

# The Great DNSSEC Quiz

(no DNS records where harmed during the making of this quiz)

# The rules

- Use the form to answer your questions
- Put your name on the form
- When done answering, hand the form to your neighbour
- Evaluate your neighbour's answers
- Count the points



# **Root Hints**

- Sometimes more answers are correct (like A records)
- A point is scored for each correct answer
- No points are scored for the entire question if it contains a single wrong answer (like lame delegations)



# Five Stone handicap criteria

You start with a handicap of **-1** point for each of these criteria you match:

- You are subscribed to the dnsop@ietf.org mailing list
- You have or had an icann.org email address
- You have root access to a TLD nameserver
- You are a listed author on a DNS RFC
- You have used the nslookup or host command in the last five years



## 1: The confidence builder

Which of the following are true?

- A) The KEY, SIG and DEL RRTYPE were replaced by DNSKEY, RRSIG and the DS RRTYPE
- B) Many countries have legal requirements that require DNSSEC to always use RFC-5155 opt-out
- C) dig, drill, unbind, bound, delve and knot are names of opensource DNS software
- D) Every key with the SEP bit set in a valid trust chain must have a corresponding DS record published.



# 2: Don't fail me now

Which of the following situations could lead to a DNSSEC validation failure?

- A) Expired RRSIG records
- B) A melted HSM card
- C) RRSIGs only valid starting in an hour
- D) Disk full on the DNSSEC signer machine
- E) A cable cut causing identical backup DNS servers to take over DNS resolution



# 3: Continental

Which were the first DNSSEC signed countries on each continent? as per wikipedia [citation needed]: Asia, Africa, North America, South America, Antarctica, Europe and Australia

- A) Sri Lanka, Niger, United States, none, The Netherlands and Australia
- B) Turkemistan, Namibia, Czech Republic, Brazil, none and New Zealand
- C) Thailand, Namibia, Puerto Rico, Brazil, none, Sweden and New Zealand
- D) Sweden, Mexico, Japan, Australia, United States, Antarctica and Australia



# 4: Rollin' rollin' rollin'... rawhide!

How many times has the Root KSK visibly changed (excluding TTL changes)

A) Never

B) Once

C) Twice

D) Thrice



## 5: The midway question

Which of these TLDs was signed before the root, but is no longer a signed TLD?

- A) .test
- B) .um
- C) .example
- D) .aq
- E) e164.arpa



#### 6: I have no glue

When deleting a delegation from a zone, what should be done with its glue records?

- A) Remove the glue, if not used by any other zones
- B) Remove the glue, regardless of other zones
- C) Keep the glue , do not sign it
- D) Keep the glue, sign it



## 7: Random Effect

Did the well-known openssl random "Debian bug" impact DNSSEC?

- A) No, because DNSSEC signed zones are served statically
- B) Yes, and various TLD's had to perform emergency rollovers
- C) No, because OpenDNSSEC and Bind do not use openssl to generate keys
- D) Yes, about 65 vulnerable keys were found but none in TLD's



## 8: Dutch DNS Dynamics

What was the .nl.nl zone?

A) The first DNSSEC TLD zone

B) A missing dot leading to a large DNS outage, often blamed on DNSSEC.

- C) An early experiment that took the .nl domain and republished it using DNSSEC.
- D) An active delegated zone owned by Olaf Kolkman used for IETF DNSSEC experiments



#### 9: DNSKEY support

Which **one** of these DNSKEY's will work best on resolvers throughout the world

- A) IN DNSKEY 257 3 13 AwEAAZyIkCwEYe [...]
- B) IN DNSKEY 385 3 8 AwEAAdZSHCrd7R [...]
- C) IN DNSKEY 257 3 8 AwEAAZyIkCwEYe [...]
- D) IN DNSKEY 257 3 8 BQEAAAABnjAVd4 [...]
- E) IN DNSKEY 257 3 12 AwEAAZyIkCwEYe [...]

# 10: For the high rollers

Which TLDs were signed before the root was signed?



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(yeah yeah - DURZ does not count as signed)



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# 4: Rollin' rollin' rollin'... rawhide!

How many times has the Root KSK visibly changed (excluding TTL changes)

- A) Never
- B) Once
- C) Twice
- D) Thrice
  - KSK first published as DURZ on Dec 1, 2009
  - June 10, 2010 brief DURZ leak
    - DURZ --1--> KSK --2--> DURZ
  - July 15, 2010 KSK goes live,
    - DURZ --3--> 19036



# 5: The midway question

Which of these TLDs was signed before the root, but is no longer a signed TLD?

A) .test

B) .um The United States Minor Outlying Islands (AKA "midway") no longer exists

C) .example

D) .aq

#### E) e164.arpa



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- E) IN DNSKEY 257 3 12 AwEAAZyIkCwEYe [...]



Which TLDs were signed before the root was signed? (remember: a wrong country means 0 points)

.SE	.BR	.CZ	.MUSEUM	.GOV	.TH
.ORG	.NA	.PTR	.CH	.LI	.TM
.US	.PT	.LK	.UK	.ARPA	.KG
.PM					

.EU .CAT .CL (same day, will give benefit of doubt)



# Scoring

- -5 to 0 DNSSEC Skeptic
- 1 to 4 Hedonist
- 5 to 8 DNSSEC Fan
- 9 to 10 DNSSEC User
- 11 to 14 DNSSEC Enthusiast
- 15 to 19 DNSSEC Expert
- 20 to 29 DNSSEC Historian

30 to 32 DNSSEC Ninja32 to 37 DNSSEC Procrastinator

