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What is a true Open Source

(and why there is it less of it than you think)

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Apache Ignite

Committer, PMC member



Apache Training (incubating)

Committer, PPMC member

Apache Com.Dev, Apache DLab – Contributor



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Agenda

License: Is it a true Open Source

Community: Size, (Open) Governance, Diversity

(Open) **Brand**

Apache Ignite, Apache Training examples

Disclaimer

⚠️ This talk represents my own personal opinion

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

⚠️ 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: EPL 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?

Single person project - blocker to enter the Apache Incubator:

Project should have some initial community around (3 PMC)

Community - size matters

- “Professional” community member
 - has a job, required to contribute
 - change company & silently leave / stay 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)

Developer base

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

Roles

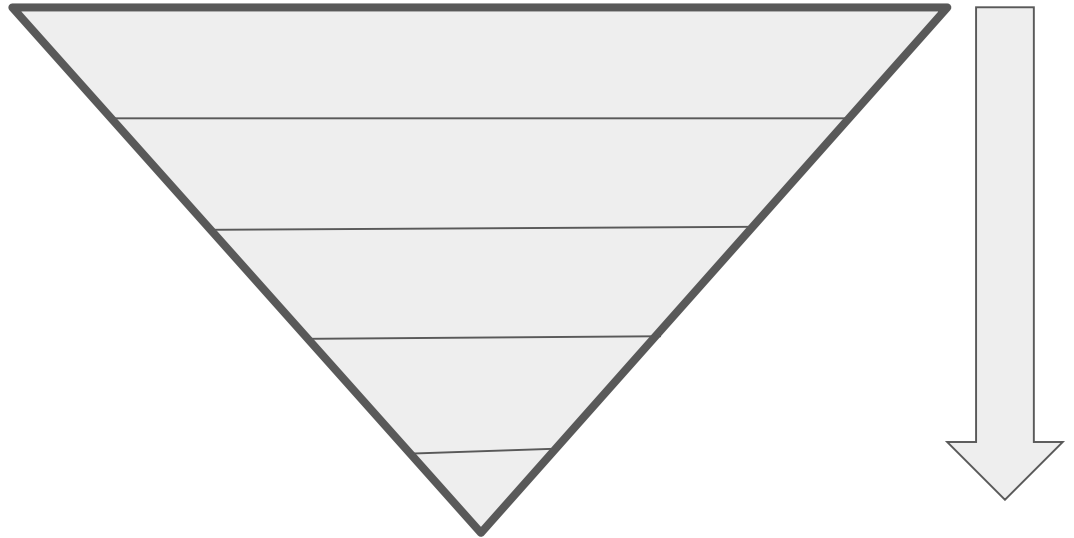
User (user@)

Developer (dev@)

Committer (dev@)

PMC (private@)

PMC Chair (private@
+ board@)



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**?
(PMC, Committers)

Public communication

- Communication between developers & users (lists)
- 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’



TM

Benevolent Dictator For Life

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

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



The Apache Way

- Companies can sponsor/employ Apache Committers / Members
- 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 expertise
- 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

<http://training.apache.org/topics/apacheWay/NavigatingASFIncubator/index.html>

Can vendor decide

- **to develop new version as proprietary?**
 - and remove the code from public?
 - **maintain its own fork?**

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

Who owns this brand?

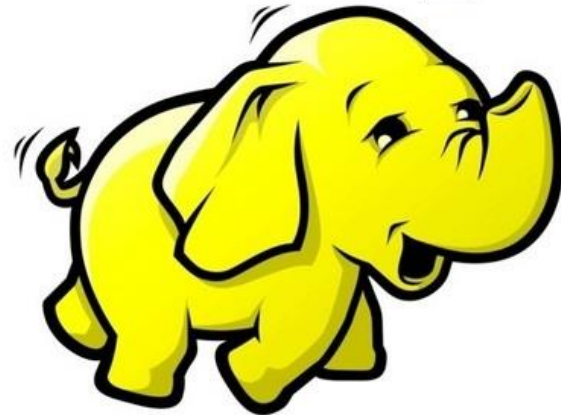
Commercial company

Business trade association

Non-profit charity

Individual

hadoop



Who owns this brand?

Commercial company

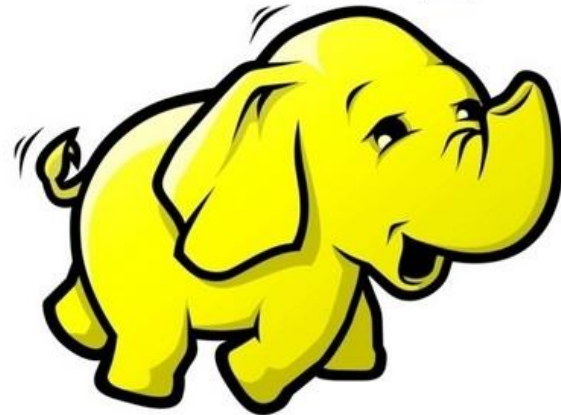
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Individual

**The Apache Software
Foundation**

hadoop



Who recognize this brand?



