DNS Activity at IETF65

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With Acknowledgements to Peter Koch
Outline

- DNSOP
- DNSEXT
- Other
DNSOP
DNS Operations

• The working group is busy cleaning up and trying to gain momentum.

• Rechartering to (also) include
  – Methods for measuring
  – DNSSEC operations
  – IPv4/IPv6 coexistence and transition
  – Review of the application of DNS elsewhere such as Dynamic Delegation Discovery System (DDDS --- NAPTR-magic)
DNSOP
Done Deals

- Operational Considerations and Issues with IPv6 DNS (RFC 4472)
- DNSSEC Operational Practices (in RFC editor queue)
  - draft-ietf-dnsop-dnssec-operational-practices-08.txt
- Observed DNS Resolution Misbehavior (on its way)
  - draft-ietf-dnsop-bad-dns-res-06.txt
DNSOP
Final Stages

• draft-huston-6to4-reverse-dns-04.txt
  – Mechanism to reverse map hosts behind a “6-to-4” route by delegating ‘/48’ domains from 2.0.0.2.i06.arpa.
  – http://6to4.nro.net
  – Finished last call

• Encouraging the use of DNS IN-ADDR mapping
  – draft-ietf-dnsop-inaddr-required
  – Many people misguided by the filename
  – Expired but will be revived
DNSOP
More in Final Stages

• DNS Response Size Issues
  – Important in the context of IPv6
  – “Expired by Accident”

• DNSSEC and split-view Configurations
  – draft-krishnaswamy-dnsop-dnssec-split-view-02.txt
  – Needs review by folk who have split view setups
DNSOP

• draft-andrews-full-service-resolver
  – AS112 in a box:
    • Catching unneeded traffic before it exits the local networks.
    • RFC 1918 zones, ‘local’ addresses, etc

http://www.nlnetlabs.nl/
DNSEXT
Done Deals

• The Role of Wildcards in the Domain Name System
  – draft-ietf-dnsext-wcard-clarify-11.txt
• A DNS RR for Encoding DHCP Information (DHCID RR)
• Link Local Multicast Name Resolution
  – Had to little review in its final stages
  – Request to publish as informational
DNSEXT

More Done Deals

• Nameserver ID
  – Troubleshooting tool
    • Anycast environments
    • Load sharing setups
  – Payload in EDNS
  – Hop-by-hop
  – Binary blob of <whatever-ya-put-in>
DNSEXT DNSSEC work

“Crypto Maintenance”

• DS-RR with SHA256
  – SHA1 has some problems
  – First draft during IETF64 now in the RFC queue
  – RRSIG with RSA/SHA256 also on the roadmap
  – DNSSEC designed with flexibility w.r.t. crypto algorithms

• More algorithm work
  – About storing ECC, DSA and DH keying info
DNSEXT DNSSEC work

Enumeration

• Preventing enumeration with online private keys
  – draft-ietf-dnsext-dnssec-online-signing
  – draft-ietf-dnsext-dns-name-p-s
  – In AUTH48

• NSEC3
  – This work has momentum
  – Final issues addressed
  – Test workshop early may
DNSEXT DNSSEC work
Trust Anchors

• A number of proposals exist
• WG went back and looked at the requirements
  – Some contentious issues passed by
  – Probably last called soon
• Then back to the proposals
DNSEXT
Loose Ends

• DNSSEC Experiments and DNSSEC Opt-in
  – Last call closed
• Clarification and Implementation notes for DNSSEC
• AXFR-Clarify
• There was a presentation from the TAHI test team
  – http://www.tahi.org
Other

- Peter Koch and Olafur Gudmundsson continued to provide their “DNS for application protocol designers” workshop.
  - Available from edu.ietf.org (under technical topics) or [http://stora.ogud.com/DNSTutorial.ppt](http://stora.ogud.com/DNSTutorial.ppt)
More other (IAB)

- IAB called for feedback on “Review and Recommendations for Internationalized Domain Names (IDN)”
  - draft-iab-idn-nextsteps-05
  - an inventory of deployment issues and potential avenues for exploring and/or resolving them
  - Deadline for feedback May 17
  - Marcos Sanz is scheduled to speak about IDN tomorrow
And other working groups

- **ENUM**
  - Work announced on RFC 3761 bis
    - Create tickets with issues to be addressed
    - See minutes for details
    - There may be specific DNS items to address (e.g. number of NAPTR RRs in one set)

- **DKIM**
  - Mail origin authentication keys
  - Remember SPF and SenderID
IETF Participation

• Join the mailinglists
  – tools.ietf.org/wg/<wg acronym>

• Attend the meeting physically
  – IETF66 in Montreal (9-14 Juli)
  – IETF67 in Europe (5-10 November)

• or remotely
  – Webcast
  – Jabber: <wg acronym>@rooms.jabber.ietf.org.

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