



 **LINUX FOUNDATION**  
COLLABORATIVE PROJECTS

# LF Overview for DPDK Community

16 December 2015

# Agenda

- Linux Foundation Overview
- LF Collaborative Projects
- LF capabilities/services
- LF project hosting models and options
- Areas where the LF can offer to help DPDK community

# What is the Linux Foundation?

- Non-profit organization hosting the world's most successful open source projects: Linux, Node.js, Cloud Foundry, OpenDaylight, Xen Project, Kubernetes, etc.
- LF Collaborative Projects power the world's technology and industry leaders; power next generation UAV's, are connecting the Internet of Things, and securing Internet communications.
- Linux Foundation projects have produced over **\$15 billion worth of code**.
- **Linux Foundation hosts 600 member companies** collaborating across dozens of projects.
- The Linux Foundation host over **88 of the most important developer events around the globe** which are consistently sold out with **over 20,000 attendees globally**.
- Host to the **most popular EdX open source curriculum** with **400,000 students** taking just ONE of our many online courses.
- We have provided **millions of dollars** of grants to developers to **work full time** on critical open source projects: Security critical infrastructure, Linux, accessibility.

# Our Team Includes

- Time Magazine's 17<sup>th</sup> most important person of the century, Winner of Millennium Technology prize, IEEE Computer Pioneer Award, Internet Hall of Fame inductee
- Internationally recognized legal counsel have authored hundreds of open source legal publications, formed over 140 consortium, serve on the boards of ANSI, Center for Women in Enterprise, and more
- Full time staff fluent in English, Spanish, French, German, Russian, Japanese, and Korean
- Expertise in semiconductors, embedded systems, mobile computing, enterprise software, cloud infrastructure, automotive, IoT, technical training and more
- Dev/Ops team that maintain and secure the world's largest open source project with expertise in a wide variety of scalable development environments
- Marketing and Ecosystem development team with experience from pre-IPO startups to large scale enterprises

# The Linux Foundation Ecosystem: Growing Daily



The Linux Foundation provides a needed role to be the neutral entity within which actors are comfortable collaborating and investing in a project

- Typical interests or concerns include:
  - Participants need a trusted neutral home for community assets (trademark, domains, etc).
  - Participants need a place to pool resources (financial, technical, etc.).
  - Participants need infrastructure that makes sharing at large scale cost effectively and independent of a single company.
  - Participants need a way to evangelize their projects to developers and industry.
  - Some participants need help on how to collaborate with their competitors in an effective manner.

# About LF Collaborative Projects

- Host a wide range of projects across technical and industry segments.
- Some projects are large, with their own entity, bylaws, marketing and large budgets (e.g. \$5 million) to drive industry awareness and adoption. Most are smaller in scale with minimal budgets (e.g. \$50k – 250k), very low overhead and focus more strictly on code development.
- Varying levels of governance, the key is the community agree on how they will work together and evolve governance over time as the community evolves.
- Minimum requirements for the LF to host projects are fairly lightweight:
  - The project needs to use an OSI-approved open source license (DPDK meets this requirement already)
  - At least one founding participant must be a Gold or Platinum member of the LF (DPDK meets this requirement already)
  - Any “community” owned assets must be transferred to the foundation (e.g. domain, trademark, similar to Apache Software Foundation)
  - If unincorporated, abide by core policies of the LF (e.g. LF Antitrust) or, if incorporated, adopt required policies and documents (e.g. bylaws, antitrust policy)

Many of the world's most important open source projects are hosted at the Linux Foundation.



# The LF has expertise and capabilities the DPDK community can leverage if it wants to

- **Consultation:** The LF has experts who can help consult on various matters important to the community (e.g. governance, contribution policies, etc.). The LF also has experienced program managers who help communities stay in sync and progress on their goals.
- **General & Administrative operations:** The LF is setup to support the G&A operations of a project including invoicing, accounts receivable, accounts payable, ledger, budget management, supplier setup, bank management, audit, HR, employment taxes and filings etc.
- **IT:** Deep systems and IT support teams who can help the community with setting up and maintaining neutral test platforms, continuous integration / build workflows and DevOps release engineering.
- **Events:** Engaging a broader community through events for developers (the LF hosts 88 events around the world each year). DPDK may find Open Networking Summit, OPNFV, OpenDaylight and other project events good for evangelizing DPDK.
- **PR:** If the community wants, the LF has a world class PR team that can help spread the word about the project with press, analysts and through social media.
- **Marketing:** The LF has creative services staff, website hosting and development staff and integrated marketing resources that can help projects build a cohesive identity.
- **Training:** The LF has extensive training and certification courses, including on-site, online proctored certification exams, MOOCs and SDN/NDV related courses expected in 2016.

# The LF hosts projects of all sizes

## Lightweight, Unincorporated

- Features
  - Governance flexible based on community consensus
  - Under the LF legal entity
  - LF membership<sup>[1]</sup> required to participate in project governance (e.g. budget decisions), but not required to contribute technically to the project.
- Examples
  - IOVisor, OCI, CNCF, Xen Project, IoTivity, Kinetic Open Storage, Open Mainframe Project, Tizen, OpenMAMA, Core Infrastructure Initiative, Open API Initiative, AGL, SPDX, OpenChain, OpenHPC

## Larger, Incorporated

- Features
  - Separate, new legal entity
  - Technical governance flexible based on community consensus, but entity governance more complex based on laws and regulations
  - LF membership not required (become members of the entity and LF acts as a service provider to entity)
- Examples
  - Cloud Foundry Foundation, Node.js Foundation, ONOS, AllSeen Alliance, OpenDaylight, OPNFV, R Consortium, Dronecode

[1] LF Silver Membership Fee Scale:

US\$ 20,000 (employee size greater than 5,000)

US\$ 15,000 (employee size between 500 and 4,999)

US\$ 10,000 (employee size between 100 and 499)

US\$ 5,000 (employee size <100)

# Most LF projects start small

- Technical community forms consensus on how it will operate.
  - The LF prefers each community come to consensus on how they will operate. We do not mandate any structures.
  - Current Architecture Board discussion in DPDK is a good example of the community discussion and consensus building.
- Some companies may want to contribute funding to the project to advance building an ecosystem, identity, etc.
  - Typically we'll setup membership levels if funding is involved. (Can be low, often include a tiering model for smaller companies) The LF projects should not require membership in order to contribute code.
  - Some projects we host do not raise any funds (and that is fine), in which case membership may not be relevant
- Ultimately we try to tailor the project structure to what the community wants to maximize participation.

# Next Steps

- Get agreement that the LF can help the DPDK community and wants to move forward.
- Get a small core team/sub-committee from the DPDK community to work with the LF on a specific proposal to bring back into the community. This could be done in January or early February.