NODE-FORWARD



IO.JS



Ayo.js

Who recognize this brand?



Who owns this brand?

Commercial company

Business trade association

Non-profit charity

Individual



Who owns this brand?

Commercial company

Business trade association

Non-profit charity

Individual



Joyent, Inc (Samsung)

Who owns this brand?

Commercial company

Business trade association

Non-profit charity

Individual



NetBeans.IDE

Who owns this brand?

Commercial company

Business trade association

Non-profit charity

Individual



NetBeans.IDE

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 1

Apache Training

- create high-quality training material for various projects in an open source form
- Entered Incubator in 2019
- Proposed by OpenCore employee, but without single line of code/training as starting code base
- Diverse, but small community, small code base



https://training.apache.org/developers/team.html#_toc_team1

Example 2

Apache DLab

- Web console for Data Scientists: Self-service, fail-safe exploratory environment for collaborative data science workflow
- Initial code base was donated by EPAM
- Name could be changed
- No site yet
- Not yet diverse



Example 3



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

IMDG

IMDB

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

- Ignite Native Persistence

Collocated Processing

Combined usage

- Persistence per enabled per cache

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

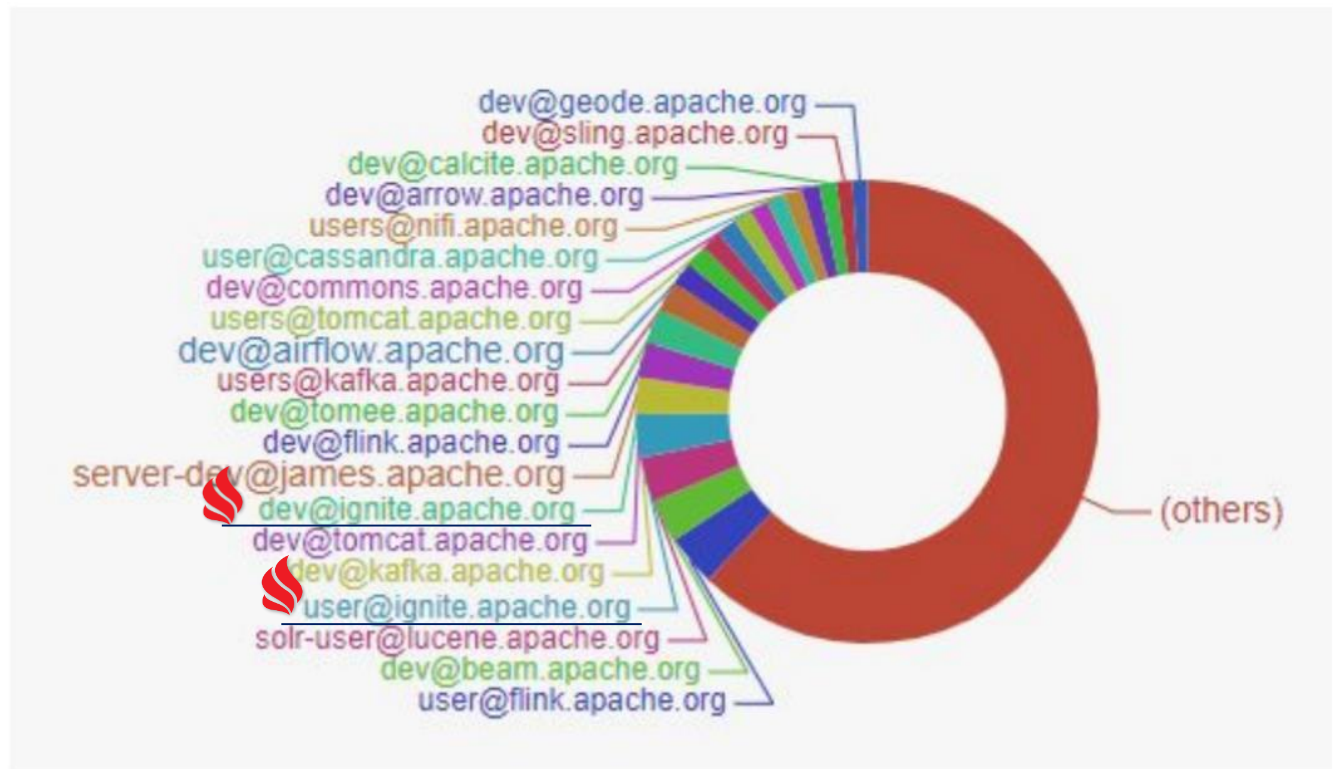


Apache Ignite™



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

FY2019's top 20 most active Apache mailing lists (user@ + dev@)



Apache Ignite Community

- PMC members: 29
(no changes in prev. quarter)
- Committers: 48
(+1 in prev. quarter)
- Employed by 16 companies
- (code) Contributors 210
- Contributors (JIRA group) 304



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

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

Summary 1/2

1. Non open source - check license, beware of fauxopensource
2. Open source - public code that uses an OSI-approved license
3. Community around, its size - user base, developers

Summary 2/2

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>



The Apache Software Foundation

<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!

<https://training.apache.org/>

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