



# BCNET

Shared IT Services for Higher Education & Research

## Conference 2018

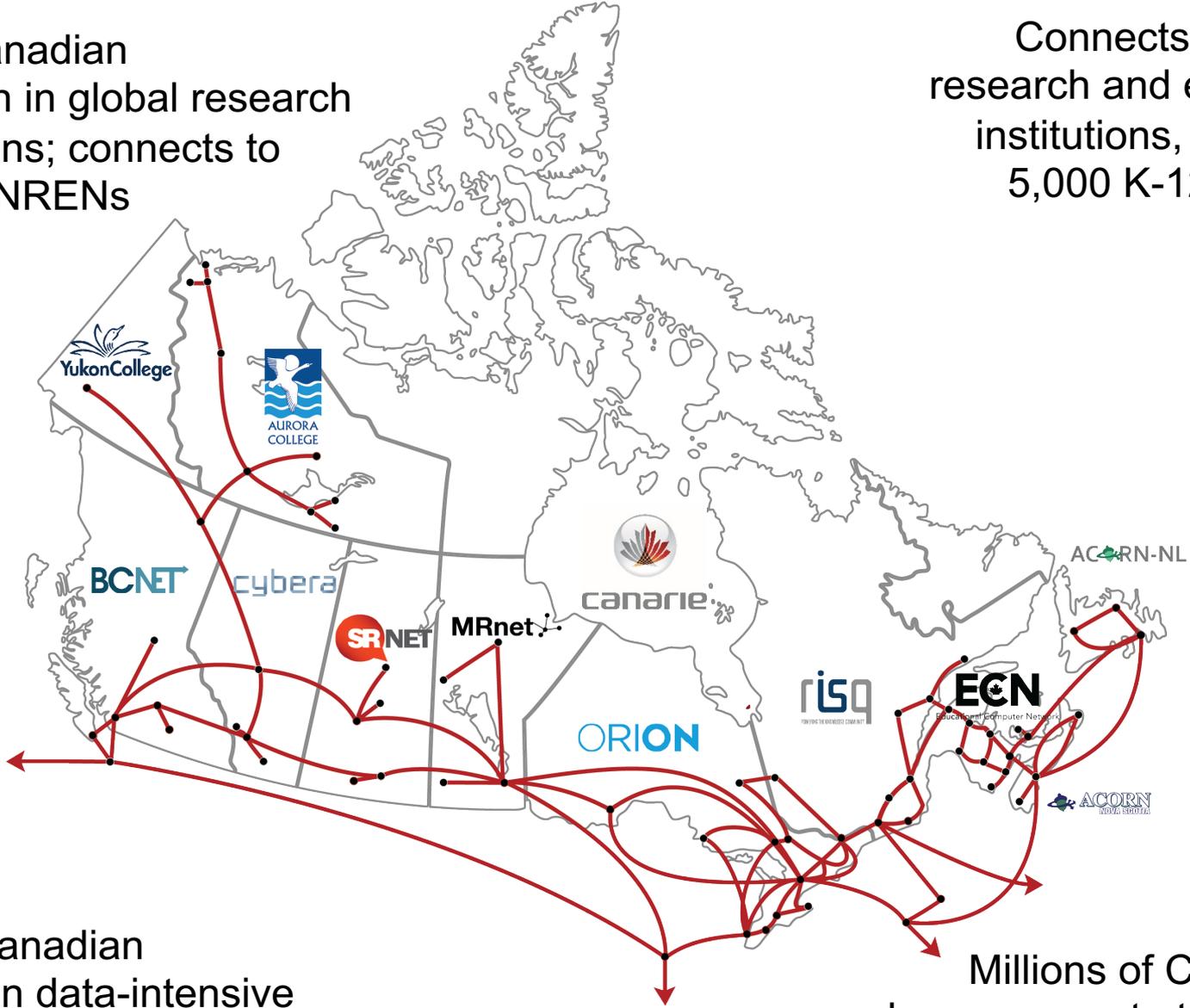
# Above-the-Network Services — Delivering Value Beyond Connectivity

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# CANADA'S NATIONAL RESEARCH AND EDUCATION NETWORK (NREN)

Enables Canadian participation in global research collaborations; connects to 100 global NRENs

Connects over 600 research and education institutions, plus over 5,000 K-12 schools



Supports Canadian leadership in data-intensive research and innovation

Millions of Canadians have access to the NREN

Maps out the evolution of the NREN in three areas:



**Services**



**Organization**



**Relationships**

...with a goal of strengthening Canadian leadership in research, education and innovation.



# NEW DEMANDS ON THE NREN...

**over-the-net services**  
software defined networking  
**cloud**  
**testbed networks**

**innovation**  
**data**  
international  
**bring your own device**  
network function virtualization

security



# ...LEADING TO COLLABORATIONS ON ABOVE-THE-NETWORK SERVICES



- Pan-European framework agreements with **20 cloud services providers**
- Negotiated by GEANT and **36 NRENs**
- Available to **10,000 institutions** representing **50+ million users**



- **700 subscriptions** with more than **25 service providers**
- **243 institutions** (73% of Internet2 members) have used program since inception



# DELIVERING VALUE THROUGH COLLABORATIVE SERVICE DEVELOPMENT

- Demand aggregation → better pricing
- Standardized procurement and contracting terms
- Access to enterprise solutions for smaller institutions
- Better utilization of existing network investments
- Potential for comprehensive services → reduced service integration costs
- Leverage existing identity management frameworks



# WHAT'S THE RIGHT APPROACH FOR THE CANADIAN NREN?

