



Position: Customer Solutions Engineer

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 next generation networks 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 (SMEs).

By providing Canadian SMEs with the infrastructure and expertise required to test their products, these growing businesses can overcome commercialization barriers. CENGN provides SMEs with full support of the development, validation, and exposure of their innovative solutions. CENGN also develops talent through co-op and internship opportunities as well as training offerings for professionals.

CENGN's ecosystem includes members Bell Canada, Cisco, EXFO, Huawei, Invest Ottawa, 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 Excellence (OCE).

What We Offer:

- 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 benefit of an agile company in a modern setting where your ideas and opportunities for growth are nurtured and encouraged
- The advantage of working with colleagues passionate about their individual contributions to CENGN
- 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 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

For more information, visit www.cengn.ca

The Opportunity:

Customer Solutions Engineers (CSEs) play a pivotal role as they possess a core set of practical skills in networking and computing technology. These skills are applied to help a wide range of Canadian tech companies design and execute projects on the CENGN infrastructure.

Projects at CENGN range from proof of concepts, to technology validations, to complex scaling tests, each involving an exciting mix of hardware and software technologies. Our domain expertise spans data centre-grade hardware, software-defined networking, virtualization/containerization, network function virtualization, security, and beyond.

Being a CENGN CSE means living on the leading edge of networking and computing innovation, tackling new technical challenges every day, and making a real difference to the Canadian SMEs that are defining our future.

We are seeking a highly skilled and motivated individual to join CENGN's Customer Solutions Engineering team. Reporting directly to the Senior Manager of Customer Solutions Engineering and working closely with colleagues in the CENGN business development and project management teams, the CSE will be responsible for owning the technical relationship with our customers and supporting and advising them as they execute their projects at CENGN.

Key Responsibilities:

The CSE role is multi-faceted. On any given day, the CSE may hold responsibility to:

- Work directly with a new customer to deeply understand their problems and goals, and then, in consideration of CENGN's platform capabilities, advise the customer on the design of a project that best meets those goals.
- Translate the high-level project design, architecture and requirements into a precise specification of the hardware and software technologies and network architecture required for the project.
- Working with CENGN's infrastructure engineering team, commission the base system resources required for a project.
- Undertake the implementation work to create the environment that the customer needs for the project. For example, installation and configuration of: VLANs, operating systems, virtualization environments, traffic generators, performance monitors, etc.
- Provide hands-on technical support and best-practices advice to the customer while they undertake their project.
- If a project surfaces a potential technical issue with CENGN's underlying infrastructure, work directly with the infrastructure engineering team to triage the problem, while maintaining clear and open communication with the customer.
- Report weekly to CENGN's management on the project's technical status, progress, and issues.
- Write concise post-project reports for internal record-keeping purposes.
- Deliver project briefings to the CENGN marketing team and advise them on how best to articulate the project in non-technical terms for case studies that are published publicly.

Key Competencies/Qualifications:

- **Practical, hands-on experience deploying and using several** of the following technologies and the willingness to develop skills in the others over time:
 - Virtualization: KVM, VirtualBox or others
 - OpenStack
 - Docker and Kubernetes
 - Linux: Ubuntu, CentOS or other distributions
 - Traffic/load generation tools such as iPerf, jMeter, TRex or others
 - Load balancers, reverse proxies, and web servers such as HAProxy, NGINX, Apache, Traefik, or others
 - Virtualized network functions like firewalls (commercial or open source)
 - Scripting: Python or other
 - IP networking protocols and concepts
- Self-motivated learner keen to continually push the bounds of their expertise
- Ability to balance several concurrent projects and efficiently task-switch between them
- Keeps current with the evolution of next generation networking technologies and related industry trends
- Interest in or experience with working with customers
- Interest in or experience with technology SMEs

Education:

University degree or college diploma in Engineering, Computer Science, or Networking, or equivalent experience.

Experience:

At CENGN, we prioritize practical skills over years of experience. The depth of skill we are seeking in the above technologies would *usually* be attained as a result of 5+ years of experience.

Languages:

- English oral, reading and writing
- Competency in any other language could be considered an asset

Interested and qualified candidates are invited to forward their resume in confidence to CENGN by email to hr@cengn.ca. Please use "**Customer Solutions Engineer**" as the subject line.

CENGN reserves the right to remove this posting prior to the application deadline. CENGN thanks all applicants for their interest, however, only those selected for an interview will be acknowledged. CENGN is an equal opportunity employer.