



Hosting Projects with Open Mainframe Project

Mission of the Open Mainframe Project:



Build community and adoption of Open Source on the mainframe

- Eliminating barriers to Open Source adoption on the mainframe
- Demonstrating value of the mainframe on technical and business levels
- Strengthening collaboration points and resources for the community to thrive

Creating
spaces for
mainframe
community

Incubating Open Mainframe Projects

CBTTape

CPEN MAINFRAME PROJECT

COPEN MAINFRAME PROJECT

Software Discovery Tool

OPEN MAINFRAME PROJECT

TerseDecompress

TESSIA POPEN MAINFRAME PROJECT OPEN MAINFRAME PROJECT ZOROW

OPEN MAINFRAME PROJECT
MENTORSHIP

Graduated Open Mainframe Projects

open source

Open Mainframe Project Working Group

Open Mainframe Project Working Group

Open Mainframe Project Working Group

Open Mainframe Landscape 2021-01-04T18:04:40Z 779b6b7

Feilong

IBM

Projects

Zowe Conformant

See the interactive landscape at l.openmainframeproject.org

Greyed logos are not open source

Linux z/VM

Tessia

OMP Incubating

IBM IBM

IBM IBM IBM

Learning and Mentoring









This landscape is intended as a map to explore open source projects within the mainframe industry, and also shows the member l.openmainframeproject.orgcompanies of the Open Mainframe Project.

API Mediation Layer ZOWE V1

App Framework **ZOWE V1**

CLI ZOWE V1

API Mediation Laver 2019

App Framework

IBM

CLI 2019









IBM

Rocket.







