DNSSEC in the Reverse Tree @LACNIC

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Why DNSSEC ?

- Securing the DNS system is both necessary and, right now, doable
  - Root signed since 2010
  - **No excuses!**
- A signed DNS tree can also be an **enabler** for new applications
  - DANE WG
- DNSSEC does not solve **every** problem in the DNS system
  - But it certainly helps a lot

DNSSEC @LACNIC: Timeline

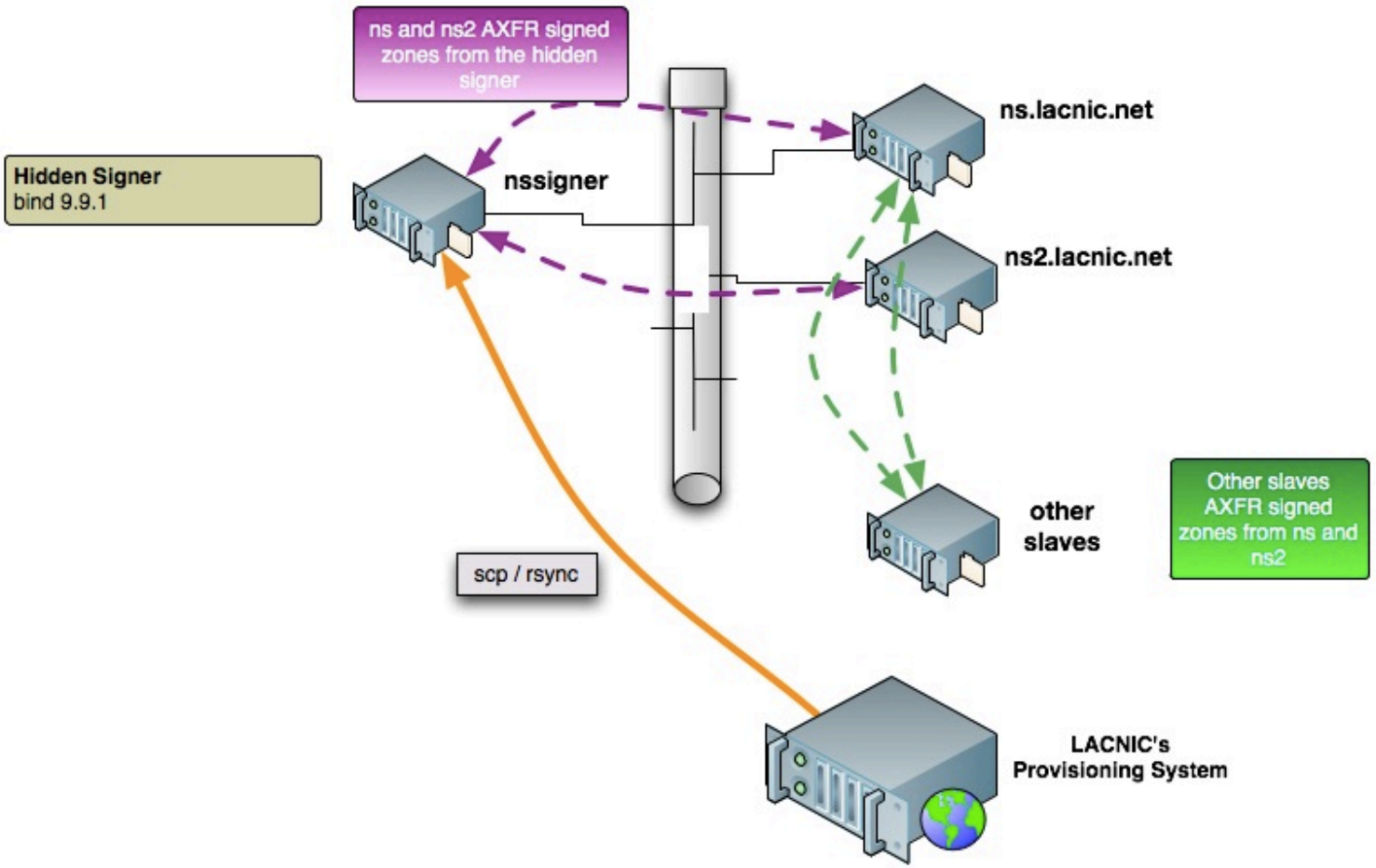
- 4Q 2010 – 2Q 2011
  - Training, study, tool testing
- 3Q 2011 – 1Q 2012
  - Experimental zone signing
    - <lacnic>.ip6.arpa
    - A few forward zones
  - Trial key rollovers and technical definitions
- 4Q 2012 – 1Q 2013
  - Reverse zones signed in production

