Welcome to NANOG 65

Dave Temkin– Vice Chair, NANOG Board of Directors

Chris Tacit – TorIX, NANOG 65 Host

Clinton Work – Telus, Connectivity Co-Sponsor

Phil Couture – Videotron, Connectivity Co- Sponsor

Tony Tauber – NANOG PC Chair

What makes a
NANOG Conference Different

- Membership and Community Engagement
- Attendee Demographics and Peer Reviewed Program
- Commitment to supporting New Operators
  - College Immersion Program
  - Fellowships
  - NANOG on The Road
- Vendor Neutrality
  - Sponsorship - Premium and Individual Meeting Sponsor

What to Expect at NANOG 65

- General Session Content
- Tracks
- Tutorials
- Lunch - Monday & Tuesday
- Social Event Reminders –
  - BnG, Tuesday Night
  - Social Events, Sunday, Monday, Tuesday, & Wednesday Nights
  - Survey Feedback

2015 Elections

- Membership as of 12:00 pm Eastern Time on Friday, October 2, 2015

- Vote Only Once for
  -- 3 Open Board of Directors positions

  -- Importance of Bylaw Changes

- Candidate Introductions at 2:00 pm today

- Voting began at 8:00 AM - Closes Wednesday at 12PM

- Results announced – Wednesday at 5:30PM

Welcome All!

- **Newcomers** - Approx. 287 attending their first NANOG Meeting

- **Members** - 268 of 893 total attending NANOG 65

Thanks to our
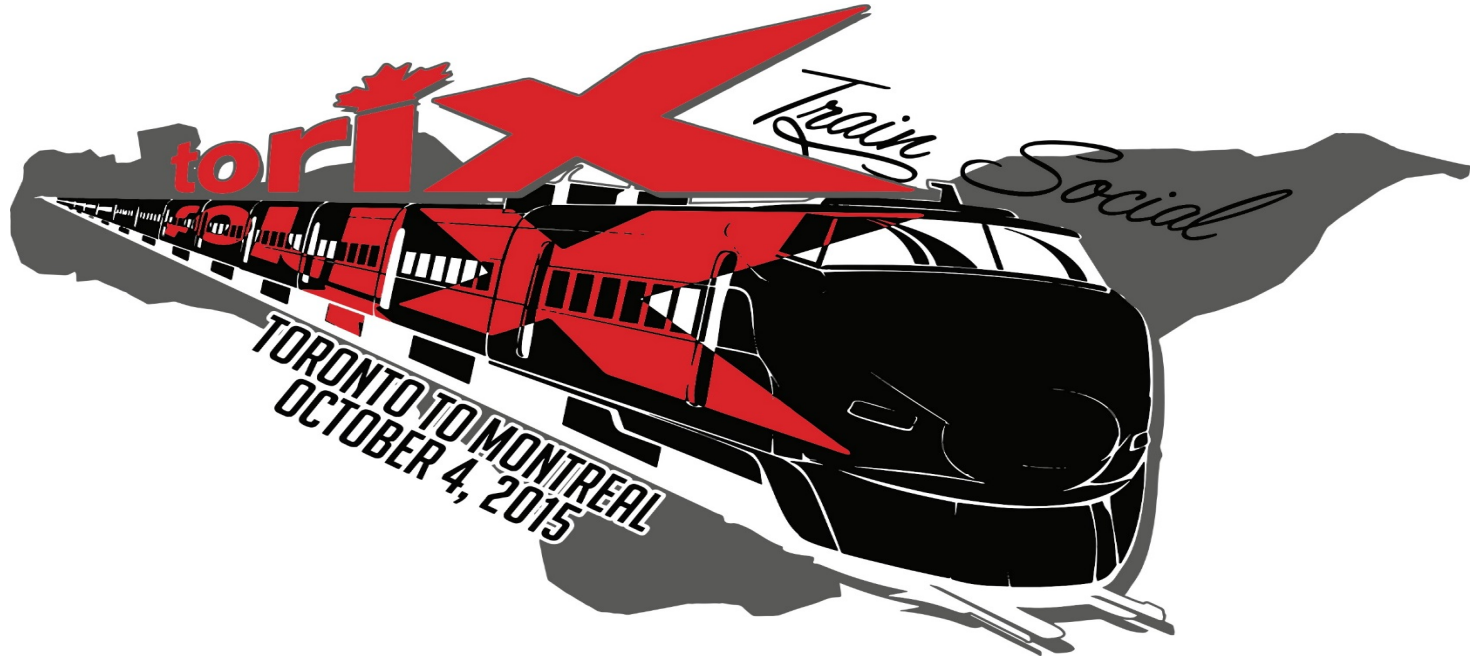# Host, Connectivity, & Premium Sponsors

TorIX - NANOG 65 Host

Chris Tacit – **Torix**

Nanog 65

October 5, 2015

Welcome

Train Social

Train Social

torix

Train Social

torix

Introducing ….

