DNS Activity at IETF65

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With Acknowledgements to Peter Koch

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Outline

- DNSOP
- DNSEXT
- Other

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DNSOP
DNS Operations

- The working group is busy cleaning up and trying to gain momentnum.

- Rechartering to (also) include
  - Methods for measuring
  - DNSSEC operations
  - IPv4/IPv6 coexistention 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

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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

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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

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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 Muticast Name Resolution
  - Had to little review in its final stages
  - Request to publish as informational

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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 IET64 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

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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

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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

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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

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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 remotly
  - Webcast
  - Jabber: <wg acronym>@rooms.jabber.ietf.org.

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