# Lab Strategy

Version 0.1.0

9/17/2018

## Introduction

The Linux Foundation Networking Qualified Labs Program (LFN PLP) has been created with the goal of supporting the compliance and certification testing and logo programs overseen by the Compliance and Verification Committee. Qualified Labs provide 3rd party testing services to the communities, where community members may choose to test their products or services within the labs instead of performing the testing in-house. These labs that are actively engaged with the Linux Foundation Networking project’s development and testing communities and are experienced with Dovetail and other required test tools.

The Qualified Labs Program is overseen by the Compliance and Verification Committee. That committee is responsible for setting of requirements and qualifications for the Qualified Labs, and for the approval of Qualified Labs. The Linux Foundation Networking Project will maintain the list of Qualified Labs on its website, and the list will clearly indicate the testing programs the lab is qualified to provide services for.

In general, participants of the various testing programs may use a laboratory at their convenience, and not all Qualified Labs may offer testing for all the different programs. Qualified Labs are not specifically endorsed or sponsored by Linux Foundation Networking, beyond meeting the qualifications outlined herein. It is expected participants using a lab will enter a commercial agreement with the lab, and the terms of such an agreement are outside the scope of the Qualified Labs Program requirements and documentation. The laboratory may submit results to the formal review processes on behalf of its customer and the review processes will support this workflow.

## Qualified Lab Participation Requirements

### Lab Qualifications

Any laboratory or test agency may apply to become a qualified laboratory. Qualified Labs are required to meet and maintain the following qualifications.

1. Be an active member, in good standing, with the Linux Foundation Networking
2. Active participation in at least one Linux Foundation Networking project, such as OPNFV, ONAP, Open Daylight, etc.
3. Active participation in the Compliance and Verification Committee and are encouraged to participate in the Dovetail Project[[1]](#footnote-1)
4. Provide testing services to the open community in a nondiscriminatory, professional fashion, protecting the credibility of the Linux Foundation Networking Projects, the Compliance and Verification Programs, and the Qualified Labs Program.
5. Demonstrate testing competence in at least one program through the following actions:
   1. Demonstrate or document how the lab has the necessary infrastructure required for the testing program, such as a Pharos compliant pod (servers and network).
   2. Demonstrate the lab posses the know-how to properly perform the testing by submitting a complete set of test results and any required documentation for the results to the review process for the testing program.
      1. The results may contain failures but must demonstrate correct setup and execution of the testing, such as documenting the cause of the failure and a proposed remedy.
      2. The results may anonymize the products (hardware, software, firmware, etc.) used for the testing.
      3. The results shall be reviewed by the Compliance and Verification Committee, according to the standard review process. The results must successfully complete this process (2 reviewer approvals), to meet this requirement.
   3. At least 1 set of results must be submitted during each calendar year. Formal results submitted for review and approval shall satisfy this requirement.
   4. Laboratory shall provide the Compliance and Verification Committee with an annual set of lab usage statics for the programs offered by the lab, including the number of companies participating in the lab, the number of unique systems tested, and the number of successful (passing) test runs.
6. Laboratory shall not host a list of devices approved under this program on its own website or any website operated by the laboratory~~.~~

Continued participation in the Qualified Labs Program is contingent upon the lab meeting the above criteria and quality standards. A lab may be removed from the list of qualified labs if it fails to meet these criteria.

### Lab Application & Approval

Laboratories interested in becoming a qualified lab are encouraged to contact the chairs of the Compliance and Verification Committee (<https://wiki.lfnetworking.org/display/LN/Compliance+and+Verification+Committee>) or Linux Foundation Networking Staff, to begin the application process. The laboratory will need to supply documentation for the above requirements, as well as provide a set of test results for review for each testing program the laboratory wishes to offer services for as a qualified lab. There is not a required format for the documentation items above, results should be submitted in the standard format, as required by the various testing programs (i.e. standard output from the Dovetail tool). Applications in process will be considered as confidential material and will be made available only to Linux Foundation Networking staff and the committee chairs, final, approved applications will store and maintained by the Linux Foundation. The application review and approval process is expected to take approximately 3 to 4 weeks.

## Expectations on Qualified Labs

The following expectations are placed on Qualified Labs, with the intention the laboratories would meet these expectations as part of their normal operations and ongoing work. These are provided to help laboratories understand the program and the resources required for participation. Laboratories are encouraged to review these expectations as part of their decision-making process when participation in the Qualified Labs Program.

1. Maintain the equipment infrastructure and technical expertise required for testing programs where the lab offers services on a continuous basis.
2. Labs will use unmodified versions of the tool(s) provided by the Linux Foundation to perform testing within the Qualified Labs Program.
3. Laboratory staff actively participate in one or more projects or development efforts within the Linux Foundation Networking projects.
4. Lab will provide feedback and suggestions for the continuous improvement of Dovetail and other test tools or infrastructure used within the programs.
5. Lab will participate in the results review process for the test program(s) which the lab is approved for.
6. Laboratory shall encourage its participants to submit passing results for formal review and inclusion in the Linux Foundation Networking programs, badging, and public lists.
7. Laboratories are expected to cooperate and share knowledge on best practices and troubleshooting, where applicable within the programs.
8. Laboratories should develop and maintain a working knowledge of the LFN Project’s CI/CD tooling and might consider using these systems to maintain their tooling and as part of their demonstration of continued testing / platform maintenance.

### Limitations

1. Laboratories or participants cannot participate in the review/approval process for their own results.

## Lab Audit and Review

The Linux Foundation Networking Project reserves the right to schedule an audit and review of any Qualified Lab within this program. Such an audit would focus on a review of the testing, reporting, and reviewing practices of the lab for the test program(s) covered within the Approved Labs Program. Audits shall be conducted by a neutral party, at the sole cost of the Linux Foundation Networking Project.

1. The OPNFV Dovetail project is responsible for the maintenance of a test framework and results portal used to support multiple programs. It is currently organized under the OPNFV project but is listed here are due to its support of testing programs beyond OPNFV. [↑](#footnote-ref-1)