DNSSEC in .at (and beyond)

Panel discussion „DNSSEC activities in Europe“
DNSSEC workshop

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DNSSEC Services

- ccTLD: .at
  - DNSSEC in production since Feb 2012
- Registry-in-a-Box: 7+ new gTLDs
  - DNSSEC mandatory
- RcodeZero Anycast DNS
  - Bump-in-the-wire signing
.at Timeline

Testbed
Feb 2011

DS in root
Feb 09 2012

DUatZ
Dez 14 2012

EPP
Feb 29 2012
PR „fallout“

- DS-record „handover“ to IANA staff
  - In person during CENTR meeting Salzburg
- Press release with first DNSSEC customer
  - austria.at (tourism company)
- DNSSECCO 😊
- 4 articles in newspapers and IT magazines
.at Specifics (technical)

- Software: OpenDNSSEC
  - HSMs: Thales
  - 2 independent signing/validation chains

- Additional Emergency Key for TLDs
  - DS in the root (but not currently used for signing)
  - Completely independent Infrastructure

- Multiple „validation“ mechanisms on the Zone
  - Prevent publication of broken/incomplete zone

- Pre-generated emergency zone
  - „now + one week“ serial with today‘s contents

- EPP: Domain Transfer optionally removes DS
  - Unless gaining registrar has indicated to be DNSSEC aware
Registrar Stats  Jun 17 2014

- 432 Registrars
  - 2012: 424

- 38 DNSSEC „on“
  - 2012: 14

- 22 DNSSEC „in use“
  - 2012: 9
Domain Stats  Jun 17 2014

1.229.612 .at

987 DNSSEC

2012: 1.146.176

2012: 57
New gTLDs: Registry-in-a-Box

- Signing setup identical to .at
  - Separate Signing Chains
  - EPP: Transfer does never remove DS

- Figures:
  - TLDs delegated: 7
  - 2nd-Level domains signed: 2 (across all 7 TLDs)
RcodeZero Anycast DNS

- Commercial Anycast service
  - Two services: TLD / Registrars
- Registrar-DNS - DNSSEC
  - „Bump in the Wire“ signing
  - Allows for full outsourcing of key management
  - Registry interaction remains with the Registrar
- Available since Q1/2014
Thanks for your time!

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