.CO DNSSEC
Status, Challenges & Benefits

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.CO INTERNET - .CO Registry

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About Us

- .CO INTERNET - Private Company
  - Launched 2.010 to Manage and Promote .CO
  - Concession contract with Government of Colombia
  - NeuStar - IT and Security Partner
    - UltraDNS® Constellation; Rapid Domain Compliance management
- .CO Statistics & Milestones
  - 1 Million registered domains in less than 12 months from global 2nd level launch
  - Renewal rates are 65% (much higher than any other TLD launch in 1st year)
  - On track to grow to 2 Million domains in 24-36 months
- Credibility and Awareness
  - T.CO used by Twitter (110M tweets a day)
  - G.CO used by Google as official URL shortener
  - A.CO, K.CO, Z.CO, CLOUD.CO (Amazon)
- More information: http://www.COInternet.CO

.CO DNSSEC - Overview

- **Tech Deployment**
  - NeuStar: 2 months (smooth) deployment (same as .BIZ and .US models)
  - PR: March 1, 2.011
  - Policies:
    - KSK's (2.048) rolled over annually and ZSK's (1.024) monthly
    - Signatures generated with RSA/SHA2-256 (algorithm/hash), refreshed monthly
    - NSEC / NSEC3
    - No restrictions on transfers
    - WHOIS.CO doesn't indicate if a domain is signed
    - **No certification required from Registrars (DS records submit via EPP update)**

- **Awareness Strategy** (Local and Global)
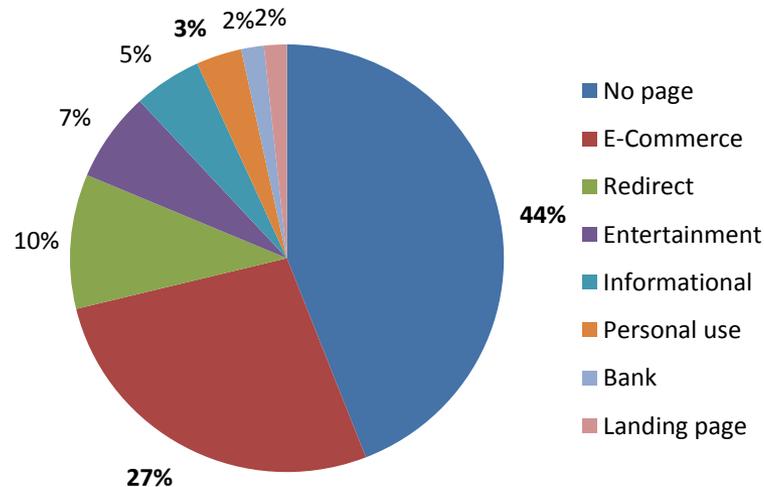 - ".CO DNS Tech and Sec Day" (annual event)
    - July 27, 2.011 (co-sponsor: CCIT)
      - 60 participants: Government, ISP's, Academy, Banking
      - NeuStar (Ed Lewis), NIC.CL, Kaspersky Lab, LACNIC, among others
      - **"CO-DNS"** virtual community (http://co-dns.cointernet.com.co)
    - September 2.012
      - LACNIC's sponsored; invitations to include COMCAST, CloudFlare, OpenDNS, Illumintel
  - .CO Blog: "DNSSEC in the .CO Zone" (1st signing anniversary)

.CO DNSSEC - Status

- February 2.012
  - 59 .CO domains signed (.BIZ [99], .US [117])
    - 4 Registrars
    - 18 (~30%) also include private registrations
    - LAC presence: 6 by Colombian Registrants, 1 by Peruvian Registrant
    - "Early Adopters":

Business Type Review

Legend:
- No page
- E-Commerce
- Redirect
- Entertainment
- Informational
- Personal use
- Bank
- Landing page

Values shown: 44%, 27%, 10%, 7%, 5%, 3%, 2%, 2%

.CO DNSSEC - Status (cont.)

- Survey of LAC DNSSEC Registrants:

  - "Registrar provides me the service (added-value)"

  - "A (DNS) security matter/issue"

  - "My website was hacked before …"

  - "When they refer others to DNSSEC: ¿What's this thing?"

  - **No registrant signed by themselves without Registrar promotion of the product**

.CO DNSSEC - Challenges

- **Strong community and knowledge transfer interaction between Registry, Academy, Government and ISP's, regarding DNS security issues, *is needed***
  - When ask local ISP tech personnel during conferences "¿What is DNSSEC?" - zero raised hands or awareness
  - Public sector IT projects RFP's should include DNSSEC
- Local knowledge regarding "domain names" (poor)
- Internet security awareness and proceedings (growing)
  - 2 Colombian CERT's in FIRST; public policy on Cyber-Defense/Security
- Combined with innovative solutions like OpenDNS "[DNSCrypt](#)" and BIND 9.9 ("Inline Signing", NXDOMAIN redirection)
  - DNSSEC **adoption** may grow so that people can have more confidence in the entire DNS infrastructure
- "As IPv6 is relevant / required for Internet infrastructure, DNSSEC is relevant / required for Internet security/stability".

Questions?

Thank you!

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