

# DNSOP

## DNS Operations

IETF 114  
Philadelphia for Reals!  
28 July 2022

# Welcome to DNSOP

## Chairs

- Benno Overeinder <benno@NLnetLabs.nl>
- Tim Wicinski <tjw.ietf@gmail.com>
- Suzanne Woolf <suzworldwide@gmail.com>

## IESG Overlord

Warren Kumari <warren@kumari.net>

## Jabber Room

- [dnsop@jabber.ietf.org](mailto:dnsop@jabber.ietf.org)
- This is going away.....

## Minutes

<https://notes.ietf.org/notes-ietf-114-dnsop>

Minutes: Paul Hoffman!

# Note Well

This is a reminder of IETF policies in effect on various topics such as patents or code of conduct. It is only meant to point you in the right direction. Exceptions may apply. The IETF's patent policy and the definition of an IETF "contribution" and "participation" are set forth in [BCP 79](#); please read it carefully.

As a reminder:

By participating in the IETF, you agree to follow IETF processes and policies.

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As a participant or attendee, you agree to work respectfully with other participants; please contact the [ombudsteam](#) if you have questions or concerns about this.

Definitive information is in the documents listed below and other IETF BCPs. For advice, please talk to WG chairs or ADs:

[BCP 9](#) (Internet Standards Process)

[BCP 25](#) (Anti-Harassment Procedures)

[BCP 78](#) (Copyright)

[\(Privacy Policy\)](#)

[BCP 25](#) (Working Group processes)

[BCP 54](#) (Code of Conduct)

[BCP 79](#) (Patents, Participation)

# IETF Code Of Conduct Guidelines RFC7154

1. Treat colleagues with respect
2. Speak slowly and limit the use of slang
3. Dispute ideas by using reasoned argument
4. Use best engineering judgment
5. Find the best solution for the whole Internet
6. Contribute to the ongoing work of the group and the IETF

# IETF Meeting Tips

- In-person participants
  - Make sure to sign into the session using the Meetecho (usually the “Meetecho Lite” client) from the Datatracker agenda
  - Use Meetecho to join the mic queue
  - Keep audio and video off if not using the onsite version
  - **Wear masks unless actively speaking at the microphone**
- Remote participants
  - Make sure your audio and video are off unless you are chairing or presenting during a session
  - Use of a headset is strongly recommended

# Agenda

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- Agenda, Blue Sheets, etc
- Warren Speaks!  
Warren Kumari, 10 min
- Updates of Old Work, Chairs
- Hackathon Results
- Working Group Business, et al

# Agenda: Current Business

DNS Security Extensions (DNSSEC) BCP

Paul Hoffman, 15min

Recommendations for DNSSEC Resolvers Operators

Daniel Migault, 15min

Survey of Domain Verification Techniques using DNS

Shivan Kaul Sahib, 15min



# Agenda: For Consideration

dry-run DNSSEC

Yorgos Thessalonikefs, 15min

Initializing a DNS Resolver with Priming Queries

Paul Hoffman, 15min

# Agenda: Time Permitting

Structured Data for Filtered DNS

Dan Wing, 10min

Recent results on measuring the end-to-end success rate of DNSSEC and new record types

Eric Rescorla, 10min

CDS/CDNSKEY Consistency

Peter Thomassen

# DNS-directorate

Éric Vyncke, INT AD

Warren Kumari, OPS AD

# DNS topics appear in many WG

Tim Wicinski collected some data since April 10, 2022 (arbitrary) for I-Ds having “dns” in name or abstract [\*]:

59 existing I-Ds including 25 existing WG I-Ds: 13 dnsop, 3 dnssd, 3 add, 2 **drip**, 2 dprive, 1 **ipsecme**, 1 **homenet**

**So, not only ‘DNS-related’ WGs are relying on DNS, others are perhaps badly understanding the protocol or its operations.**

[\*] Probably many more are using DNS

# Non WG Documents

draft-boucadair-opsawg-add-encrypted-dns  
draft-brand-indicators-for-message-identification  
draft-cuiling-dnsop-sm2-alg  
draft-dashevskiy-dnsrr-antipatterns  
draft-dkg-intarea-dangerous-labels  
draft-duke-httpbis-quic-version-alt-svc  
draft-duke-quic-protected-initial  
draft-eastlake-dnsop-rrtype-srv6  
draft-eastlake-dnsop-svcb-rr-tunnel  
draft-farrell-tls-wkesni  
draft-hallambaker-mesh-udf  
draft-hallambaker-web-service-discovery  
draft-homburg-add-codcp  
draft-hsyu-dnsop-message-fragments  
draft-hsyu-message-fragments  
draft-hsyu-dnsop-message-fragments  
draft-hsyu-message-fragments  
draft-hunek-v6ops-nat64-srv  
draft-klh-dnsop-rfc8109bis