Effective October 1ˢᵗ, 2015, TorIX has a new President

Introducing Christian S. Tacit
TorIX President

torix

About Torix

204 total active peers, of which:

- 10 x 100 Mbps
- 110 x 1 Gbps
- 72 x 10 Gbps
- 12 x Multi 10 Gbps

Total Exchange Traffic at Peak (peer ports) – 188 Gbps

Estimated to be over 200 Gbps by end of year

torix

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torix

About Torix (continued)

Gear:

- 2 x Nexus 7K Switches

- 3 x Cisco ME3600 Ethernet Access Switches

- 2 x ASR1001 Routers (route servers)

Network Time Protocol Services

- 3 servers serving Stratum 1

Various other mail/list/web servers

Locations

- TR1 (151 Front Street W) and TR2 (Front and Parliament)

torix

People @ Torix

Elected Board

- 7 Members elected to staggered 2 year terms

Operations team

- 6 Volunteers

Executive Director

- New in 2015

torix

Come Join Us – You should Peer in Toronto

Not connected yet? You should be!

Contact us at peering@torix.ca if you are ready to peer.

For other or additional information contact

Christian Tacit at ctacit@torix.ca.

torix

Come Join Us – You should Party

Proud to be the main sponsor of the NANOG 65 Social event tonight at Cirque Eloize

NANOG65 Connectivity

Clinton Work

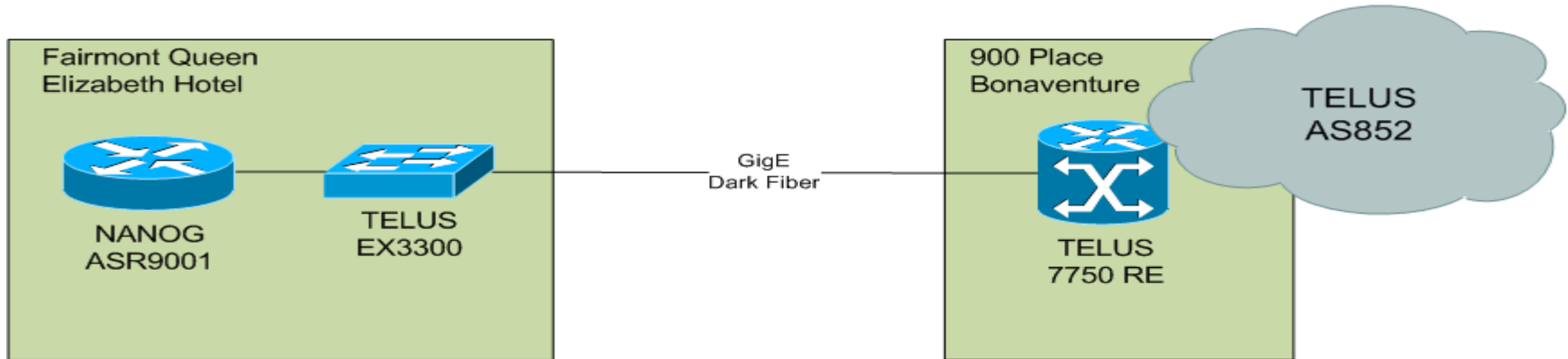Member of the TELUS team

October 2015

TELUS Overview

- TELUS has 1.5 million Internet and 954,000 IPTV subscribers between BC, Alberta, and eastern Quebec

- TELUS has 8.4 million wireless subscribersacross our national HSPA/LTE network.

- Internet and data services are built across a 100GE MPLS core with dual-stack support.

- TELUS AS852 implements most of our Internet peering in Seattle Westin, Chicago Equinix, and New York (two locations).

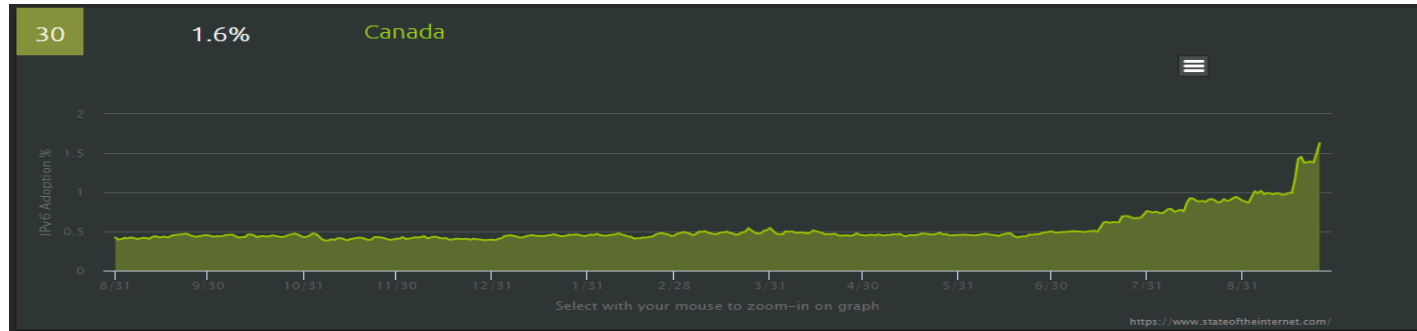- TELUS announced plans in June to deploy fiber to 300,000 Edmonton, AB homes and businesses using GPON technology

