ALTO WG Status Report

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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!