



Hosting Projects with Open Mainframe Project

Mission of the Open Mainframe Project:



To build an Open Source community and drive adoption of Open Source on the mainframe by...

- 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
- Identifying, accepting and hosting purely open source projects that are consistent with and advance us towards realizing our vision



Graduated Open Mainframe Projects

Linux

IBM

z/VM

z/OS

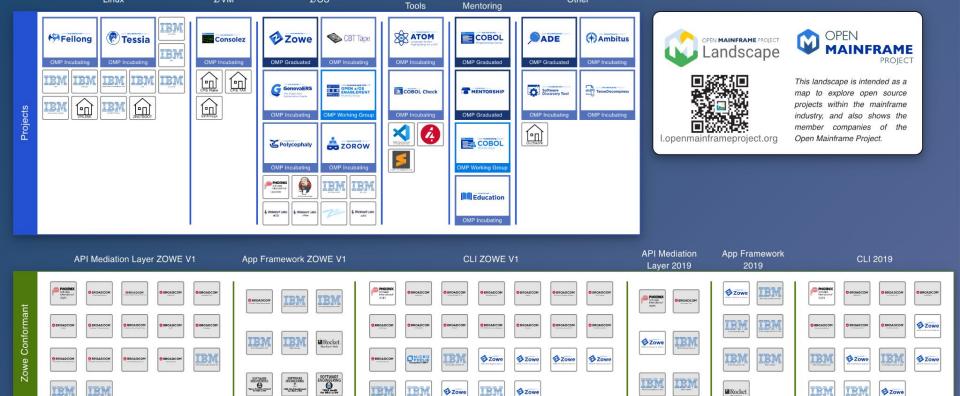
Learning and

Other

Development

IBM

Zowe



IBM

Zowe

Rocket

Zowe

years since launch

45
Supporting

Organizations

20

Hosted Projects and Working Groups

40+

Mentees

Sponsored

IU

000+

61,000+

Project Project
Contributors Contributions



















































































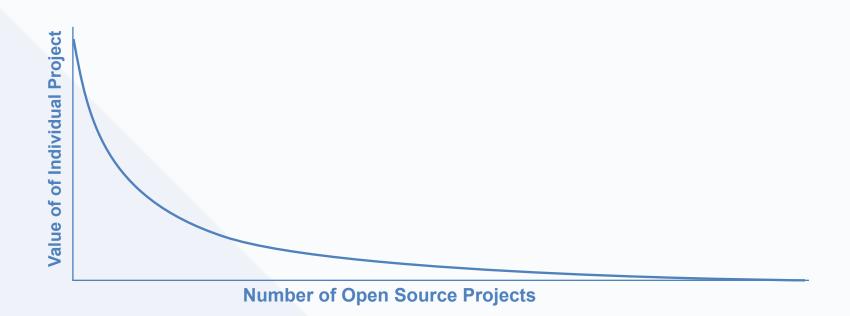


Zoss Team LLC



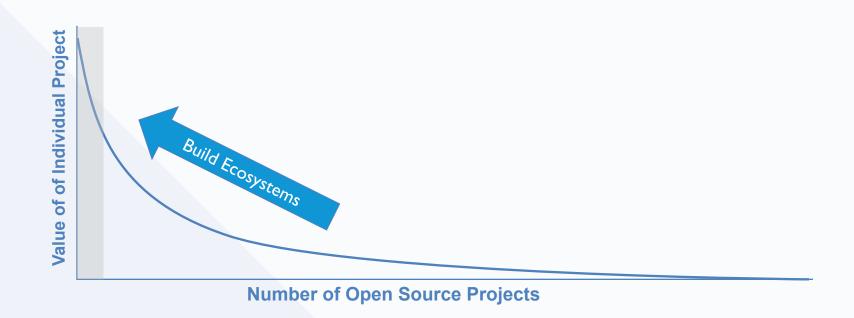
The Real Question is Which Projects Matter?





LF seeks to accelerate new projects to adoption and sustainability

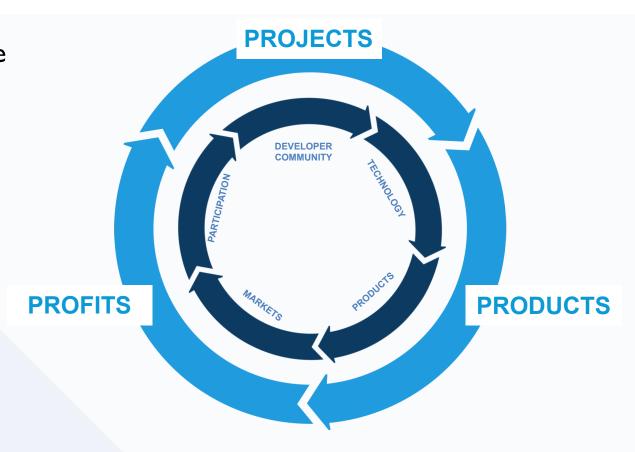




The Answer: Projects With Sustainable Ecosystems



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 Making Project Life Cycle Release 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 are critical for industry



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 from contributions from Broadcom, IBM, Rocket Software
- 2019 Zowe reached 1.0, launched Zowe Conformant to enable downstream ecosystem
- 2021 Zowe formed TSC to have technologists lead project direction.

Results - 2020

- 30000+ Commits, 250+ committers all time
- Zowe gaining significant mindshare in DevOps community
- 50+ Zowe Conformant offerings from Broadcom, IBM, MicroFocus, Phoenix Software International, Rocket Software, Software Engineering AG
- New project contributions from BMC, IBA Group, Vicom Infinity, and others, has grown codebase



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 700 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.

and on-site

e-learning.

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

Certification

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 AI, 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 Cloud credits and \$200k from AWS 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

Measure your project impact with LFX Insights



LFX Insights (Technical Trends) is a new analytics tool that is provided to all open source projects hosted by the Linux Foundation. Its capabilities include:

- Getting the visibility you need to remove bottlenecks at any stage of your project's code pipeline. Drill down into performance metrics across every step in the development lifecycle to identify where you should be focusing your resources.
- Ensuring the health and viability of the open source projects you care about.
 Leverage data to help validate projects for investment, and track the activity and growth of projects your organization is already involved in.
- Showcasing your organization's leadership and subject matter expertise in the open source community. Leverage affiliations to measure the impact of your employees' contributions and capture the full picture of your team's impact

In addition to the use of the other LFX tools provided by the Linux Foundation, access to **LFX**Insights (Ecosystem Trends) tool is available to Open Mainframe Project Silver and

Platinum members, which provides additional visibility into tracking your project's

performance beyond code with a more holistic view of your ecosystem. Identify opportunities

to grow your community and increase awareness with ecosystem trend metrics including share
of voice, top influencers, email list collaborators, and more.





Unique opportunities for driving deeper awareness and engagement





Slack Channel https://slack.openmainframeproject.org



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 project 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);
- determined 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 at openmainframeproject.org
- → See the breadth of open source on the mainframe at Lopenmainframeproject.org
- → Discover and participate in any of our 19 hosted projects and working groups at open-mainframe-project.org/projects
- → Take part in our upcoming events and webinars at openmainframeproject.org/events





Thank you!