Zowe



Zowe



Zowe



IBM



Zowe





IBM





Zowe









⊕ BROADCOM











IBM



Software International (E)(ES







Zowe











Software Premational (E)ES

years since launch

30,000+

Supporting **Organizations**

Hosted Projects and **Working Groups**

Mentees Sponsored

Project Contributors

Project Contributions







BROADCOM*

CANONICAL

cobura university of applied sciences

East Carolina





Academic Mainframe Consortium





Albany State University

Beijing Institute of Technology

Broadcom

Canonical

Coburg University of Applied Sciences and Arts

East Carolina University

EPSI

fit for mainframe European Mainframe







GT Software

Syncsort







IBM







Micro Focus

Academy

Guide Share Europe









UNIVERSITÄT

LEIPZIG

Leipzig University



WIICOM Infinity

Red Hat

Vicom Infinity









South China University of

Technology



YADRO



University of Bedfordshire

Zoss Team LLC

Zoss Team

North Carolina Agricultural and Technical State University

University of Washington







University of Wolverhampton



Virginia Commonwealth University



University of Western

Ontario

SHARE

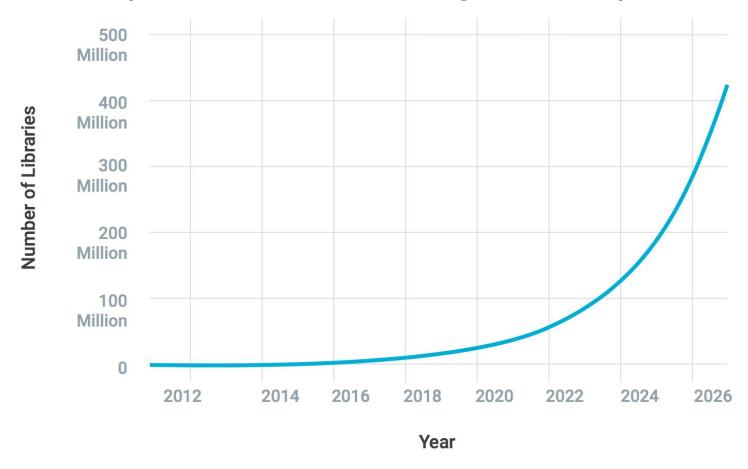


of New Jersey

SOFTWARE ENGINEERING

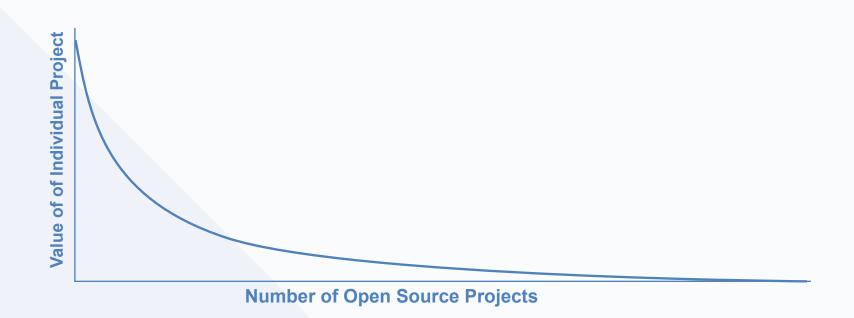


Open Source Isn't Slowing Down Any Time Soon



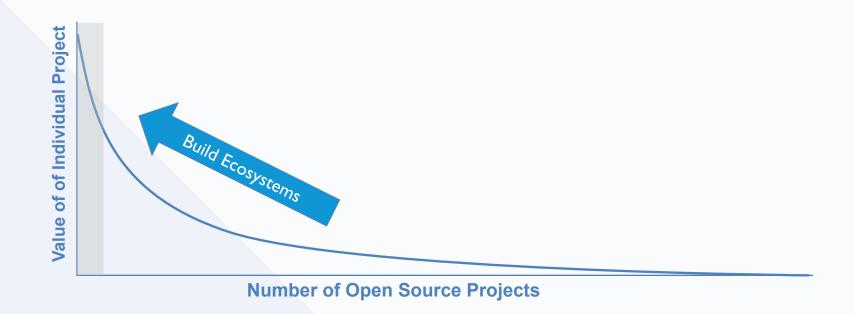
The Real Question is Which Projects Matter?





LF seeks to accelerate new projects to adoption and sustainability

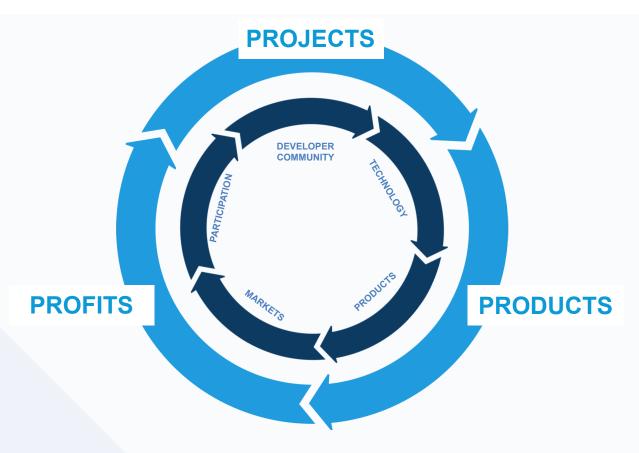




The Answer: Projects With Sustainable Ecosystems



Sustainable projects have a developer community whose technology is used in commercial solutions that profit businesses, who in turn participate and reinvest back into the project and hire developers to work in the community.



Open Source on Mainframe - Ecosystem Challenges



Managing projects assets

As project grows, it is unclear who should own legal and administrative tasks that are essential to the health of the project

Governance challenges

No formal governance, governance favors the creators of the project, project backer dominating dev and governance



Glass ceiling for project investment and adoption

in the absence of a fair governance and safe haven for the project's assets

Developed for a specific product needs

The open source spinoff is a result of wanting to build an ecosystem and collaborate on building a platform

Fragmentation
Lack of integration
Lack of cross pollination across
projects

Creating sustainable open source projects requires real work



Governance and Membership	 Incorporation, Tax status, Bylaws, Member Agreements, Anti-trust, etc. Ongoing business development and membership recruitment 	
Development Process	Technical Decision MakingProject Life CycleRelease Process	
Infrastructure	 Custom infrastructure using open source best practices Security and reliability 	
Ecosystem Development	Marketing Events Training	
IP Management	 Code Provenance and License compliance Trademark management Legal defense and Collaboration 	

Case Study: Zowe



Open Mainframe Project focuses on projects that matter



Major Problem

- Modernize integration with z/OS based applications and services
- Bridge the talent gap by enabling modern development stacks on z/OS

How OMP Innovated

- 2018 Open Mainframe Project added Zowe
- 2019 Zowe reached 1.0, launched Zowe Conformant to enable downstream ecosystem
- Investments in collaboration, ecosystem development, and infrastructure

Results - 2020

- 20000+ Commits, 200+ committers
- Zowe gaining significant mindshare in DevOps community
- 20+ Zowe Conformant offerings



Why host your project at Open Mainframe Project?

The LF is the leading commons for community assets



- The LF is the largest open source foundation, providing management of community assets for over 400 projects:
 - Over 3,400 source code repositories.
 - Over 700 trademark registrations and applications, plus hundreds of unregistered marks.
 - Over 700 project domains and DNS records.
 - Over 12,000 Contributor License Agreements signed for project communities that decide to require one.
- Neutral sponsorship for managing fundraising.
 - Over 1,600 unique member company relationships.
- Our communities raised over \$100 million in 2019 via over 6,500 invoices.
 - Our communities spent funds in over 180,000 separate transactions in 2019.
 - The LF reports its audited financials to its board.

