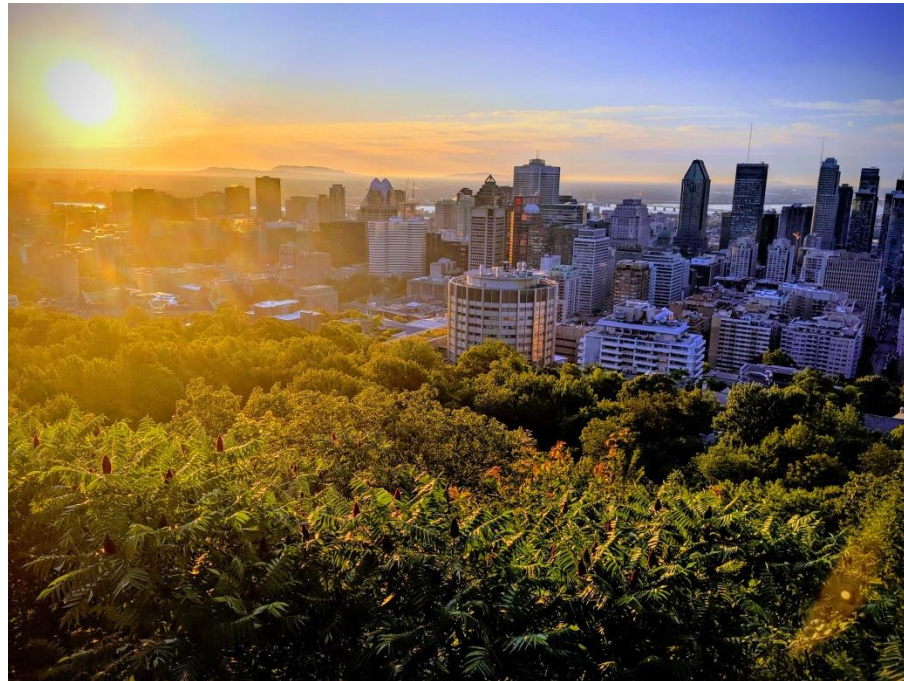


Application-aware Networking (APN) Side Meeting

IETF 108, Online Session
July 30, 2020



Welcome to APN

Housekeeping

- Chairing Today's Discussion
 - Daniel King (daniel@olddog.co.uk) & Zhenbin Li (lizhenbin@huawei.com)
- Note Well
- Blue Sheet
 - Please fill in the blue sheet at:
 - <https://etherpad.wikimedia.org/p/v108-apn-side-meeting>
- WebEx Chat for Question Queue:
 - Type “+q” to enter the queue when want to speak
 - Please state your name before speaking
- Minute takers & Etherpad:
 - <https://etherpad.wikimedia.org/p/v108-apn-side-meeting>
- Online Agenda and Slides at:
 - <https://github.com/APN-Community/IETF108-Side-Meeting-APN>

Note Well

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Definitive information is in the documents listed below and other IETF BCPs. For advice, please talk to WG chairs or ADs:

- BCP 9 (Internet Standards Process)
- BCP 25 (Working Group processes)
- BCP 25 (Anti-Harassment Procedures)
- BCP 54 (Code of Conduct)
- BCP 78 (Copyright)
- BCP 79 (Patents, Participation)
- <https://www.ietf.org/privacy-policy/> (Privacy Policy)

Agenda

- 1. Introduction & Agenda Bashing (5 mins)**
- 2. Attempts in IETF History [Brian Trammell] (15 mins)**
 - What attempts (SPUD and PLUS proposals)? What lessons were learned?
- 3. Requirements on Application-awareness in Networks (20 mins, 5 mins each)**
 - Operators present use cases to make clear that they have the Requirements on Application-awareness in their Networks
 - 3.1 Service/Application aware [Daniel Bernier, Bell Canada] (5 mins)
 - 3.2 CDN [Luis Murillo, Telefonica] (5 mins)
 - 3.3 MEC [Peng Liu, China Mobile] (5mins)
 - 3.4 Game Acceleration [Shuai Zhang, China Unicom] (5 mins)
- 4. APN Framework [Shuping Peng, Huawei] (5 mins)**
 - Introduce APN Framework, functional components, and requirements
- 5. Acquisition, Encapsulation and Conveying of Application-related Information (30 mins)**
 - 5.1 Network Tokens [Yiannis Yiakoumis, Selfie Networks] (10mins)
 - 5.2 FAST [Tom Herbert, Intel] (10mins)
 - 5.3 APN6 [Xing Li, Tsinghua University] (10mins)
- 6. Discussions & Clarifications [Shuping Peng, Huawei] – Collecting views (10 mins)**
 - 6.1 Whether it will bring privacy issue? If yes, how to overcome?
 - 6.2 Whether it will bring security issue? If yes, how to overcome?
- 7. Conclusion – the way forward. (5 mins)**

Presenters, please respect timings

Shaping the APN Discussion

- What is Application-aware Networking (APN)?

“Application-aware Networking is a mechanism whereby traffic flows can be steered and routed within the network to ensure that the specific service levels needed by applications can be delivered.”

- Are the right use cases identified?
- What techniques are available to achieve the goals of the use cases?
- Can we ensure the scope of work to focus on a limited number of domains, and the network layer?
- How can we address security and privacy issues?
- If there is interest in continuing the work? If so, where would we do this work, RTG Area, or?
 - Encapsulation of application related information in MPLS, IPv6, SRv6, VXLAN, etc.
 - Distribute application related information through IGP/BGP/PCEP extensions.