## BIER WG IETF 101

Montreal

18 July 2018

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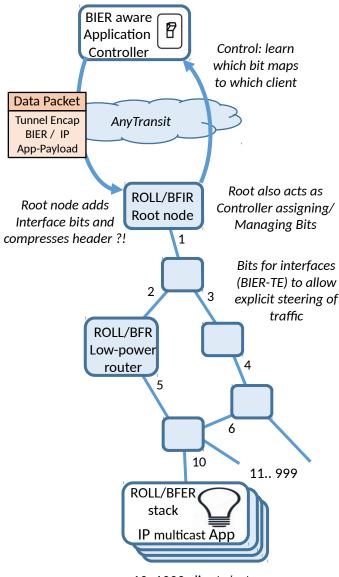
## Agenda

<ul> <li>Welcome, Notewell, Agenda bash</li> </ul>	5min Chairs
<ul> <li>multicast-http-response</li> </ul>	15min Purkayastha
<ul> <li>draft-ietf-bier-pim-signaling</li> </ul>	Bidgoli
<ul> <li>draft-hj-bier-mldp-signaling-00</li> </ul>	15min Bidgoli
• draft-venaas-bier-mtud-01	10min Stig Venaas
• draft-ietf-bier-mld	10min Stig Venaas
<ul> <li>draft-zzhang-bier-php-00</li> </ul>	10min Jeffrey Zhang
<ul> <li>draft-przygienda-bier-migration-options</li> </ul>	15min Przygienda
•	room discussion as needed
<ul> <li>draft-geng-bier-sr-multicast-deployment</li> </ul>	room discussion as needed 10min Liang Geng
<ul> <li>draft-geng-bier-sr-multicast-deployment</li> </ul>	10min Liang Geng
<ul> <li>draft-geng-bier-sr-multicast-deployment</li> <li>draft-xie-bier-entropy-staged-dc-clos</li> </ul>	10min Liang Geng 10min Mike & Jingrong
<ul> <li>draft-geng-bier-sr-multicast-deployment</li> <li>draft-xie-bier-entropy-staged-dc-clos</li> <li>draft-xie-bier-mvpn-mpls-p2mp-02</li> </ul>	10min Liang Geng 10min Mike & Jingrong 5min Mike & Jingrong

## Advertisement for BIER in ROLL Design Team

- Consider joining/collaborating in BIER design team in ROLL-WG:
- Email: <a href="mailto:roll-bier-dt@ietf.org">roll-bier-dt@ietf.org</a> (normal subscribe)
- Issues: <u>tte@cs.fau.de</u>
- What could be cool about this (if design team decides to do it) ?
- End-to-end BIER (with TE) in low-power networks (e.g.: building control)
  - Example: Application Controller sends BIER packet to subset of clients (lightbulbs)
  - Each client is BFER (has a bit)
  - Every packet can address a separate subset of actors through bitstring
  - Only controller app needs to be BIER aware. Receivers can think its just IP multicast.
- BIER TE bits to save power/memory
  - Routers are low-power (memory/CPU). Do not want to keep large routing table (1000 light bulbs). Links are low power too.
  - Every interface has a bit. Routers only need to route on bits to directly connected downstre am neighbors.
- No ASIC constraints. Everything is software
  - Headers/Bitstring can be compressed (loss free, lossy (bloom) to support long bitstrings.
  - Should result in header more compact than existing ROLL/RPL headers even for unicast: Only hop-by-hop bits sets to one receiver: Would also be used for unicast forwarding.

Application controller can efficiently send packets to Every subset of receivers by being BIER aware.



10..1000 clients/actors