

VOLTHA - Integration & Validation Lab Lead

Job Description

What You'll Do

Your goal as the Verification Lead for VOLTHA (<https://docs.voltha.org>) is to own and maintain the software QA environment and hardware lab for validating VOLTHA software releases.

You'll work collaboratively with the community to help incorporate new devices and new test cases in the VOLTHA pipeline, ensuring we provide ever improving coverage for the variety of features, deployment scenarios, and edge condition testing. You will be a valuable member of the global VOLTHA community and key contributor to the VOLTHA TST (Technical Steering Team).

Your goal is to improve the stability, scalability and robustness of the platform, and the variety of scenarios in which it can be configured and deployed. You'll work with ONF's community of operators (which includes Deutsche Telekom and Turk Telekom) who are using VOLTHA as a platform for building open broadband PON networks, and with suppliers building hardware and software products that leverage VOLTHA.

You'll be responsible for the automated test platform (Jenkins-based) and QA tests used to validate a wide range VOLTHA configurations. You will be co-located in Berlin Germany with Deutsche Telekom and the VOLTHA lab testbeds in order to embed with the community and to manage the physical hardware and specialized PON devices used to build VOLTHA networks. You will own the nightly Jenkins testing of the VOLTHA project, working closely with ONF's DevOps and Infra team. You will be responsible for extending and tailoring the existing test suites to cover new scale, stability and compatibility testing. You will work with the diverse open source community to help integrate new features and test scenarios contributed from the community.

Responsibilities

- Own and grow the scope of functional, unit and scale testing of various VOLTHA deployment configurations
- You will be expected to develop expertise in the VOLTHA architecture
- Own and manage the VOLTHA hardware lab co-located with Deutsche Telekom Berlin
- Help guide the community with their contributions to the VOLTHA project
- Help assimilate community contributions, incorporating new features into the testing framework
- Work with newcomers to help grow the VOLTHA ecosystem

- Directly support the VOLTHA TST to shape and deliver releases of software, including resolving external dependencies

Minimum Qualifications

Networking:	TCP/IP networking, including VLANs and multicast
Linux Networking:	SSH, and secure networking concepts
Cloud technologies:	Kubernetes, containers, Ixc, VM and Bare metal setups
Tools/Technologies:	Jenkins, Helm, Wireshark, OpenAPI
Languages:	Python, Bash
Automation tools	RobotFramework, Jenkins
Testing:	Automated test environment setup and execution

Education: BS Computer Science and 4 years relevant experience, or 8 years relevant experience

Desirable Qualifications

Systems:	Development experience with cloud-native microservice systems
PON:	Architectural understand of PON networks and equipment, OLTs, ONUs
PON Protocols:	OMCI, XGS-PON
Languages:	golang, C

Why ONF

ONF is unique.

ONF is a non-profit, giving you the opportunity to work for the greater good to help transform networking and bring the latest technologies to leading researchers (commercial and academic) around the world. Our engineers have opportunities to engage with a diverse and vibrant community to help foster consumption, engagement and contributions to the projects.

ONF is about delivering transformation, not financial profit. This allows us to work on the latest technologies in order to help drive change, leading to lots of variety in our work.

ONF is broad. With over 100 member organizations and with developer contributions coming from around the world, you'll have the opportunity to work with lots of people from different backgrounds, companies and cultures.

ONF is a community-led, operator-driven organization (backed by Deutsche Telekom, Turk Telekom, Google, Microsoft, AT&T and others). You'll get to work with the most advanced companies, building a set of skills and relationships that can't be matched elsewhere.

ONF offers a collaborative and rewarding 100% remote work environment, great benefits and opportunities for personal and professional growth.

Location -

- **Berlin, Germany (to be embedded at the DT lab facilities)**

Submit resumes to: jobs@opennetworking.org