DNSSEC @LACNIC: Status

- Status of DNSSEC in the reverse tree @LACNIC:
  - Reverse zones for IANA-allocated LACNIC space signed
    - ERX / Legacy depending on majority holder
  - DS records from members
    - Currently we can insert DS records manually, for testing purposes
    - Provisioning system support for DS records for 2Q 2013

Signer Architecture

- Hidden signer plus public masters

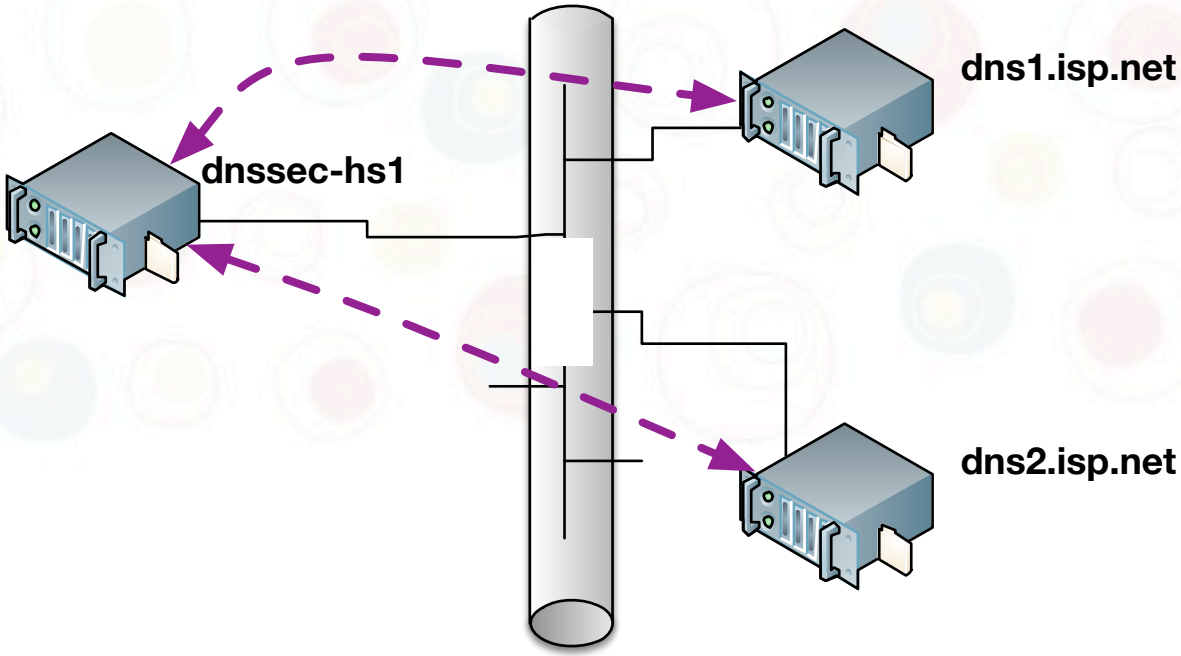


DNSSEC on the Cheap

- Unless your zones are extremely large, you don't need a huge investment to use DNSSEC
- Software
  - BIND 9.9
  - OpenDNSSEC
  - … others as well
- Hardware
  - Almost any Linux server will do

DNSSEC on the Cheap (II)

- A ‘hidden signer’ setup provides a reasonably secure setup without huge investments



Final Remarks

- The root is signed! Make good use of it!
  - No need for static, out-of-band trust anchors
  - Making the DNS more secure is our duty as technical community
- Useful signing performance is possible even with commodity hardware
  - Unless your zones are really huge
- NSEC vs NSEC3 in the reverse space?
  - NSEC3 doesn't seem to make a lot of sense here

THANK YOU!