



DNS Activity @ IETF 70/71

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Where to go

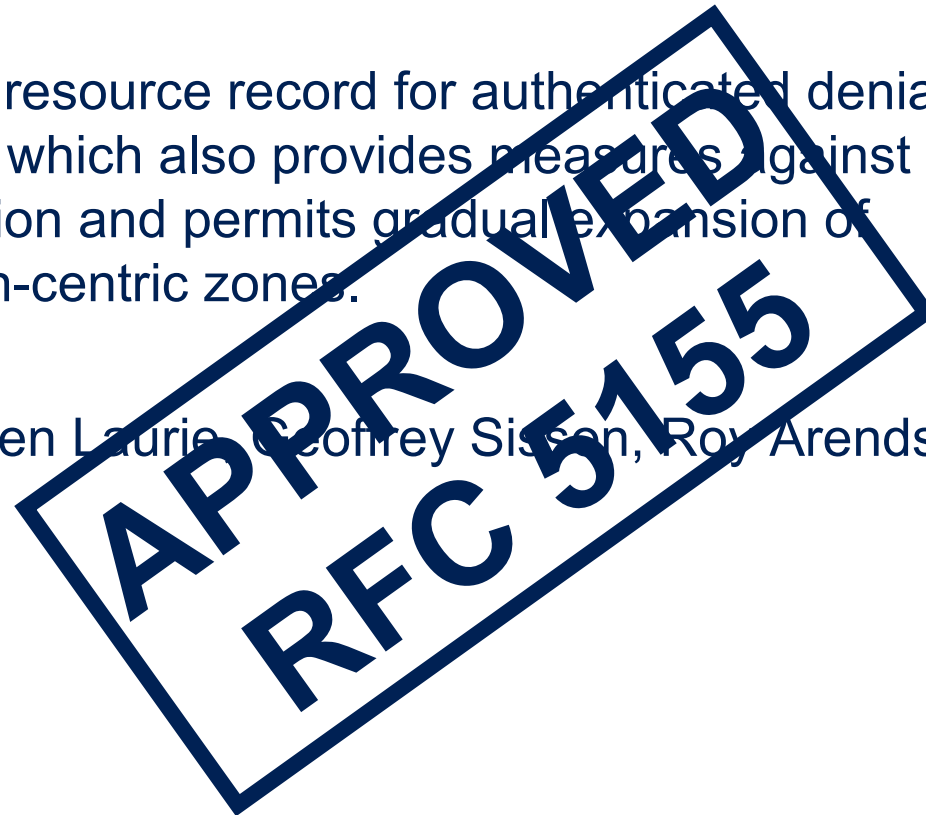
<http://tools.ietf.org/wg/yourfavoriteworkinggroup/>

- **DNS extensions:**
<http://tools.ietf.org/wg/dnsexst/>
- **DNS operations:**
<http://tools.ietf.org/wg/dnsop/>
- **ENUM:**
<http://tools.ietf.org/wg/enum/>
- **DomainKeys Identified Mail:**
<http://tools.ietf.org/wg/dkim/>

DNSEXT Work done

- draft-ietf-dnsext-nsec3

- DNSSEC resource record for authenticated denial of existence which also provides measures against zone enumeration and permits gradual expansion of delegation-centric zones.
- Editors: Ben Laurie, Geoffrey Sisson, Roy Arends, David Blacka



DNSEXT work left

IESG processing:

- **draft-ietf-dnsext-2929bis**
 - IANA parameter assignment considerations

Active:

- **draft-ietf-dnsext-rfc2672bis-dname**
 - update to the original DNAME specification in RFC 2672
- **draft-ietf-dnsext-forgery-resilience**
 - lightweight measures to make 'spoofing' harder

DNSEXT New Items!

