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 chaches

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?