RFC6761bis Problem Space:
Input to the Design Team
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What is new since Prague?

• Core group of people got together:
  – Peter, Joe, Alain

• Draft problem statement published:
  – draft-adpkja-dnsop-special-names-problem-00
    starting point for discussion

• Design team lead:
  – Ralph Droms

• Other team members
  – ???
• Published just before the cut-off date
• Personal submission from 3 authors
• Based on slides presented in Prague
• Attempt to frame problem by providing a taxonomy to analyze the problem space:
  – Architectural
  – Technical
  – Organizational
Architectural

• Name space is not just DNS
• 3 ways to “signal” alternate name space and name resolution mechanism
  – Left selector: http-onion: //<foo
  – Right selector: http://foo.onion
  – Middle selector: http://onion/foo
• There are precedents to use the right selector
  – localhost, local, onion
Technical

• Are application suppose to check a “registry” of name space selector?
  – Should that check be dynamic or done at compile time?
  – What to do if selector is unknown?
  – Is this an application issue or a library issue?

• Same questions for name resolvers
Inter-Organizational

• “Running the code” has revealed a lack of clarity in the relationship between RFC6761 and RFC2860 (ICANN/IETF MoU)

• Note:
  – Current round of gTLD application at ICANN is closed. It did not include a possibility to “reserve” names.
  – ICANN looking at the possibility of another round with rules tbd.
IETF Process
(Intra-Organizational)

• “Running the code” has shown there is a lack of clarity on the IETF process to evaluate proposals:
  – Answer to 7 questions of RFC6761
  – Technical evaluation of the alternate name resolution protocol
  – Evaluation of the proposed “string”
    • Is there a need to reserve any string, as long as it is unique, or is there any technical reason to reserve a particular string?
    • Are non-technical reasons to reserve a "specific" string acceptable?
    • Is demonstrated prior-usage of a specific string a valid rationale?

• ICANN has a process to review gTLD application to check if a name is potentially offensive, has political ramifications, etc... IETF does not have a similar process.
Way forward  
(current thinking of the authors)

• 5 possible directions:
  a) Close the 6761 registry
  b) Constraint reserve names to mitigate cross-organizational & IETF process issues  
     e.g.: .ALT or xx--...
  c) Create new full fledged IETF and/or ICANN process to reserve name
  d) Develop a URI-based name space selector  
     • http://[selector]/....
  e) Something else entirely...