Position: Site Reliability Engineer – Operations

About Us:

CENGN is Canada's Centre of Excellence in Next Generation Networks. Our mission is to drive technology innovation and industry growth through our test bed, technical expertise, talent development, and partner ecosystem, to enable economic strength and prosperity as well as innovation and competitiveness for Canada in the high-growth global multi-trillion dollar Information and Communications Technology (ICT) industry.

CENGN collaborates with national and global technology leaders, the public sector, and academic partners, to solidify Canada's leadership in advanced networking technology for the benefit of all Canadians. Our members and partners are a crucial part of CENGN's operation, providing us with the technologies and support needed to enable our service offerings to Canadian small and medium enterprises.

By providing growing Canadian businesses with the infrastructure and expertise required to test their products, these tech startups and scale ups can overcome commercialization barriers. CENGN provides these businesses with full support of the development, validation, and exposure of their innovative solutions. CENGN also develops Canadian talent through co-op and internship opportunities as well as training offerings. Approximately 40 students complete CENGN internships annually to strengthen their knowledge and understanding of their position by tackling new and exciting challenges.

CENGN's ecosystem includes members Bell Canada, Cisco, EXFO, Juniper Networks, Mitel, Nokia, Ribbon Communications, TELUS, and Wind River. CENGN also partners with the federal government through the Networks of Centres of Excellence (NCE) and the Ontario government through the Ontario Centres of Innovation (OCI)

What We offer:

- The benefit of an agile company in a modern setting where your ideas and opportunities for growth are nurtured and encouraged
- The gain of working with cutting edge and relevant technology
- The opportunity to work in our state of the art physical and virtual multi-vendor, test, certification and validation platform which provides a unique environment to commercialize advanced products, applications and services
- The chance to be part of the growth of a Canadian company driven by providing opportunity for Small & Medium Enterprise (SME) Canadian companies to succeed
- The advantage of working with colleagues passionate about their individual contributions to CENGN
- The experience of developing and deploying wired and wireless technologies that are utilized by applications such as cloud, wireless 5G, autonomous vehicles, broadband Internet and cybersecurity

- A company which embodies its values of:
 - Passion for our mission and empowered to make an impact

ENGN

- Integrity in an open, agile, and collaborative environment
- Accountable and customer focused with a commitment to exceeding expectations
- Flexible and diverse work environment with a sense of belonging
- A flexible environment where output of work if valued beyond input of time, resulting in optimized work/ life balance through modern flexible work arrangements
- Organization supported professional development
- Top-Notch Health Benefits Package
- Employer paid RSP Contribution
- 15 days annual vacation allowance with additional personal and sick days
- Select paid holiday shutdowns
- Annual fitness allowance
- Monthly social activities



The Opportunity:

We are seeking a highly skilled and motivated individual for the Centre of Excellence in Next Generation Networks (CENGN's) Engineering team. Reporting to the VP Engineering Operations, the candidate will work with senior levels of technical engineers and leaders to plan, develop, support, and operate the different components of the CENGN platform comprised of a hybrid cloud environment. This environment integrates various CENGN partner in-kind contributions into one cohesive system capable of accepting test and verification projects from CENGN's membership. The candidate will manage CENGN's operations built around a modern automation framework and contribute to its continuous development. It is expected that a major part of the infrastructure built will be from direct contributions (h/w, s/w, services and engineering) from CENGN's membership thus creating CENGN's multi-vendor testbed platform.

Key Responsibilities:

Due to the rapid evolution of the emerging cloud and networking technologies for which CENGN is in the forefront; the Solutions Architect plays an important role in continuously developing and operating the CENGN Testbed and services that are available internally to the CENGN organization as well as externally to any CENGN customer or partner. The candidate will account for the following:

- Develop and advise on critical services running in automation driven, highly available production environments
- Automate, monitor, and maintain platform and security infrastructure for both physical and virtual components of the CENGN hybrid cloud platform
- Develop, debug, and execute automation code to support the operations of CENGN services
- Deploy and validate physical and virtual platform components and supporting tools

Key Competencies/Qualifications:

Candidate Must have:

- Expertise in UNIX/LINUX operating systems: RedHat, CentOS, Canonical Ubuntu, FreeBSD and other opensource distributions
- Expertise in automation tools for modern application deployments (**Docker**, **Kubernetes**, infra-as-code, RESTAPIs)
- Expertise in virtualization technology like **OpenStack** (preferred), KVM
- Expertise in system design and operations in Public Cloud environments (AWS, Azure, and/or GCP)
- Expertise in one or more of the following automation tools or languages: **Python, Go, Terraform, Ansible**



- Expertise in system design and operations of highly available and distributed systems using containerization
- Expertise with Software Defined Storage (SDS) solutions like **Ceph** (preferred), NetApp, VMWare, Longhorn

Preferred Qualifications

- Expertise in leveraging collaboration tools for agile inter and intra-team communication and incident response (Jira, Confluence, Git, Teams)
- Experience and/or contribution to Open Source technologies: Docker, Kubernetes, Cilium, Ceph
- Proven problem-solving skills and root-cause analysis
- Experience with developing and operating CI/CD pipelines and principles with tools such as Jenkins
- Experience working with IPAM and DCIM software (NetBox, RackTables)
- Understanding of IP, BGP, MPLS, and/or Segment Routing based networks
- Experience in network security and operations with firewalls, IPS/IDS, and encryption
- Experience in automating, configuring, and working with networking devices from various vendors including Cisco, Juniper, Nokia and whitebox equipment
- Experience with deploying and maintaining hardware in a datacenter environment (racking, cabling, power, cooling)
- Participate in and evaluate proof-of-concepts for emerging cloud technologies to support CENGN cloud infrastructure
- Highly motivated to gain experience in R&D engineering/DevOps environments
- Sound judgment and ability in handling matters of a confidential and/or sensitive nature
- Ability to communicate effectively
- Ability to work independently
- Ability to learn and adapt quickly to changes

Education & Experience:

- Minimum 5 years of experience in a progressive leadership role
- Bachelor's degree or College Diploma in Engineering or Computer Science or related discipline

Languages:

- English oral, reading and writing
- French oral, reading and writing would be considered an asset

Interested and qualified candidates are invited to forward their resume in confidence to CENGN by email to <u>hr@cengn.ca</u>. Please use "**Site Reliability Engineer – Operations**" as the subject line.



Due to COVID-19, our employees are working from home. We've implemented a virtual hiring process and continue to interview candidates by phone or video and are onboarding new hires remotely.

CENGN thanks all applicants for their interest, however, only those selected for an interview will be acknowledged. CENGN is an Equal Opportunity Employer.