New WG documents:

- **draft-ietf-dnsext-rfc2671bis-edns0**
 - Review of EDNS0
- **draft-ietf-dnsext-axfr-clarify**
 - New definition of AXFR
- **draft-ietf-dnsext-dns-protocol-profile**
 - Overview of relevant DNS RFC's

Current State of most DNS documents

- Full Standard (3)
 - 1034 1035 1123
- Draft Standard (2.5)
 - 3596 3597 4398
- Proposed Standard (62.5)
 - 1886 1982 1995 1996 2065 2136 2137 2138 2139 2163 2181 2308 2535 2536 2537 2538
2539 2671 2672 2782 2845 2915 2916 2930 2931 3007 3008 3090 3110 3123 3225 3226
340[1-6] 3425 3445 3645 3655 3658 3755 3757 3845 4025 4033 4034 4035 4255 4343
4470 4509 4592 4635 4701 4795 4955 5001 5011 5155
- Experimental (13)
 - 1183 1348 1637 1664 1712 1876 2052 2168 2540 2874 3822 4471 4956
- Informational (37)
 - 1535 1536 1537 1706 1794 1912 2010 2230 2517 2541 2673 2694 2826 2870 2929 3071
3123 3130 3197 3258 3363 3364 3467 3833 3901 4027 4074 4183 4185 4339 4367 4431
4472 4641 4892 4986 5074
- BCP (7)
 - 2182 2219 2317 2606 2929 3901 4697
- Historic/unknown (6)
 - 882 883 973 1611 1612 4870
- Total = 131 (and I'm sure I missed some)
 - Orange is updated, Red is obsolete, green is in advancement

So DNSEXT has woken up



DNSEXT even more New Proposals!

- **draft-ietf-dnsext-dnssec-rsasha256**
 - Now a WG item
- **draft-lewis-axfr-over-udp**
 - Proposal to do AXFR over UDP
- **draft-vixie-dnsext-dns0x20**
 - Use DNS case insensitivity as extra bits to secure queries
- Even more proposals to prevent spoofing

DNSEXT is more alive than ever

- Time for a completely new DNS revision ?

DNSOP drafts at IESG

- draft-ietf-dnsop-reflectors-are-evil

- This document describes ways to prevent the use of default configured recursive nameservers as reflectors on DOS attacks
- Editors: Joao Damas, Frederico Neves
- IESG evaluation

**Network operators
reading material**

DNSOP AS112 related drafts

The AS112 project aims to provide a distributed sink for RFC 1918 and other bogus queries that pollute the DNS. Some drafts related to this issue:

- **draft-ietf-dnsop-default-local-zones**
 - DNS zones all iterative resolvers and recursive name servers should automatically serve. Past WGLO
- **draft-ietf-dnsop-as112-ops**
 - How to run an AS112 node.
- **draft-ietf-dnsop-as112-under-attack-help-help**
 - background information and technical advice.

**Vendors
reading material**

**Network operators
reading material**

DNSOP other active drafts

- **draft-ietf-dnsop-respsize**
 - Issues related to UDP message size of 512 octets.
- **draft-ietf-dnsop-reverse-mapping-considerations**
 - Reverse mappings of addresses to names.

New since RIPE 55:

- **draft-ietf-dnsop-resolver-priming**
 - Initial queries a DNS resolver is supposed to emit
- **draft-ietf-dnsop-dnssec-trust-anchor**
 - How to configure and maintain DNSSEC trust anchors

DNSOP current work

- Name Server Configuration and Management (Protocol) Requirements
- New WG charter.

ENUM activity

- No real new DNS related stuff
- draft-ietf-speermint-requirements
 - Brought some fundamental discussions on what data should be in the DNS or what concepts the DNS uses by principal design, when trying to discover peering parameters, even when using it on private networks.
- More in the ENUM WG on Thursday

DomainKeys Identified Mail (DKIM)

DomainKeys Identified Mail (DKIM) defines an authentication framework for email using the DNS to prevent spam, phishing, etc.

- Concept: RFC 4871
 - Put a public key in the DNS
 - Sign a message with a private key
 - The recipient can check if the mail was trusted by the domain.
- Looks like they will put the keys in TXT records

IDN - Internationalized Domain Names

- BOF was held on IETF 71
- Discussion to adjust the IDN specifications to the latest unicode standards, and take out some errors.
- New IDN WG is chartered to work on this IDN revision.

How to participate in IETF

- Join/read mailinglists
 - <http://tools.ietf.org/wg/yourfavoriteworkinggroup/>
- Webcast/Jabber
 - Audiocast and jabberrooms during meetings
 - <xmpp:yourfavouriteworkinggroup@jabber.ietf.org>
- Next Physical meetings:
 - IETF 72 27 July - 1 August 2008 (Dublin)