DNSSEC in UA: Zero to Live in Six Months

Dmitry Kohmanyuk
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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: ho1.ua.ua
  195.47.253.17
  2001:67c:258::17

• Test trust anchor (and KSK):
  ua. IN DS 29019 10 2
  68B5F97978F45398C9C0382161701EA3AB4A882011DCAA4F5188800D
  D58FE2AD

• 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”
  – lh.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