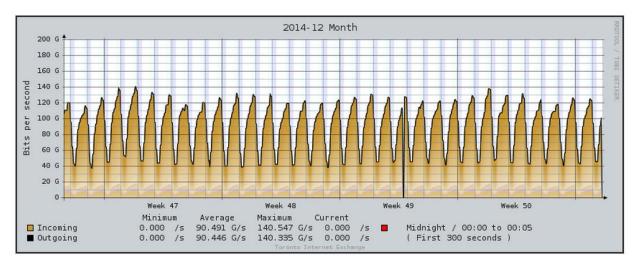
Internet Exchange Case Study

The Toronto Internet Exchange (TorIX) is the largest IX in Canada with more than 175 peering participants benefiting from lower network costs & faster speeds

The non-profit Toronto Internet Exchange (TorIX) is a multi-connection point enabling members to use one hardwired connection to exchange traffic with 175+ members on the exchange. With peering participants swapping traffic with one another through direct connections, TorIX reduces transit times for local data exchange and cuts the significant costs of Internet bandwidth.



The success of TorIX is underlined by its tremendous growth, exceeding 145 Gbps as one of the largest IXs in the world. TorIX is in Cologix's data centre at 151 Front Street, Toronto's carrier hotel and the country's largest telecommunications hub in the heart of Toronto. TorIX members define their own routing protocols to dictate their traffic flow, experiencing faster speeds with their data packets crossing fewer hops between the point of origin and destination. Additionally, by keeping traffic local, Canadian data avoids international networks, easing concerns related to privacy and security.



Above: In Dec. 2014, TorIX traffic peaked above 140 Gbps, with average traffic hovering around 90 Gbps.

Beginning

- Launched in July 1996
- Ethernet-based, layer 2 connectivity
- TorlX-owned switches capable of handling ample traffic
- IPv4 & IPv6 address provided to each peering member to use on the IX
- Broke the 61 Gbps mark in Jan. 2011

Today

- Direct TorlX on-ramp in Cologix's 151 Front Street data centre in Toronto
- Second largest independent IX in North America
- Operated by telecom industry volunteers
- Surpassed 145 Gbps with 175+ peering participants, including the Canadian Broadcasting Association, Microsoft & Google

24 Network Neutral Data Centers Throughout North America

Columbus **Dallas Jacksonville** Lakeland Minneapolis Montreal **New Jersey Toronto** Vancouver















TORIX Peering Participants

- 295.ca
- 3Men@Work Integrated Networks,
- **About Communications**
- Accelerated Connections Inc.
- Activo, Inc.
- Advanced Knowledge Networks
- Afilias Limited
- Agilis Networks
- Aircomplus Inc.
- Akamai Technologies
- All Blue Solutions
- Allstream
- Andrews Wireless Ltd.
- AT&T Global Services Canada Co.
- Axia Connect Limited
- Beanfield Technologies Inc.
- Bell Aliant Regional Communications
- Blink Communications
- Canaca Com
- Canada Web Hosting
- Canadian Broadcasting
 - Corporation
- Canadian Internet Registration Authority (CIRA)
- CANARIE Inc.
- Carpathia Hosting, Inc.
- Carrier Connex Inc.
- ccRoute Inc
- CDNetworks, Inc.
- CentriLogic Inc.
- CIK Telecom Inc.
- CIRA DNS
- CIRA MLAB
- Cisco Webex
- CiteNet Internet
- CloudFlare, Inc.
- Cogeco Cable Canada Inc.
- Cogeco Data Services Inc.
- Cohere Communications
- Colosseum Online
- Compton Communications
- Computer Talk
- Comwave Telecom Inc.
- Connex See Service
- Convoke Communications Corp
- CRS Networks Inc.
- DALnet IRC Networks
- Data Centers Canada, Inc.
- Data Deposit Box (Acpana Buss.
- Desire2Learn Incorporated
- Distributel Communications, Ltd.
- E4A S.R.L.
- E-Gate Communications Inc.
- Eastlink Limited
- El Catalyst Corp.
- Epik Networks
- Execulink Telecom Inc.
- FiberConX Communications
- Fiber Networx Inc.
- Fibernoire Internet
- Fidalia Networks Inc

- Flowfinity Wireless Inc.
- Fonthill Media Network
- Frontier Networks
- Galaxybroadband Communications, Inc
- Gazelle Communications
- Globe and Mail
- Google, Inc.
- GTAnet Networking
- Hurricane Electric
- **Heavy Computing**
- Hosting Logistic Inc.
- Hostopedia Inc.
- Host Virtual, Inc
- **Humber College**
- Hydro One Telecom
- Internet Access Solutions Ltd.
- Internet Light and Power, Inc.
- Init Seven AG
- InnSys Inc.
- Internet Systems Consortium, Inc.
- Internetworking Atlantic
- IPTP Networks
- IrisTel
- ISP Telecom Inc.
- IT Canada
- iWeb Technologies
- Juch-Tech, Inc.
- Keewaytinook Okimakanak
- Korax Inc.
- Lantern Hill IT
- LARG*net
- LinkedIn Corporation
- Limelight Networks
- Magna International
- **MCSNet**
- Message Labs
- Microsoft
- Managed Network Systems Inc.
- MTO Telecom
- Navigata Communications
- Net Access Corporation
- NetAccess Systems Inc.
- Neutral Data Centres Corp.
- Nexicom Inc.
- Nexusds.com
- Niagara Regional Broadband Networks Inc
- nLayer Communications, Inc.
- Ocdotus Inc.
- Ontario Research and Innovation Optical Network
- OnX Enterprise Solutions
- OpenDNS, Inc.
- Openwave Systems, Inc.
- Packet Clearing House
- Packet-Tel Corp. Pathway Communications
- Peer1 Hostina
- Persona Inc. PostMedia Network Inc.
- Primus Telecommunications CA Inc.

- Prodosec Inc.
- PurePages Inc.

Priority Colo Inc.

- Q9 Networks Inc.
- Quadro Communications Cooperative Inc.
- RackForce Networks Inc.
- Radiant Communications Corp.
- Ravand Cybertech Inc
- Reliablehosting.com
- Rogers Communications Inc.
- **RU Networks**
- Ruralwave
- Saskatchewan Telecommunications
- Seaside Communications
- Selectcom Telecom
- Sentex Communications
- Corporation Server North Inc.
- Shaw Communications Inc.
- Sheridan College SoftCom Inc.
- SoftLayer Dutch Holdings, B.V.
- Source Cable Limited
- SPD Network
- Structured System Administration
- Standard Connections Ltd. Stargate Connections Inc.
- **Start Communications**
- Storm Internet Services
- **TBavTel TDCNet**
- TekSavvy Solutions Inc.
- Telnet Communications
- TeraGo Networks Inc.
- The Wire Inc.
- The Working Group Inc. TMX Atrium
- Trutel
- Tucows Inc.
- Unitas Global
- Venture Computers of Canada Inc
- ViaNet Internet Solution
- VianetTV Inc. Videotron Telecom Ltee
- VIF Internet
- Vmedia Inc. VSOFT Inc.
- Watch Tower Canada
- Westman Communication Group Wightman Communications
- WIND mobile
- WirelE Holdings International WoodyNet
- Xplornet Communications Inc. Yak Communications (Canada)
 - ZeroFail
- Zip Telecom

Source: http://www.torix.ca/peers.php