NANOG 65 Connectivity

- Business Internet GigE service
- Dual-stack connectivity

Canadian IPV6 Deployment

- TELUS is in the process of rolling out dual-stack connectivity to our Internet customers

- The Canadian IPV6 usage has increased from 0.5% to 1.6% during July – Oct (source Akamai).
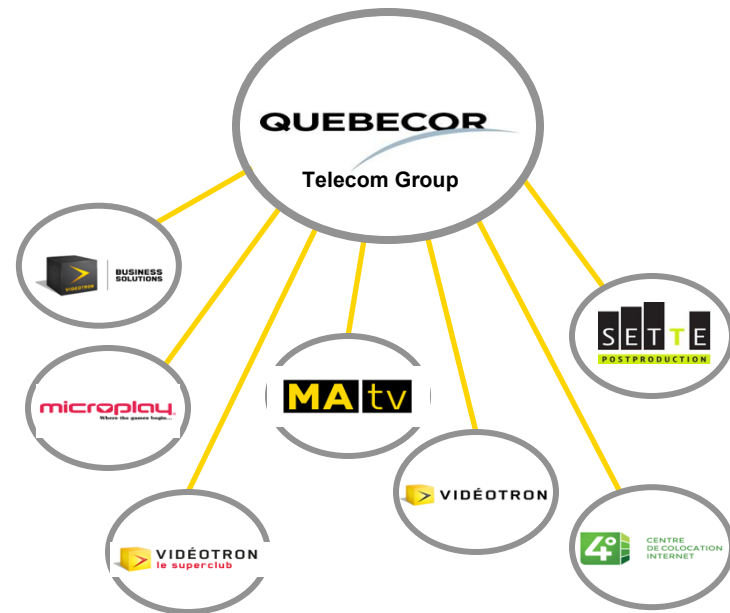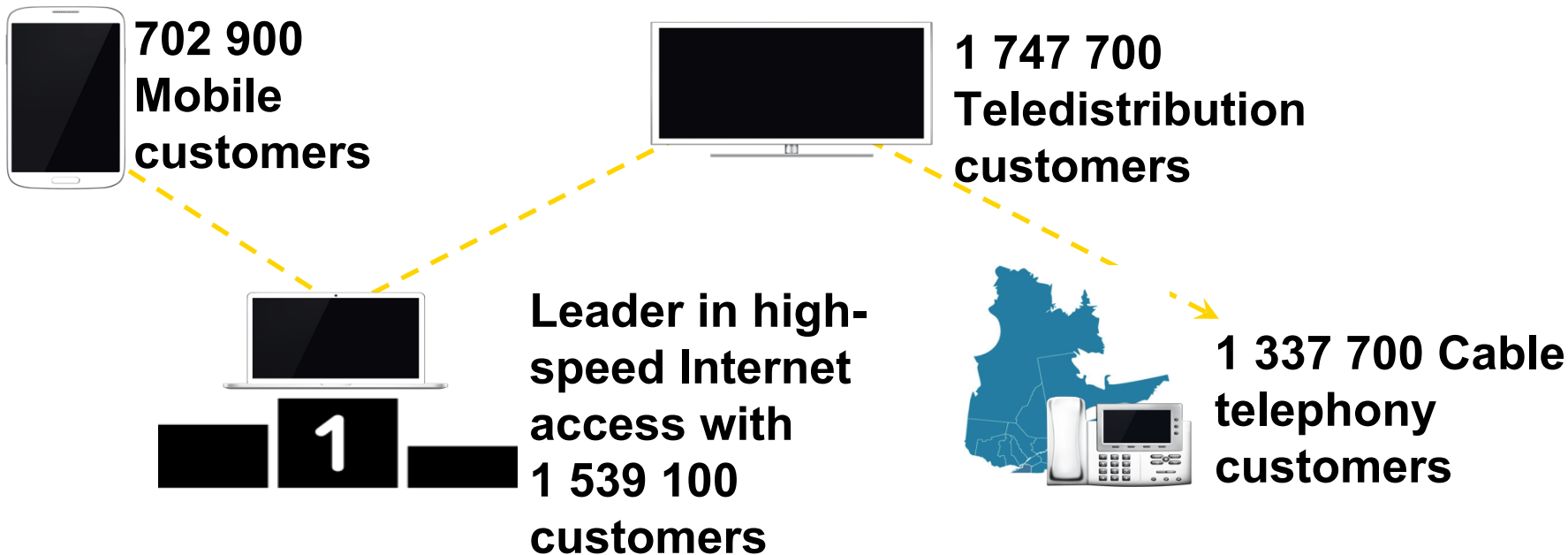
the future is friendly®

VIDEOTRON

Videotron, a wholly-owned subsidiary of Quebecor Media inc., is an integrated communications company engaged in cable television, interactive multimedia development, Internet access, cable telephone and mobile telephone services.

