

Status update on DNS, DNSSEC and DANE

.nz Registrar Conference
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DNS

- Efforts on preparing a DNS API for applications to benefit from DNSSEC
 - <http://getdnsapi.net/>
 - Sponsored by NLnetLabs and Verisign
- KnotDNS appearing like a strong alternative in the authoritative side of DNS servers
- DNSviz now has a command line version, code available



DNSSEC status

- Current discussion preparing for rollover the root KSK
 - Includes discussion about increasing the size of the ZSK
- RFC 7344 – Automating DNSSEC Delegation Trust Maintenance
 - CDS/CDNSKEY records
 - Parent fetches DS records from child zone, updates parent zone.
- RedHat involved in supporting OpenDNSSEC
 - LDAP multi-master backend
 - FreeIPA project http://www.freeipa.org/page/Main_Page



DANE

- TLSA survey by Verisign on com/net zone
 - 460k signed zones
 - 276 domains with TLSA records, 708 TLSA names
- DENIC
 - Held technical training on DNSSEC and DANE for registrars, some of them interested on offering DANE as added value



DANE

- PoC Thunderbird code to use SMIME certs
 - Used for encrypting email messages
 - <https://tools.ietf.org/html/draft-ietf-dane-smime-07>
- Opportunistic SMTP encryption using TLSA records.
 - Support in Postfix
 - Expected for Exim in 2015
- TLSA records for XMPP



DANE in .nz

- 16 domains with TLSA records
- 32 records
 - For ports 25, 443, 587



Other resources

- TLSA Walkthrough
 - <http://blog.huque.com/2012/10/dnssec-and-certificates.html>
- DANE/TLSA demonstration
 - <http://dane.verisignlabs.com/>