Building an ecosystem around open source projects



- The LF has repeatedly shown its ability to build diverse ecosystems around open source projects incorporating developers, end users, tech giants, consulting companies, and startups.
- The LF hosts <u>Let's Encrypt</u>, which provides the majority of the world's https certificates, and demonstrates our track record of helping to build sustainable, privacy-focused initiatives.
- The LF has a strong history of fostering a rich environment of downstream commercial and volunteer implementations.
 - There are hundreds of independent Linux <u>distributions</u>.
 - There are over 100 <u>Certified Kubernetes</u> implementations, each of which has passed a comprehensive conformance test suite.
- CNCF has achieved unprecedented success in helping to grow awareness and adoption of Kubernetes, as demonstrated by Google Trends and KubeCon attendance.

Building large, sustainable ecosystems requires collective resources



Events



We gathered over 45,000 attendees from over 12,000 organizations across 113 countries in 2019.

We manage
IP for the
world's most
important
tech and have
one of the
world's top
open source
legal teams in
house.

Legal

Training



Certification



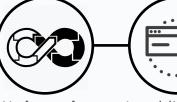
We have designed and implemented both software and hardware testing and certification programs.

Developer Marketing



We have the largest share of voice of any open source foundation and a proven method to build large scale developer programs.

Developer Application Operations Security



We host the infrastructure that develops the world's largest software communities and provide release management, IT ops, and support.

In addition to massive peer review, our projects are regularly audited and pen tested. We offer bug bounties, dependency analysis, and code scanning.

What else can the Linux Foundation offer?



- The LF is a recognized and respected brand and can activate communications across tech, business, and social media channels.
- The LF runs one of the largest software training and certification <u>organizations</u> with millions of course graduates and hundreds of thousands of certified developers.
 - We can develop courses for Al, data, and analytics to train on using the apps and accessing the data.
 - We can also offer advanced courses for developers on integrating and customizing the upstream software.
- The LF runs the largest developer <u>conferences</u> in the world. (Due to COVID-19, these have currently switched to being virtual conferences.)
- The LF arranges third-party security <u>audits</u>, privacy policy audits, and <u>bug bounties</u> for our critical hosted software.
- LF <u>CommunityBridge</u> offers paid internships with experienced mentors to increase the number and diversity of contributors.
- Submission of protocols to become ISO standards via the LF's loint Development Foundation.
- Hosting aggregated data projects, including via our <u>Community Data License Agreement</u>
- Other services including documentation, webinars, PR, and much more, with many examples described in the CNCF annual report.

The Linux Foundation serves as a nonprofit home



- The LF has invoicing relationships with its 1,600 members, representing nearly every significant tech company, hundreds of startups, and many government organizations.
 - We have strong relationships with all of the public cloud, mobile phone, and telecom organizations. For example, CNCF currently administers \$9M in Google <u>Cloud</u> credits and \$200k from <u>AWS</u> for our hosted projects.
- The LF can quickly receive and distribute funding.
- The mission of the LF, a 501(c)(6) nonprofit, is to support the creation of sustainable open source ecosystems and public health is a natural next focus.
 - The LF fee for fiscal sponsorship services, which includes audited financials, is 9% of the first million dollars per year and 6% of additional funds.

Question: Value of a Foundation?



There have been times when projects have asked what the value of an open source foundation can offer them?

A basic premise behind the LF, and open source in general, is that most interactions are positive-sum. There is no fixed amount of investment, mindshare, or development contributions that is allocated to specific projects. Just as open source development is based on the idea that, collectively, we are smarter than any one of us, open source foundations work to make the entire community better off. Equally important, a neutral home for a project and community fosters this type of positive-sum thinking and drives growth and diversity that we believe are core elements of a successful open source project.

