CENGN is committed to removing barriers to commercialization, accelerating product introduction to the market, as well as reducing product development time and costs for growing Canadian tech businesses. By working with CENGN’s cutting edge infrastructure and expert engineers, our clients are able to undertake high-value market readiness projects that would otherwise be out of reach. The unique physical and virtualized offerings from CENGN enables companies to test, containerize, and validate new and emerging technologies.

### Project Areas

- Companies carrying out a CENGN project will have a product or solution that leverages digital or networking technology

### Project Types

- **SDN / NFV / SD-WAN**
- **Internet of Things**
- **Data Centre & Cloud**
- **Security**
- **Mobile Networks**
- **Network Transport**
- **Network Applications**
- **Artificial Intelligence**

### Service Offerings

- **Traffic Generation**
  - Tools for generating system loads
- **Cloud Tenancy**
  - Virtual machines on CENGN’s OpenStack cloud
- **Bare Metal**
  - Fully dedicated high-performance servers
- **Hardware Hosting**
  - Hosting client hardware in CENGN’s data centres
- **Virtual Network Functions**
  - CENGN provides VNFs from Cisco, Juniper Networks and others
- **Cloud Native Expertise**
  - CENGN offers network and digital technology testing expertise
- **Custom OpenStack**
  - A fully dedicated Kubernetes opensource cloud with the option of OpenStack-Helm
- **GPU and CPU Compute**
  - Highest performing data centre grade GPU, provisioned as part of bare metal or virtual machines

### CENGN’s Product Testing Services Provide:

- **Performance Testing**: Validating a product’s ability to interoperate with new systems or components
- **Functionality Testing**: Validating a product or one of its features is operational for market introduction
- **Demonstration and Validation**: Demonstrating key product capabilities in a customer-like environment for the benefit of a specific strategic customer or partner
- **Load and Stress Testing**: Determining system performance and resource requirements at given levels of load and determining what happens when maximum loads are exceeded

While every client project is unique, they are built up from a common set of CENGN service offerings. Beyond infrastructure offerings, CENGN works with each of its customers to provide technical expertise as well as business exposure to its ecosystem of multinationals.
Gain Access to our CENGN Testbed

CENGN Secure Hybrid Cloud

Capacity Across 4 Sites
- CENGN HQ (Kanata)
- Invest Ottawa (Ottawa)
- MaRS (Toronto)
- Communitech (Waterloo)

Testbed Infrastructure
- 6000 Cores
- 50TB RAM
- x100Gbps
- MPLS-SR Underlay
- Nvidia V100 GPU
- AWS and Azure

CENGN Academy helps advance the global competitiveness of the Canadian ICT sector by arming professionals and students with cutting-edge skills in open-source cloud and intelligent networking technologies that move innovation forward. CENGN also offers online self-paced training with hands-on labs, delivered with high value learner support, and validated through digital badge and certification exams.

Course Offerings
- CENGN Cloud System Specialist (CCSS) certification program
- Docker + Kubernetes Overview, Basics and Advanced
- Infrastructure as Code
- Intro to DevOps
- Machine Learning Overview
- Machine Learning with Python
- Automation with Terraform and Ansible

Visit cengn.ca/services/cengn-academy for details on our course offerings!

About Us: CENGN is Canada’s Centre of Excellence in Next Generation Networks. Through our leading-edge technology infrastructure and expertise, and the creation of a globally recognized ecosystem of partners, CENGN helps Canadian small and medium enterprises overcome commercialization barriers and grow.

Contact us: services@cengn.ca