

**Technical Charter (the “Charter”)**  
**for**  
**Tungsten Fabric Project a Series of LF Projects, LLC**  
**Adopted March 13, 2018**

This charter (the “Charter”) sets forth the responsibilities and procedures for technical contribution to, and oversight of, the Tungsten Fabric Project, which has been established as Tungsten Fabric Project a Series of LF Projects, LLC (the “Project”). LF Projects, LLC (“LF Projects”) is a Delaware series limited liability company. All Contributors to the Project must comply with the terms of this Charter.

**1) Mission and Scope of the Project**

- a) The Tungsten Fabric Project is an open source project that is built using standards-based protocols and provides all the necessary components for network virtualization and network security. The components of the Project include: an SDN controller, virtual router, analytics engine, published northbound APIs, hardware integration features, cloud orchestration software and an extensive REST API.
- b) The mission of the Project is to facilitate the development, evolution and adoption of the Tungsten Fabric Project codebase to enable a comprehensive network and security fabric that encompasses various open source ecosystems, including virtual machine-based public and private clouds, container-based clouds and ecosystems and other computational platforms. The community’s goal is to maintain and improve the production-ready and scalable nature of the Project while accelerating development and attracting additional developers and users to the platform.
- c) The scope of the Project includes development of the Tungsten Fabric code base under an OSI-approved open source license supporting the mission, including documentation, testing, integration and the creation of other artifacts that aid the development, deployment, operation or adoption of the Project.

**2) Technical Steering Committee**

- a) The TSC is responsible for:

- i) Setting high level architecture goals and coordinating overall project architecture and technical direction
  - ii) Selecting technology stack, software features and supported hardware including
  - iii) approving project or system proposals (including, but not limited to, incubation, deprecation, and changes to a sub-project's scope);
  - iv) organizing sub-projects and removing sub-projects;
  - v) Developing Project use cases;
  - vi) Defining and monitoring Project technical processes and interfaces with third party code and external projects including creating sub-committees or working groups to focus on cross-project technical issues and requirements;
  - vii)Overseeing the Infrastructure Working Group other TSC working groups;
  - viii) Appointing representatives to work with other open source or open standards communities;
  - ix) Establishing community norms, workflows, issuing releases, and security issue reporting policies;
  - x) Approving and implementing policies and processes for contributing (to be published in the CONTRIBUTING file) and coordinating with other project committees to resolve matters or concerns that may arise as set forth in Section 7 of this Charter;
  - xi) Engaging in discussions, seeking consensus, and where necessary, voting on technical matters relating to the code base that affect multiple projects;
  - xii)Setting target dates for software development and testing;
  - xiii) Coordinating any marketing, events, or communications regarding the Project with the Manager of LF Projects and the Marketing Advisory Council of the LF Networking Fund of The Linux Foundation (“LFN”);
  - xiv) Establishing a vetting process for maintaining security and integrity of new and/or changed code base and documentation, including vetting for malicious code and spyware; and
  - xv) Establishing a security issue reporting policy and resolution procedure.
- b) The TSC voting members are initially selected from the Project's Committers and Community volunteers. The TSC voting members, TSC election process and TSC defined processes and procedures will be documented in the TSC section of the community documentation repository. TSC will initially have 11 voting members, but may modify the number of voting members by two-thirds vote of all TSC members.

- c) Any meetings of the Technical Steering Committee are intended to be open to the public, and can be conducted electronically, via teleconference, or in person.
- d) TSC projects generally will involve Contributors and Committers. The TSC may adopt or modify roles so long as the roles are documented in the TSC section of the community documentation repository. Unless otherwise documented:
  - i) Contributors include anyone in the technical community that contributes code, documentation, or other technical artifacts to the Project;
  - ii) Committers are Contributors who have earned the ability to modify (“commit”) source code, documentation or other technical artifacts in a project’s repository;
  - iii) The primary distinguishing characteristic of Committers is a demonstrated history of performing code reviews in the project code review system. References to quantity and/or quality of code reviews (of other Contributors’ code, not the Committer’s own code) should be given predominant weight when voting on the addition or removal of a Committer;
  - iv) A Contributor may become a Committer by a majority approval of the existing Committers. A Committer may be removed by a majority approval of the other existing Committers; and
  - v) A Committer may be elected by other sub-project Committers to serve as a Project Technical Lead (PTL) and provide direction for a sub-project. The TSC may cast a tiebreaking vote or appoint a PTL in the absence of a majority agreement of the Committers.
- e) Participation in the Project through becoming a Contributor and Committer is open to anyone so long as they abide by the terms of this Charter.
- f) The TSC may (1) establish workflow procedures for the submission, approval, and closure/archiving of projects, (2) set requirements for the promotion of Contributors to Committer status, as applicable, and (3) amend, adjust, refine and/or eliminate the roles of Contributors, and Committers, and create new roles, and publicly document any TSC roles, as it sees fit.
- g) The TSC will elect a TSC Chair, annually, who will preside over meetings of the TSC and will serve until their resignation or replacement by the TSC. The TSC Chair, or any other TSC member so designated by the TSC, will serve as the primary communication contact between the Project and LFN.

