ARCING BoF

Alternative Resolution Contexts for Internet Naming

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Scribes?

Agenda

- Intro: motivation for the BoF
  - And some things we're not doing
- Ed Lewis: draft-lewis-domain-names (20 min)
- Ted Hardie: draft-hardie-resolution-contexts (20 min)
- Brian Trammell: draft-trammell-inip-pins (20 min)
- Discussion
  - Is there an interesting set of problems here?
  - Is it possible to provide good guidance on solving them?

Intro: Internet names

"RFC 819 described Internet names as a set of directed graphs in an absolute naming context. While that work eventually lead into the creation of the domain name system, it is important to note that it does not imply that there will be a **single** resolution system for Internet names. While the most **common** Internet names by far are those which are part of the domain name system, that set of names is **not the whole**."

How is this a problem?

- Lots of name resolution systems
  - DNS names in various scopes: local or global?
  - Onion routing
  - Multicast DNS
  - Handle system
  - URNs
  - Etc.
- Ambiguities in resolution for individual names
  - operational difficulties: queries in the wrong context
  - limitations for domain names

Naming as an architectural issue

- Protocol development needs ways to construct, manipulate, and resolve names
- Name resolution systems need to co-exist
- Should the IETF describe and document best practices for identifying name resolution contexts?

Boundaries

- The DNSOP WG is working on issues arising from the use of the special use names registry (a specific issue, with an identified home)
- We’re not here to fix DNS at any layer
- New potential solutions are interesting

Possible discussion questions

- Is there interest in further work on these drafts?
- Are there more drafts that need to be written?
- This is an IETF BOF; is there useful work to do that could require a WG?