

.nz DNSSEC Friendly Status

A presentation to APRICOT
March 2012

.nz DNSSEC Update

- On 18 November 2011 the .nz DNSKEY's were generated
- Coincidentally they were very New Zealand DNSKEY's
- On 16 December 2011 it was announced that the encoding of the .nz DNSKEY was not RFC compliant
- This resulted in the following steps to correct this last week:
 1. Remove DS records for .nz from the root zone
 2. Deploy patched software to the production servers
 3. Resign the .nz zone
 4. Confirm encoding is correct, including consultation with the supplier
 5. Submit new DS records for .nz for inclusion in the root zone.
- The deployment schedule for the .nz second level zones will be announced shortly

.nz DNSSEC Update

nz. 3600 IN DNSKEY 256 3 8
BAABAAGD+q3p2XDCb6SvAbACB/NPdljxhpBx2O9ZnvF2OYb6kViMJ5dg
xYDcFtvL5RW31Bc7UDvseoQPUK1wora3BtUTylo1xd5PN/IV600mrNGR
xfmw77Hen/MXH5GQrjajO+rFP1xce1/jdyvCciJzrYRcPL9p4c/eGoJK
3ZMubiu1OQ==

nz. 3600 IN DNSKEY 257 3 8
BAABAAGwfTiEoh71o6S55+Mdy1qqVRnpKY1VHznrv+wxrPfvRGB5VivF
FPFN+33fsaTxJQTceOtOna7IKxTffj6pbBG4a9vtk2FqF551lwXomKWJ
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EZCeVrie0fLI03Ufjuhi6IJ7gLzjEWw84faLIxWHEj8w0UVcXfaI2VL0oUC/R
+9RaO7BJKv93ZqoZhTOSg9nH51qfubbK6FMsvOWEyVcUNE6NESYEbu
CiUByKfxanvzzYUUCzmm+JwV77Ebj3XZSBnWnA2yLLXQ4+HD84rnq
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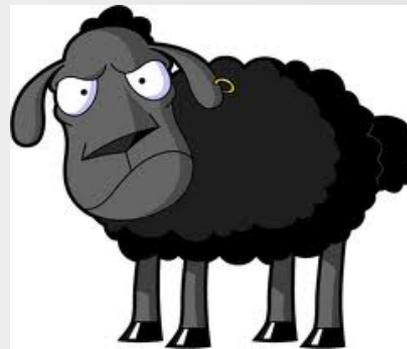
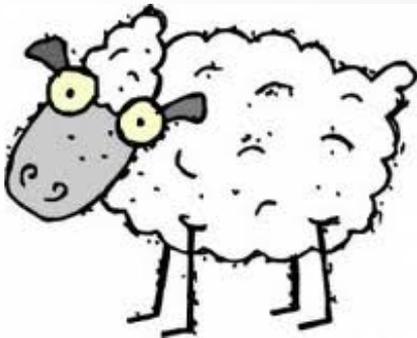
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nz. 3600 IN DNSKEY 256 3 8

BAABAAGD+q3p2XD**CB6SvAbACB/**
NPdljxhpBx2O9ZnvF2OYb6kViMJ5dg

nz. 3600 IN DNSKEY 257 3 8

BAABAAGwfTiEoh71o6S55+Mdy1qqVRnpKY1VHznrv
+wxrPfvRGB5VivF



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- Goals behind establishing this are to:
 - Ensure that Registrants who are early adopters of DNSSEC have the best experience possible
 - Encourage Registrars to offer DNSSEC
 - Promote a culture of security amongst registrars

Current Registrar Statuses

- Currently two .nz Registrar statuses:
 - IDN Friendly
 - This tag designates that a Registrar meets a certain level of service relative to offering IDN registration services in the .nz space.
 - Supports IPV6 Glue Records
 - This denotes that a Registrar has the capability to update the Registry with IPV6 glue.
 - These appear in the .nz Authorised Registrars table at www.dnc.org.nz/registrars

Handles DS Records

- Similar to *'Supports IPV6 Glue Records'*
- Registrars that can handle DS Records declare that they:
 - Accept all IANA-accepted code points for DS's or DNSKEY's, and if accepting DNSKEY's will produce valid DS records.
 - Have the ability to delete, modify and add DS records (either provided directly or derived from DNSKEY)

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- This status indicates that a registrar meets a certain level of service relative to offering DNSSEC services in the .nz space.
- This is in addition to:
 - Adhering to the DNSSEC related clauses in the .nz policies
 - Handling DS Records

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- Organisations confirm that:
 - Staff have been trained in DNSSEC fundamentals and their operation
 - Registrants will be notified when a new DS record is being introduced (as part of KSK rollover)

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- Organisations confirm that their website contains information on:
 - The basics and benefits of DNSSEC
 - Key Policy
 - Key length and algorithm used
 - Key rollover period
 - Whether a common key is used across multiple customers or a single key per customer

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- Organisations confirm that their website contains information on:
 - Key Protection
 - State whether online/offline signing of keys is performed
 - State how keys are backed up
 - State how key are handled (HSM, no HSM, or hardened host)

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- In summary the goals behind establishing this are to:
 - Ensure that Registrants who are early adopters of DNSSEC have the best experience possible
 - Encourage Registrars to offer DNSSEC
 - Promote a culture of security amongst registrars

Questions?



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