### **3) TSC Voting**

- a) While the Project aims to operate as a consensus based community, if any TSC decision requires a vote to move the Project forward, the voting members of the TSC will vote on a one vote per voting member basis.

- b) TSC votes must be conducted electronically, even if initiated verbally at a meeting, and, except as provided in Sections 2.b., 7.c. and 8.a., decisions will require the majority of all voting members of the TSC.
- c) TSC will define and document an appropriate conflict resolution mechanism, subject to approval by the Series Manager. This mechanism will be used in the event a vote cannot be resolved by the TSC.

#### **4) Compliance with Policies**

- a) This Charter is subject to the Series Agreement for the Project and the Operating Agreement of LF Projects. Contributors will comply with the policies of LF Projects as may be adopted and amended by LF Projects, including, without limitation the policies listed at <https://lfprojects.org/policies/>.
- b) The TSC may adopt a code of conduct (“CoC”) for the Project, which is subject to approval by the Series Manager. Contributors to the Project will comply with the CoC or, in the event that a Project-specific CoC has not been approved, the LF Projects Code of Conduct listed at <https://lfprojects.org/policies/>.
- c) When amending or adopting any policy applicable to the Project, LF Projects will publish such policy, as to be amended or adopted, on its web site at least 30 days prior to such policy taking effect; provided, however, that in the case of any amendment of the Trademark Policy or Terms of Use of LF Projects, any such amendment is effective upon publication on LF Project’s web site.
- d) All participants must allow open participation from any individual or organization meeting the requirements for contributing under this Charter and any policies adopted for all participants by the TSC, regardless of competitive interests. Put another way, the Project community must not seek to exclude any participant based on any criteria, requirement, or reason other than those that are reasonable and applied on a non-discriminatory basis to all participants. Contribution requirements will be set based on reasonable criteria and applied on a non-discriminatory basis to all participants in the Project community.
- e) The Project will operate in a transparent, open, collaborative, and ethical manner at all times. The output of all Project discussions, proposals, timelines, decisions, and status should be made open and easily visible to all. Any potential violations of this requirement should be reported immediately to the LF Projects Manager.

#### **5) Community Assets**

- a) LF Projects will hold title to all trade or service marks used by the Project (“Project Trademarks”), whether based on common law or registered rights. Project Trademarks will be transferred and assigned to LF Projects to hold on behalf of the Project. Any use of any Project Trademarks by participants in the Project will be in accordance with the license from LF Projects and inure to the benefit of LF Projects.

- b) The Project will, as permitted and in accordance with such license from LF Projects, develop and own all Project GitHub and social media accounts, and domain name registrations created by the Project community.
- c) Under no circumstances will LF Projects be expected or required to undertake any action on behalf of the Project that is inconsistent with the tax-exempt status or purpose, as applicable, of LFP, Inc. or LF Projects, LLC.

## **6) General Rules and Operations.**

- a) The Project will:
  - i) engage in the work of the project in a professional manner consistent with maintaining a cohesive community, while also maintaining the goodwill and esteem of LF Projects, LFP, Inc. and other partner organizations in the open source software community; and
  - ii) respect the rights of all trademark owners, including any branding and trademark usage guidelines.

## **7) Intellectual Property Policy**

- a) Participants acknowledge that the copyright in all new contributions will be retained by the copyright holder as independent works of authorship and that no contributor or copyright holder will be required to assign copyrights to the Project.
- b) Except as described in Section 7.c., all code contributions to the Project are subject to the following:
  - i) All new inbound code contributions to the Project must be made using the Apache License, Version 2.0 (available here: <https://www.apache.org/licenses/LICENSE-2.0>) (the “Project License”).
  - ii) All new inbound code contributions must:
    - (1) be made pursuant to a duly executed Corporate Contributor License Agreement or, in the case of self-employed contributors, a duly executed Individual Contributor License Agreement (forms of which are available on the Project’s web site); and
    - (2) be accompanied by a Developer Certificate of Origin (<http://developercertificate.org>) sign-off in the source code system that is submitted through a TSC-approved contribution process which will bind the authorized contributor and, if not self-employed, their employer to the applicable license;
  - iii) All outbound code will be made available under the Project License.

- iv) Documentation will be received and made available by the Project under the Creative Commons Attribution 4.0 International License (available at <http://creativecommons.org/licenses/by/4.0/>).
- v) The Project may seek to integrate and contribute back to other open source projects (“Upstream Projects”). In such cases, the Project will conform to all license requirements of the Upstream Projects, including dependencies, leveraged by the Project. Upstream Project code contributions not stored within the Project’s main code repository will comply with the contribution process and license terms for the applicable Upstream Project.
- c) The TSC may approve the use of an alternative license or licenses for inbound or outbound contributions on an exception basis. To request an exception, please describe the contribution, the alternative open source license(s), and the justification for using an alternative open source license for the Project. License exceptions must be approved by a two-thirds vote of the entire TSC. Contributed files should contain license information, such as SPDX short form identifiers, indicating the open source license or licenses pertaining to the file.

## **8) Amendments**

- a) This charter may be amended by a two-thirds vote of the entire TSC and is subject to approval by LF Projects.