ALTO Server Discovery
draft-ietf-alto-server-discovery-03

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Updates in -03

- Normative Language aligned
- Addresses items identified by expert review (Thanks to *Olafur Gudmundsson*)
  - New section: Operational Considerations
  - New section: General Security Considerations

Items addressing Expert Review

- Clarifications in Introduction
  - Goal is to find *closest* ALTO server
  - Rational for U-NAPTR is to find *URL not only server name*
  - ALTO servers *cannot redirect* clients to better server
- New Pre-Conditions - Not in scope:
  - Best ALTO server for multi-interfaced client
  - NAT discovery
- Clarified use of methods to retrieve domain name
  - „A client SHOULD use the first DNS suffix determined and MAY try other methods in case the U-NAPTR lookup failed."
  - Shortening of domain suffixes reduced to one step

Items addressing Expert Review

New section: Operational Considerations
- Reverse DNS lookup Limitations
  - No unique way of maintaining the DNS tree
  - Clients must be able to deal with failures of the reverse DNS lookup
  - Tree climbing is problematic, in particular for IPv6 [RFC4472]
  - Populating a DNS name space like a reverse tree is a significant administrative DNS overhead
  - Tree walking raises several issues: Only one step for shortening
  → Implementers SHOULD consider skipping this step

Items addressing Expert Review

New section: General Security Considerations

- Two failures caused by malicious attacks or by configuration problems
  - Discovery fails even if suitable ALTO server exists
    → Application performance corresponds to scenario without ALTO guidance
    → No significant additional security risk

  - Discovery yields sub-optimal or wrong ALTO server
    - ALTO service useless as no suitable information available
    - Sub-optimal or forged information
      → Performance problems or potentially unwanted traffic
      → Disabling of ALTO service as counter measure

Next Steps

- All items addressed?

Thank you
and
Time for your questions!

Acks