SD-RAN DevOps Engineer

ONF and its partners have been committed to enabling network operators (telco, cloud, and enterprise) embrace open networking by way of Software-Defined Networking (SDN) and white box hardware. An important part of achieving this goal has been to create open-source software stacks that the community can adopt and build on in a variety of networking areas, including datacenter fabrics, broadband wired access, optical core transport, and 4G/5G mobile core and RAN.

About the SD-RAN Project (https://opennetworking.org/sd-ran/)

The SD-RAN project is developing an O-RAN compliant near-real-time Ran Intelligent Controller (nRT-RIC) and a set of exemplar xApps for controlling the mobile RAN. This SD-RAN RIC is cloud-native and builds on several of ONF's well established platforms including the ONOS® SDN Controller. The goal is to foster the creation of true multi-vendor RAN solutions and help invigorate innovation across the RAN ecosystem, an area historically dominated by vendor-proprietary base-stations. Learn more from the Press Release

About the role

ONF is looking for a DevOps engineer to join the SD-RAN team. As ONF's nRT-RIC gears up towards field trials with our operator partners, the role requires close collaboration between ONF and Deutsche Telekom (DT) in the Berlin based O-RAN Open Test and Integration Center (OTIC).

In this role, the engineer will report to ONF's VP of Engineering and work closely with the ONF SD-RAN development and QA team to build, operationalize and maintain the RIC platform and SD-RAN solution at OTIC. The role also requires interaction with 3rd party xApps, and vendor RU/DU/CU hardware/software certification, as we integrate their products into the SD-RAN solution.

Role Requirements:
- Position is located in Berlin, Germany. This is an external facing role, requiring frequent interaction with ONF partners, members and other 3rd parties.
- Responsible for all CI/CD operations necessary to setup and maintain ONF's SD-RAN solution in DT's OTIC labs in Berlin. This includes server administration, networking, and automated software deployment.
- Develop deep understanding of O-RAN architecture, interfaces, protocols and their implementation in ONF's SD-RAN solution, including the microservices that build up ONF's RIC.

- Interact closely with DT, and 3rd party xApp developers for DT-desired xApps. This requires helping ONF colleagues understand xApps requirements, design, develop, test and release SDK APIs and E2 Service Models needed for xAPP integration. It may also require co-development of xApps that satisfy the DT-vision.
- Optimize and harden the RIC platform in support of MVP set of features with required performance and scale. Create test plans suitable for the same.
- Perform troubleshooting of problems encountered in the integration of xApps, RIC platform and RAN physical or emulated hardware. Develop tooling for the same.
- Enhance and integrate ONF's RAN Simulation software (RanSim) and/or white-box RAN hardware (RiaB) with new features required for DT specific xApps.

Candidate Requirements:

- MS or higher in CS or similar technical field
- Prior knowledge and experience with LTE/5G cellular technologies including the mobile RAN and/or the mobile Core.
- Familiarity with O-RAN architecture, specifications, interfaces and protocols
- Proven experience in debugging, finding, isolating, and tracking bugs through resolution
- Experience working on L2, L3 protocols, TCP/IP, IPv4/v6
- Expertise with open source software projects, and modern software development, CI/CD tools and processes
- Experience with multiple software languages including Go lang, C/C++, Python, with expertise in at least one of them.
- Experience with containerized environments and tools (Docker, Kubernetes, Helm)
- Soft skills:
    - Communicate clearly, both when writing documentation and giving presentations to the rest of the organization as well as external entities.
    - Must be able and willing to collaborate with teams in other time-zones, specifically US Pacific time zone, while being located in European CST; Good relationship and co-working skills
    - Possess a whatever-it-takes attitude towards keeping customers happy

About the Open Networking Foundation (http://opennetworking.org)

The Open Networking Foundation is headquartered in Menlo Park, CA. We are a non-profit operator led consortium driving transformation of network infrastructure and operator/supply chain business models. We are an open, collaborative, community of communities. The ONF serves as the umbrella for a number of projects building solutions by leveraging network disaggregation, white box economics, open source software and software defined standards to revolutionize the carrier industry.

We are building Open Source Tools and Platforms to *accelerate* the adoption of Software Defined Networking (SDN), Cloud infrastructures, Virtualization, and Network Functions Virtualization (NFV). We are an Open Source *development* organization with strong research, product and innovation background.

We are looking for people who are passionate about learning and who are open minded about the way cloud infrastructure and networks are built. We want people with a strong desire to implement their ideas and see those implementations used in real networks. Have you built and delivered products for commercial companies? Have you done applied research in cloud infrastructures and networks? Have you contributed to Open Source projects?

What is life like on a daily basis at ONF? We work closely with operators, partner engineers, and executives leading change in the networking industry. We develop with agile methods. We challenge each other, we brainstorm, we write code, we create new implementations that have *real impact*. We collaborate closely with both commercial and academic organizations. We have fun and we make a difference.