Professional Services + Open Source Foundation



Open Mainframe Project provides a unique set of services for the mainframe community that goes beyond the simple mailing list, code repository, and website. You should host your project at Open Mainframe Project because:

Foundation Staff Events

- A neutral home for your project increases the willingness of developers from other companies and independent developers to collaborate, contribute, and become committers.
- Endorsement by leading mainframe architects of the Open Mainframe Project's <u>Technical Advisory</u> <u>Council</u> is an independent signal of the quality of your project.
- Ability to leverage Open Mainframe Project mainframe infrastructure for your CI/CD needs.
- You will have access to funds for further investing in your project, including security, training, and documentation
- Partner academic institutions and next-gen students will have visibility into your project, resulting in new committers and class projects to help strengthen your project.
- Your existing committers still control your project, and we just ask that you document a neutral governance process (and if you don't have one, we have one that's a good starting point)

- You can work with our full-time press relations and analyst relations teams to increase awareness of and excitement about your project.
- Receive regular reports on press mentions and comparisons to similar projects.
- Open Mainframe Project is able to leverage the expertise of its parent organization, The Linux Foundation, which hosts other successful projects including the Linux kernel, Let's Encrypt, and Node.js. For example, Open Mainframe Project has worked on cross project collaboration between Kubernetes, HyperLedger, and Cloud Foundry for improving mainframe support of those technologies.
- You will have access to full-time Open
 Mainframe Project staff who are eager to assist
 your project in myriad ways and help make it
 successful

- Your project will have unique opportunities to participate in our annual Open Mainframe Summit.
- Our world-class events team work with you to showcase your project at <u>our leading open source events</u> worldwide.
- We also work to ensure your project is represented at key mainframe events and meetups worldwide, such as SHARE, VM Workshop, and GSE.
- We have travel funding available for your non-corporate-backed developers and to increase attendance of women and other underrepresented minorities.
- We will work with your community to offer a customized "event in a box", so that your team can easily participate in events worldwide with little overhead.
- We host virtual events, scaling from webinars to multi-day events
- And for all events, we can promote on social and our blog of the participation, as well as track community metrics to for your community to better understand the impact of participation on your community.

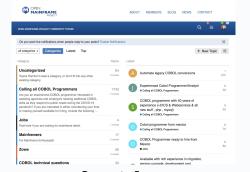
Detailed project benefits are at https://www.openmainframeproject.org/projects/benefits

Unique opportunities for driving deeper awareness and engagement





Slack Channel https://slack.openmainframeproject.org



Community Forums https://community.openmainframeproject.org/



openmainframe.org

- Monthly interview series that highlights diversity in mainframe
- Showcases why people have mainframe in their careers and their views of the technology and career field
- Read and listen at https://www.openmainframeproject.or g/news/podcast





...and more!



Bringing your project here

Anna Karenina Principle of Open Source



- https://en.wikipedia.org/wiki/Anna Karenina principle
- All happy open source projects are alike; each unhappy open source project is unhappy in its own way...
- > The "LF Way" is that there is no one way...
- The LF assumes that each open source project is unhappy/different in its own way and that leads to building a unique governance and solution to sustain their communities...

Basic requirements for hosting a project at Open Mainframe Project



The	pro	iect	must

- use an approved OSI open source license, preferably inline with the Open Mainframe Project IP Policy;
- ☐ be supported by a <u>TAC member</u>;
- allow neutral ownership of project assets such as a trademark, domain or GitHub account (the community can define rules and manage them);
- determinate technical do-ocracy and separation of business governance from technical governance (we're flexible on the model) clearly documented in a charter;
- □ allow anyone to participate in the technical community, whether or not a financial member or supporter of the project

Often projects are new open source project, but that isn't a requirement - existing projects are welcome!

Project Preparation Checklist



□ Prepare draft mission and scope statement
 □ Identify internal teams within mission and scope
 □ Identify developers internally
 □ Analyze code for identification of licenses, license quality and project dependencies
 □ Assess potential universe of project participants
 □ Identify ecosystem constituents and concerns of each
 □ Identify any trademarks leveraged by the project (these will be owned by the LF neutrally)
 □ Outline infrastructure, marketing any other requirements needed for the project
 □ Complete the project proposal and submit to the TAC for consideration

The Open Mainframe Project staff is happy to engage and advise during this process - let us know how we can help!

Project Trademarks



- Our project communities control the name of the project, not any one member or company contributor
- In order to provide for neutral ownership of project assets, we require that The Linux Foundation entities own the trademarks leveraged by the project.
- In the event that a trademark is already in use by the sponsoring organization, we recommend that the project create a new name to operate under or the owner assign the interest in the mark to The Linux Foundation.
- > See http://fossmarks.org for an education on trademarks in open source



- Find out more and subscribe to our newsletter at www.openmainframeproject.org
- Discover any of our 15 hosted projects and working groups at https://www.openmainframeproject.org/projects
- Organizational membership opportunities at https://www.openmainframeproject.org/about/join or email at membership@openmainframeproject.com
 - If you are ready to pursue corporate members, complete the paperwork at https://joinnow.openmainframeproject.org





Thank you!