Canada’s National Research and Education Network (NREN)

UPDATED SEPTEMBER 2020
What is Canada’s NREN?
The National Research and Education Network (NREN) is an essential collective of infrastructure, tools and people that bolsters Canadian leadership in research, education, and innovation.

CANARIE and its twelve provincial and territorial partners form Canada’s NREN. We connect Canada’s researchers, educators, and innovators to each other and to data, technology, and colleagues around the world.
Partners in Canada’s NREN

- ACORN-NL
- ACORN Nova Scotia
- Collège Aurora College
- BCNET
- Canarie
- Cybera
- ECN
- Manitoba Research Network
- ECN
- ORION
- Risq
- SRNET
- Yukon University
What does the NREN do for Canadians?
The NREN connects Canada’s research, education, and innovation communities via ultra high-speed (up to 100G) networks.

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The NREN enables data-intensive research and education that would not be feasible over commercial networks.
The NREN makes access to global research instruments and vast data stores seamless so that distance is irrelevant.

- 30 Metre Telescope
- Large Hadron Collider
- Canadian Light Source

- Genomics Databases
- Neptune 2.0
- Worldwide sensor networks
Canada’s NREN leverages global investments in advanced networks and enables Canadian students and researchers to collaborate with colleagues around the world.
The NREN connects over 725 Canadian universities, colleges, CÉGEPs, research hospitals, government research labs, school boards, business incubators and accelerators.
Fast Facts about Canada’s NREN
Massive amounts of data flows to and from Canada to international partners, as Canadians are fully engaged in global collaborations to solve our most pressing problems.

176 Petabytes* in 2019

* The equivalent of watching movies 24/7 for 20,000 years!
Canadians’ investment in the NREN is leveraged by significant international investments.
How is the NREN operated?

The NREN is governed and managed by members of the NREN Governance Committee (presidents of the provincial and territorial networks plus the president of the federal partner, CANARIE).

Initiatives are guided by the NREN Strategic Plan, which lays out priority projects to evolve the NREN and maximize its value for stakeholders.
Who pays for the NREN?

Investments in the NREN are made by the federal partner, CANARIE, and by NREN-connected institutions in the provinces and territories to support their provincial or territorial networks.
Questions?
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