License compatibility

Not all licenses are compliant

Category A: Apache, BSD, MIT/X11;

Category B: <u>EPL</u> 1,2;

Category X: GNU GPL, GNU LGPL

https://www.apache.org/legal/resolved.html

Not compatible:

Free software



Open Source != Free software

(Free/libre) software (FSF)

End user freedoms

Derivatives should be free

Open Source

Commercial friendly

Open Source != Source-available licenses

Not meeting the criteria to be called Open source

E.g. common clause licenses

OK, if it is properly named so

#fauxpensource = (French, faux=false)

Proprietary software that claims (masquerading) to be open source, but lacks the full freedoms required, termed "fauxpen source":

- it is confusing by design
- costs
- availability

Is it safe to rely on Open Source?

Vendor lock-in

Named as main benefit of Open Source

Code is least interesting

Expertise

- How to use
- How to build/test
- How to release
- How moving parts interacts

No lock-in requires Community + Open Governance + Diversity

Single Contributor Project

1 developer creates some soft

- is it valuable?
- would you use it?

What if that single person leave?

Blocker to enter the Apache Incubator:

Project should have some initial community around

Community - size matters

- "Professional" community member
 - has a job, required to contribute
 - Can change company & silently leave / stay (less) involved
- Enthusiast
 - Personal priorities can change
 - Motivated to get a badge
- PMC don't care about motivation to contribute

Community - size matters

User base

- usages quality
- knowledge base (forums, stack overflow, lists)
- cases covered

Developer base

- product development
- risk of running out of committers/PMCs -> Attic

Roles

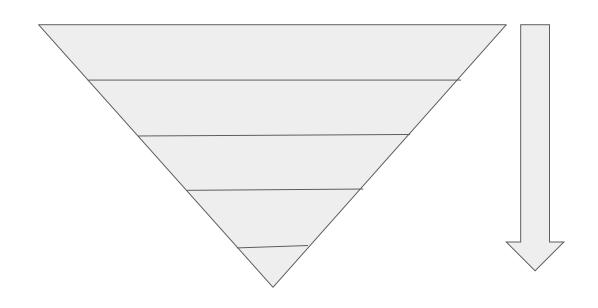
User (user@)

Developer (dev@)

Committer (dev@)

PMC (private@)

PMC Chair (private@)



Decision making

Developer - Advisory vote, patch submission process.

Committer - Advisory vote, code write access, can accept patches.

PMC - Binding vote, code write access, can accept & revert.

PMC Chair - PMC + reports to the Board

Is it a sort of closed club?

Public communication

Apache requires publicly archived lists

- Communication between developers
- JIRA tickets
- Builds, tests results
- Release preparation
- Release process



Is it Read-only? Or Read-Write?

Open Governance

Meritocracy: literally, government by merit.

- That is, once someone has contributed sufficiently they can be voted in as a committer.

A do-ocracy - Responsibilities attach to people who do the work, rather than elected or selected officials.

'There is no boss in open-source'

Benevolent Dictator For Life

Proprietary analogy: (chief/lead) architect, (co-)founder, etc.

BDFL, Title for open-source leader

- typically project founders
- retain the final say in disputes or arguments within the community

https://en.wikipedia.org/wiki/Benevolent_dictator_for_life

Discouraged by ASF

The Apache Way

- Everything is on mailing list publicly archived
- Discussion -> Votes(+1/-1 & Justification) ->
 Consensus
- 72h minimum
- Companies can pay to Apache Committers /
 Members to work on code
- Community Over The code; community mindset
- Company can't buy a seat in the Board



Community

Everyone in Apache is volunteer and individual

Does not mean there is a free support or training

(except of https://training.apache.org)

- 1. Vendor contract, Mentoring,
- 2. Consulting/Training contractors,
- 3. Full-time employees



What if everyone is employed by one vendor? What if this vendor decide to leave?

Diversity of committership

Affiliated by different entities

- Long term stability
- Wider expertize
- Different opinions



Apache Incubator

Goal: Build healthy community

ASF: Mentor(s) to help members to learn the Apache Way

Training to build a consensus, decision making

- people should be aware how decisions are made;
- where they voice can be heard.



Diversity of committership

Graduation requirement

No full control by one company





Top-level project: Fully endorsed by the ASF

- to remove the code from public?

Can vendor decide

- to develop new version as proprietary?

Brand is more powerful than we think

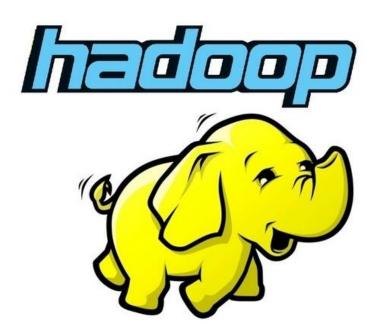
- Code is forkable
- Community members constantly change
- Brand is the only one constant entity
 - You can't fork it
 - It can't disappear
 - Attracts both users & contributors

