

DNSSEC in UA: Zero to Live in Six Months

Dmitry Kohmanyuk June 25, 2012 Prague, ICANN 44

Test zone UA.UA

- Key generated November 8th, 2011, during Fourth IPv6 Workshop in Kiev
- Zone UA.UA signed, keys published in DLV (dlv.isc.org)
- UA zone updated: DS record for ua.ua
- Test web site (use Firefox plugin and dnssec-trigger to verify)

Zone UA Key Generation Ceremony

- Held on December 2nd, 2011 (UA anniversary), UAdom conference
- Scripted, rehearsed, recorded
 - Key parameters:

RSASHA512 (algorithm 10)

KSK bits: 2048

ZSK bits: 1024

DNSSEC Testbed Environment

Copy of production environment:

- BIND 9.8 (then latest release)
- some shell and Makefile magic
- FreeBSD with jails
- rsync over ssh
- several sleepless nights

Public server with cloned UA (signed with test key)

• Anycast server: hol.ua.ua 195.47.253.17 2001:67c:258::17

• Test trust anchor (and KSK):
ua. IN DS 29019 10 2
68B5F97978F45398C9C0382161701EA3AB4A882011DCAA4F5188800D

 Not a production zone, use as your own risk (all delegated NS records are the same)

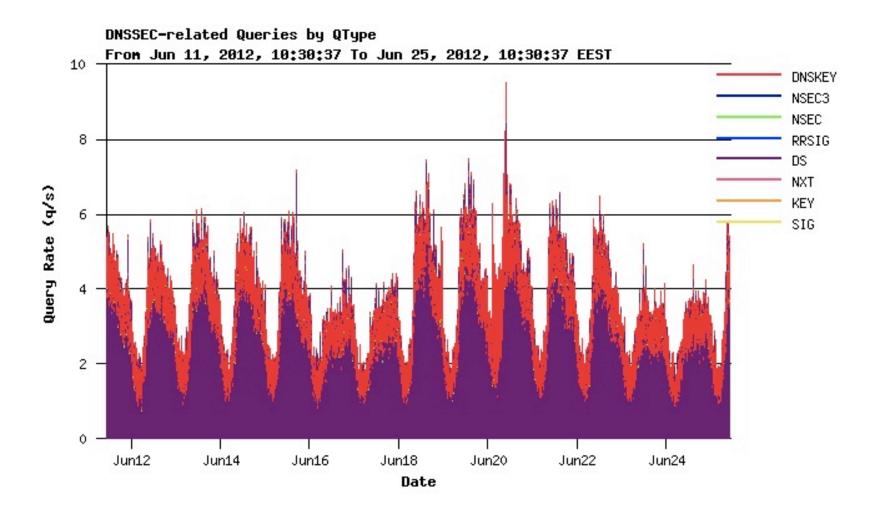
Public resolver – enabled DNSSEC validation

- Announced February 7th, 2012 at Fifth IPv6 Workshop in Kiev
- Code name "Lighthouse"
 - Ih.cctld.ua
 194.44.71.71
 2001:7f8:55:7::71
- Used test authoritative server (anycast)

Live Deployment

- Met Steve Crocker March 14th, 2012
- KSK in UA March 27th
- UA DS in DLV March 28th
- DS in Root Zone April 13th (Friday)
- DS delegations in UA 6 total:
 - ua.ua netassist.ua rovno.ua nic.ua;chernovtsy.ua cv.ua (May 2012)

DNSSEC traffic, ho1.ns.ua anycast (0.2%)





Questions?

www.hostmaster.ua/dnssec info@hostmaster.ua