ALTO BOF

Charter Discussion
Charter

• Iterated (twice) on the list
  - Several comments on the first version
    • Terminology, caching
  - No complains on current version (2 weeks old)

• Charter structure
  - Problem description
  - Working Group description
  - Work items
  - Scope
  - Goals
The Problem

• Significant part of the traffic is peer-to-peer
  − P2P applications access distributed resources available in multiple instances
  − Resources may be files, media relays, mirrors...

• The problem consists in optimizing peer selection
The Working Group

• Will produce protocol(s) to enable communications between P2P systems and “informed” external services
  - Tracker-based, tracker-less, structured, unstructured...

• Mechanisms will be general, to address today's and tomorrow's applications
Work Items (Support)

• Survey and taxonomies
  - Existing solutions (coordinate systems, ISP-P2P collaboration...)
  - Discovery mechanisms
  - Applications which would benefit

• Requirements document
Work Items (Protocols)

• Discovery mechanism for locating the oracle
  − “Oracle” (not referred to any particular solution) is the proper server

• Query/Response protocol for communicating with the oracle
Work Items (Node Location)

• Discovery mechanism for locating “special” nodes
  - Caches, media relays...
  - Possibly reusing existing mechanisms
  - In-line discovery
    • Applications provide additional information (application protocol, content-id...) and the oracle returns new nodes
  - Off-line discovery
    • Applications use separate discovery mechanism and put the results in the ALTO query
In and Out of Scope

• Focus on the interface
  − Algorithms for actually implementing the service (provisioning, coordinate systems, routing protocol extensions) are out of scope

• Information will be about network topology and characteristics of involved peers
  − E.g. AS numbers, coordinates, priority are in scope
  − Congestion is out of scope

• Issues related to the content are out of scope
  − I.e. legal issues are out of scope
Goals

Submit a problem statement document
Submit a survey document describing existing solutions/approaches
Submit a document defining requirements for a standard solution
Submit a document specifying a discovery mechanism for locating an oracle
Submit a document specifying a protocol for querying the oracle
Submit a document specifying a discovery mechanism for locating caches
Is this a problem the IETF should work on?
Should the IETF form a WG with the charter discussed today?
Who would be willing to contribute (edit, review, discuss) in such a WG?