draft-lemon-srp-replication  
draft-lenders-dns-over-coap  
draft-muks-dnsop-message-fragments  
draft-pauly-ohai-svcb-config  
draft-rebs-dnsop-svcb-dane  
draft-reddy-add-enterprise-split-dns  
draft-reddy-add-resolver-info  
draft-schanzen-gns  
draft-schwartz-add-ddr-forwarders  
draft-shuangli-dnsop-update-of-dns-cache  
draft-thomassen-dnsop-cds-consistency  
draft-tllq-tsr  
draft-wilson-dance-architecture  
draft-wing-dnsop-structured-dns-error-page  
draft-yan-ipwave-nd  
draft-yorgos-dnsop-dry-run-dnssec  
draft-yu-dnsops-disdm

# DNS-directorate for reviews by DNS expert

The IESG + add/dnsop/dnssd/dprive chairs have agreed to create a DNS directorate after IETF-114.

Main item on the charter: (early) reviews of IDs from a DNS point of view

Next steps (before 1st September 2022)

- Small group of reviewers, we are looking for volunteers.
- Looking for 2 directorate secretaries in charge of a weekly check of pending reviews, assigning reviews, ...

# DNS Directorate

Example, riffing on the OPS-DIR disclaimer:

I have reviewed this document as part of the DNS Directorate's ongoing effort to review all IETF documents being processed by the IESG. These comments were written primarily for the benefit of the area directors. Document editors and WG chairs should treat these comments just like any other last call comments.

# Document Updates



# Since Our Last Meeting

- ~~draft-ietf-dnsop-nsec3-guidance~~ RFC9276

## RFC Editor Queue

- draft-ietf-dnsop-svcb-https
  - There's been some more updates in the repo

# Document Status

## Post Working Group Last Call

draft-ietf-dnsop-rfc5933-bis

Updated this morning, need to review

## In Working Group Last Call

draft-ietf-dnsop-avoid-fragmentation

3 Weeks, please send comments

# Document Status

## Upcoming Working Group Last Calls

- draft-ietf-dnsop-dnssec-bcp
  - This Week
- draft-ietf-dnsop-glue-is-not-optional
  - Now? September?

# Document Status

## Upcoming Working Group Last Calls

- draft-ietf-dnsop-dns-catalog-zones
  - September
- draft-ietf-dnsop-dnssec-validator-requirements
  - September

# Document Status

- draft-ietf-dnsop-ns-revalidation
  - Only a few outstanding items
  - Shumon getting assistance finishing these "real soon"
  
- draft-ietf-dnsop-rfc8499bis
  - Interim to finalize the bailiwick definitions
  - Either Week of 12th September or 26th September

# Document Status

- draft-ietf-dnsop-dns-error-reporting
  - New Version with positive reporting
  - Some initial implementations happening
- draft-ietf-dnsop-zoneversion
- draft-ietf-dnsop-dnssec-automation
  - Adding another author from .SE
  - Also implemented entire protocol
- draft-ietf-dnsop-dnssec-bootstrapping

# Document Status

## Documents Just Adopted

- draft-ietf-dnsop-domain-verification-techniques
- draft-ietf-dnsop-caching-resolution-failures

## Not Yet....

- draft-rebs-dnsop-svcb-dane
  - Needs some more comments on this

# What Else Are We Working On?

DataTracker

GitHub



# Hackathon Updates

# IETF 114 Hackathon: DNSSEC Bootstrapping

- DNSSEC bootstrapping requires special records under the nameserver hostname, like  
    `_dsboot.example.co.uk._signal.ns1.desec.io. IN CDS ...`
- Hackathon plan: Automatically generate these records, either via
  - period cron job, or
  - dynamic synthesis (by nameserver when queried)
- Code results:
  - Python cron job (catalog zone → bootstrap zone) deployed at saltant.net ([Gitlab repo](#))
  - PowerDNS synthesis via LUA records deployed at deSEC ([PR desec-ns#46](#), [video](#))
  - Knot DNS module ... still in the works

Thanks to participants John O'Brien, Jerry Lundström, Nils Wisiol, Peter Thomassen

# IETF 114 Hackathon: DNS Error Reporting

- Started implementation in Unbound
- Happy path works (+ testing)
- Needs more work for
  - Positive feedback flag (-02)
  - Promiscuous query generation
  - Avoid reporting agent resolution errors
  - More?

Thanks to participants Yorgos Thessalonikefs and Tom Carpay for his preparatory work

Let's Get Started!!