Videotron is an important player in the Canadian telecommunications market. On the strength of its state-of-the-art fibre and HFC network, it holds a privileged position, offering its customers fast and reliable services.

SERVICE AFFAIRES

VIDEOTRON

Videotron in numbers

702 900 Mobile customers

1 747 700 Teledistribution customers

Leader in high-speed Internet access with 1 539 100 customers

1 337 700 Cable telephony customers

VIDEOTRON BUSINESS SOLUTIONS

Videotron Business Solutions provides services to small, medium, and large private and public organizations, as well as to other telecommunication providers in Canada.

Videotron Business Solutions is a major telecommunications provider, offering:

- Fixed and mobile telephony
- High-speed data services
- Cable and fibre-based Internet access
- Data hosting
- Video services

THE VIDEOTRON NETWORK

Extending over a territory reaching more than 80% of the Québec population, the Videotron network provides outstanding connectivity with the rest of Canada, as well the United States.

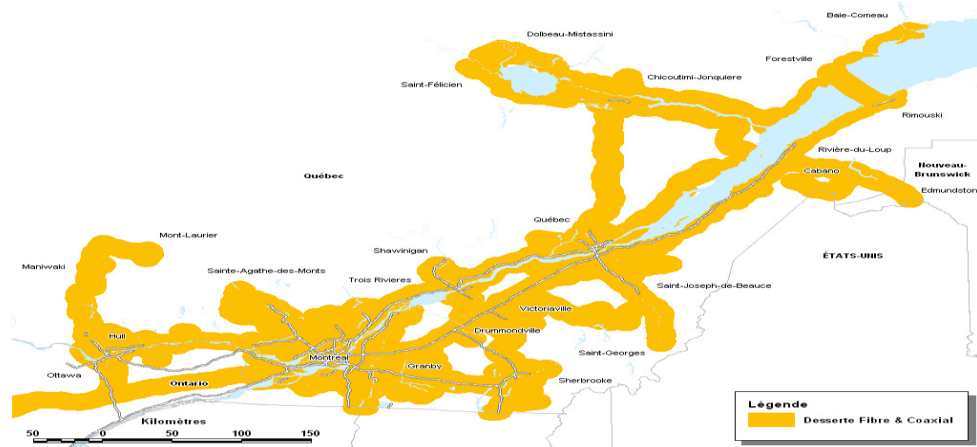Videotron also reaches the rest of the agreements.

Internet up to 30 Gbit/s

Fibre-based telephony

LTE Mobile telephony

Television

The Videotron fibre optic and cable network is state-of-the-art

Tony Tauber - Program Committee Chair
Thank You to the Members of the Program Committee

- Jeff Bartig
- Christina Chu
- Philippe Couture
- Paul Ebersman
- Allison Feese-Strickland
- Greg Hankins
- Elisa Jasinska
- Anton (Tony) Kapela

- Manish Karir
- **L. Sean Kennedy (Vice Chair)**
- Randy Neals
- Matt Petach
- **Michael Sinatra (Secretary)**
- Steven Schechter
- Krassi Tzvetanov
- John van Oppen
- Ryan Wooley

Program Notes

- New PC Tool Agenda/Guidebook Automation

- Agenda Icon notation

    - Most Grand Ballroom sessions will be webcast/archived

    - Most other sessions will be recorded/archived

- Hands-on Net DevOps Tutorial on Tuesday

    - Some preparation (software installation) recommended

- Difference between Peering Track and Peering Personals

General Reminders

- Breaks and Espresso Bar
  - Convention Foyer

- Breakfast and Lunch
  - Hochelaga 1- 4

- Q&A and Microphone Guidelines
  - Introduce yourself – Name and Affiliation
  - Questions brief and to the point – not statements
  - Be courteous and respectful

General Reminders

- Daily "Presentation Survey" Giveaway
  - Take online via the web or guidebook
  - Awards
    - 1 Tuesday
      - *for Monday Surveys*
    - 1 Wednesday Morning
      - *for Tuesday Surveys*
    - 1 Wednesday Afternoon
      - *for Wednesday Morning Surveys*

Introduction of First Speaker

Jack Waters
Chief Technology Officer
Level3 Communications