Commercial company

Business trade association

Non-profit charity

Individual



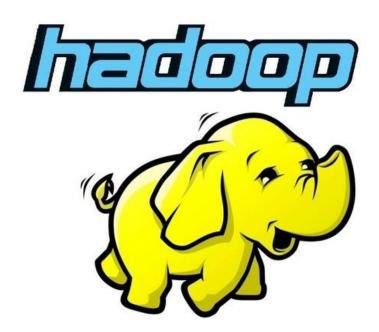
Commercial company

Business trade association

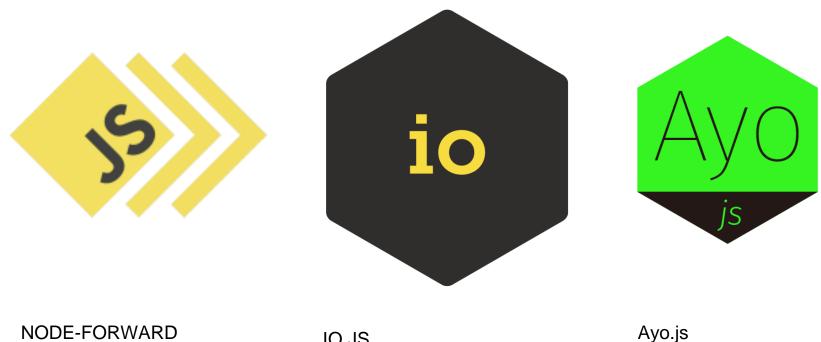
Non-profit charity

Individual

Apache Software Foundation

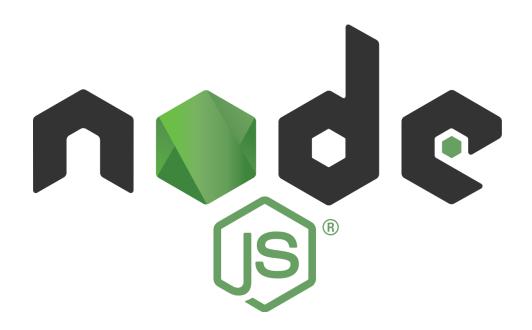


Who recognize this brand?



NODE-FORWARD IO.JS

Who recognize this brand?

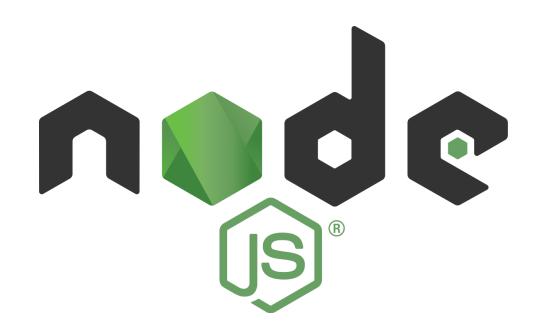


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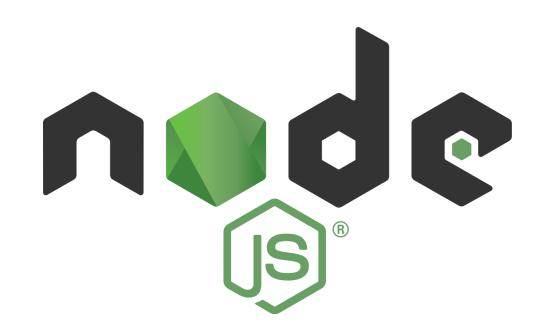


Commercial company

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Individual



Joyent, Inc (Samsung)

Commercial company

Business trade association

Non-profit charity

Individual



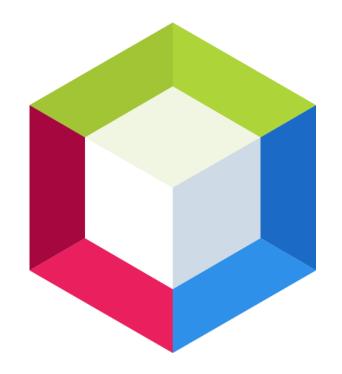
NetBeans.ide

Commercial company

Business trade association

Non-profit charity

Individual





Oracle -> ASF

Open Brand

Gives freedoms we usually expect from open source

Brand owner - Non-profit charity

501C3 - Internal Revenue Code

- Charitable organizations
- Cannot benefit shareholders/individuals
- Cannot serve in private interests

Example

Apache Ignite

- Donated by GridGain to the Apache
 Incubator 2014
- Graduated 2015
- ~ 1M downloads
- AL 2.0
- Initially in-memory solution
- Native persistence donated by GridGain - 2017







Ignite™ is a memory-centric distributed **database**, **caching**, and **processing** platform



- Stores entries in-memory
- Need external store
- Caching data

- Ignite Native Persistence

Collocated Processing

Combined usage

- Persistence per enabled per cache

<u>Apache</u> Ignite™





Ignite is registered trademark of the Apache Software Foundation in the United States and/or other countries.

Apache report (2018 by the digits)

Top 5 most active Apache user@ mailing lists

- 1. Flink
- 2. Lucene



- 3. Ignite
- 4. Cassandra
- 5. Kafka

Top 5 most active Apache dev@ mailing lists

1. Beam



- 2. Ignite
- 3. Kafka
- 4. Tomcat
- 5. James

https://blogs.apache.org/foundation/entry/apache-in-2018-by-the

Apache Ignite Community

- PMC members: 28 (+1 in prev. quarter)
- Committers: 47 (+5 in prev.quarter)
- Employed by 16 companies
- (code) Contributors 202
- Contributors (JIRA group) 286



http://people.apache.org/phonebook.html?pmc=ignite

https://ignite.apache.org/community/resources.html#people

Summary

- 1. Non open source check license, beware of fauxpensource
- 2. Open source public code that uses an OSI-approved license
- 3. Community around, its size user base, developers
- 4. Open governance check documented leader elections / decision making
- 5. Diverse/Healthy community check the list of committers Linkedin
- 6. Open brand check trademark owned by 501C3 non-profit charity

References

Who owns Open Source brand?

https://foss-backstage.de/session/who-owns-open-source-brand



Apache

http://www.apache.org/foundation/how-it-works.html



Apache Ignite

https://ignite.apache.org/ user@ignite.apache.org dev@ignite.apache.org

Thank you!



If you have any training material?

dev@training.apache.org

Dmitriy Pavlov

dpavlov@apache.org