

Research Networking in Ontario

- 1983 - 1984 The Ontario Universities Network (OUNET) is formed and includes the Universities of Guelph, Toronto, Waterloo, Western Ontario, York and Queen's. Humber College, Ryerson Polytechnic Institute, McGill University and the University of Manitoba later join the group, which changes its name to NetNorth. With assistance from IBM Canada, NetNorth begins coast-to-coast expansion and adds links from Toronto to Ithaca, NY to connect to BITNET in the United States.
- 1988 Ontario's first regional Internet Protocol (IP) network ONet, is established, starting with a link between the Universities of Waterloo and Western Ontario. A connection to the NSFNET via Cornell University was also made.
- 1990 The national IP backbone research network CA*net comes on stream operated by CA*net Networking Inc. with start-up funding from the National Research Council of Canada.
- 1993 CANARIE Inc. is established as a not-for-profit corporation working in partnership with Industry Canada, spearheading the upgrade of the initial CA*net national research network infrastructure. The Provincial Government awards \$5 million to ONet Networking to expand and enhance its network within Ontario.
- 1994 - 1997 OCRI net in Ottawa, WEDnet in Windsor, sureNet in Sudbury, and LARGnet in London established as regional advanced networks in Ontario with Provincial Government and other financial assistance.
- 1996 - 1997 ONet embarks on the CANARIE supported UNI*net project for high speed CA*net 2 links for eight of its member institutions. WEDnet, sureNet, and OCRI net supported by CANARIE connect to CA*net2. Toronto and Ottawa GigaPops to CA*net 2 added.
- 1999 Ontario issues a Request for Proposals to establish the Ontario Regional Innovation Optical Network (ORION) as a next generation research and education (R&E) network for Ontario R&E institutions.
- 2000 The ORANO consortium (WEDnet from Windsor, LARG*net from London, OCRI from Ottawa, sureNet from Sudbury, and ONet Networking as lead) submit a proposal to establish the ORION network.
- 2001 The Optical Regional Advanced Network of Ontario (ORANO) is established as a not-for-profit corporation. The Province commits up to \$32.3 million, CANARIE \$3.4 million, and private sector partners additional support to build the 4,200 km, \$78 million ORION network, connected to the national CA*net 3 backbone.
- 2002 ORANO commences to build the ORION network in partnership with Bell Canada, HydroOne Telecom and Nortel Networks.
- 2003 ORION, as Ontario's optical regional advanced network, establishes connections to CANARIE's next-generation CA*net 4 network. The first ORION link is completed and tested between Laurentian and York Universities on February 7, 2003, and within a few months, 20 of ORION's 22 Points of Presence (PoPs) are operational across Ontario.
- 2004 The last of 22 ORION PoPs is completed, at Northern College in Timmins, on March 31, formally completing the ORION network.
- 2007 ORION expands its capabilities with next-generation ROADM technology. A new routing layer is being implemented, supporting IPv6, Multi Protocol Label Switching, Quality of Service, and in the future, virtual routing.

