Nanog – Past “north”

- The last Toronto - June 2002 - 509
- The last Montreal - Nov 1999 - 551

### Nanog Attendance

<table>
<thead>
<tr>
<th>Year</th>
<th>City</th>
<th>Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan '05</td>
<td>33 Las Vegas</td>
<td>400</td>
</tr>
<tr>
<td>May '05</td>
<td>34 Seattle</td>
<td>450</td>
</tr>
<tr>
<td>Oct '05</td>
<td>35 Los Angeles</td>
<td>500</td>
</tr>
<tr>
<td>Feb '06</td>
<td>36 Dallas</td>
<td>420</td>
</tr>
<tr>
<td>Jun '08</td>
<td>37 San Jose</td>
<td>440</td>
</tr>
<tr>
<td>Jun '08</td>
<td>38 St. Louis</td>
<td>480</td>
</tr>
<tr>
<td>Feb '07</td>
<td>39 Toronto</td>
<td>500</td>
</tr>
</tbody>
</table>

Nanog Attendance Graph

- X-axis: Attendance
- Y-axis: Year and City
Nanog – Current Info

- Meeting has roughly ~170 new, ~430 total, ~18 students

**Nanog 39 - Regional Distribution**

- United States: 55%
- Canada: 34%
- Europe: 6%
- Asia: 4%
- Australia: 1%
- Africa: 0%
Toronto - Facts

- Established in 1793 as “Town of York”
- Incorporated March 6, 1834 as “City of Toronto”
- Elevation 79m (249 ft)
- Area codes available: 289, 416, 647, 905
- Sporting events in town: Toronto Raptors vs Orlando Magic (Wed, Feb 7, 7:00pm)
- Toronto underground Path
Toronto? In the winter?! (blame Joe)

- Temperature for the week .... **COLD**!

<table>
<thead>
<tr>
<th></th>
<th>SUN FEB 4</th>
<th>MON FEB 5</th>
<th>TUE FEB 6</th>
<th>WED FEB 7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Weather</strong></td>
<td>![Cloud with Snow]</td>
<td>![Sun]</td>
<td>![Cloud with Snow]</td>
<td>![Sun]</td>
</tr>
<tr>
<td><strong>Temperature</strong></td>
<td>-14°C</td>
<td>-20°C</td>
<td>-21°C</td>
<td>-18°C</td>
</tr>
<tr>
<td><strong>Fahrenheit</strong></td>
<td>-6.8°F to -7.2°F</td>
<td>-4°F to -6.8°F</td>
<td>-6°F to -8°F</td>
<td>-6.8°F to -6.8°F</td>
</tr>
<tr>
<td><strong>Wind</strong></td>
<td>40% W 5 km/h</td>
<td>0% N 10 km/h</td>
<td>20% NW 15 km/h</td>
<td>0% NW 10 km/h</td>
</tr>
</tbody>
</table>
• Not for profit organization
• Established roughly July 1997
• Currently over 4Gbps of traffic
• Over 80 peers!
• 3 network jockeys, 5 board members
• Connectivity, 100, 1000, 10G
• www.torix.net
VSNL International | **Tata Group**

**Tata Group**

- 125-year old largest private sector group
- $17.8 billion in revenues
- Acquired VSNL in February 2002
- Tata Consultancy Services (TCS)
  - Asia’s largest software & systems integration services company
  - 33 countries across 5 continents
  - Key player in high-growth international markets
Integrating Key Assets

VSNL International
- Best Wholesale Carrier 2006 as per WCA awards
- Global presence with operations in North America, Europe & Asia
- All customer segments, encompassing wholesale and corporate
- Presence in voice, data and mobile services markets

Teleglobe
- #1 Wholesale Voice Provider
- The largest true hybrid VoIP/TDY network
- Leading international wholesale voice, data & mobile provider
- Over 1400 wholesale customers & 17 billion minutes
- 100 Gbps connectivity in nearly 80 cable systems
- Reach to 240 countries/territories
- 415 direct and bilateral relationships
- Major supplier of voice, internet traffic and signaling conversion
- Wholesale services to over 400 mobile operators

TGN
- 60,000 kilometers of global sub-sea connectivity spanning 3 continents
- Bandwidth at all STM/OC levels
- Reliable, scalable and fully redundant

VSNL
- India’s #1 Communications Group
- Leading provider of International Telecommunications and Internet Services
- Largest Enterprise, Wholesale and Retail Broadband services footprint
- 800,000 strong Internet subscriber base
Meeting network

151 Front St. W.

- Teleglobe
- Peers
- Transits
- TorIX

Bell Canada SONET

OC3 POS/SM/SC

Merit 7200

Sheraton Hotel – Telco Room

20 Mbps SHDSL
(treated as a 1394 bridge)
(ATM internally)

SPONSORS
Teleglobe – IPv4, IPv6 Transit, Local Loop
VSNL INTERNATIONAL
Force 10 – Local Loop
RIM – 7200 Router

ElCatalyst/Dave Gilbert – Local Loop
Thank the Teleglobe and TorIX volunteers

**TorIX**
- Joe Abley, Afilias
- David Gilbert, EICatalyst
- Stephen Fulton, Network Connections
- Sameer Khosla, Neutral Data Centers
- Paul Nash, Nash Networks
- Jon Nistor, TorIX
- Scott Silzer, TorIX

**Teleglobe**
- Sylvie LaPerriere – The juggler
- Marc Brisebois - ops
- Guy Coallier - registration
- Jim Deleskie – “BGP”
- Sebastien Feliciello – LL contract
- Annie Pronovost -- registration
- Stefan ShinHune – connectivity
- John Sweeting – “BGP”
- Michel Tremblay – provisioning
And

Programme Committee
Steve Feldman, CNET (meeting consultant, SC Member, & PC Chair)
Nick Feamster, Georgia Tech
Igor Gashinsky, Yahoo!
Daniel Golding, Tier 1 Research
Kobi Hsu,
Mike Hughes, LINX
Joel Jaeggli, University of Oregon
Keith Mitchell, ISC
Ren Provo, ATT
Bert Rossi, Merit
Ted Seely, Sprint
Josh Snowhorn, Terremark
Richard Steenbergen, nLayer
Pete Templin, Texlink Communications
Todd Underwood, Renesys
Bill Woodcock, Packet Clearing House
Vish Yelsangikar, Netflix
Awesome T-shirt

Artist:
Jonathan Davis
davis@snickers.org
This NANOG is Nistor Approved