ALTO WG Status Report

Enrico Marocco <enrico.marocco@telecomitalia.it>

Vijay K. Gurbani <vkg@bell-labs.com>

Application-Layer Traffic Optimization

- Created in APP, then moved to TSV
- Application level, HTTP-based, protocol
- RESTful approach
- JSON-based syntax
  - BTW, need for a mechanism for incremental updates (JSON-patch?)

Need feedback from APP (possibly before we think we're done!)

Goal

- Provide applications with information about the network
  - Driving use case: peer selection in p2p applications
  - Also CDN (cdni WG), SDN (sdn BOF)
- Provided by ISPs and/or third parties
  - Whoever knows about the network infrastructure…
  - … and has interest in helping applications

High Level Design

- Maps
  - "Going from network A to network B costs X"
  - Get once use forever
  - Full privacy for info consumer
  - Coarse-grained information
- Ranking
  - Q: "Costs from A to B, C and D?"
    A: "A to B costs X, A to C costs Y, A to D costs Z"
  - Query/Response service
  - Some information disclosure from consumer
  - Fine-grained information

Current Status

- Protocol *almost* done
  - Reference specs from JOSE WG to replace current integrity protection
    - But JOSE meets for the first time this week!
  - Interoperability event in Quebec
    - 5 servers tested vs. 7 clients over 20 test cases, 66% success rate
- Server discovery mechanism
  - Similar to GEOPRIV
- Requirements recently sent to IESG
  - Intentionally late

Relationships With Other Works

- JOSE WG for integrity protection
  - For information redistribution
- GEOPRIV WG for server discovery
- JSON-patch proposal for incremental updates
- CDNI, DECADE, PPSP WGs use ALTO

Again…

… we'd immensely appreciate your feedback…

- HTTP
- REST
- JSON
- …

… now, rather than at IETF LC!