

DNSSEC Visualization and Historical Analysis

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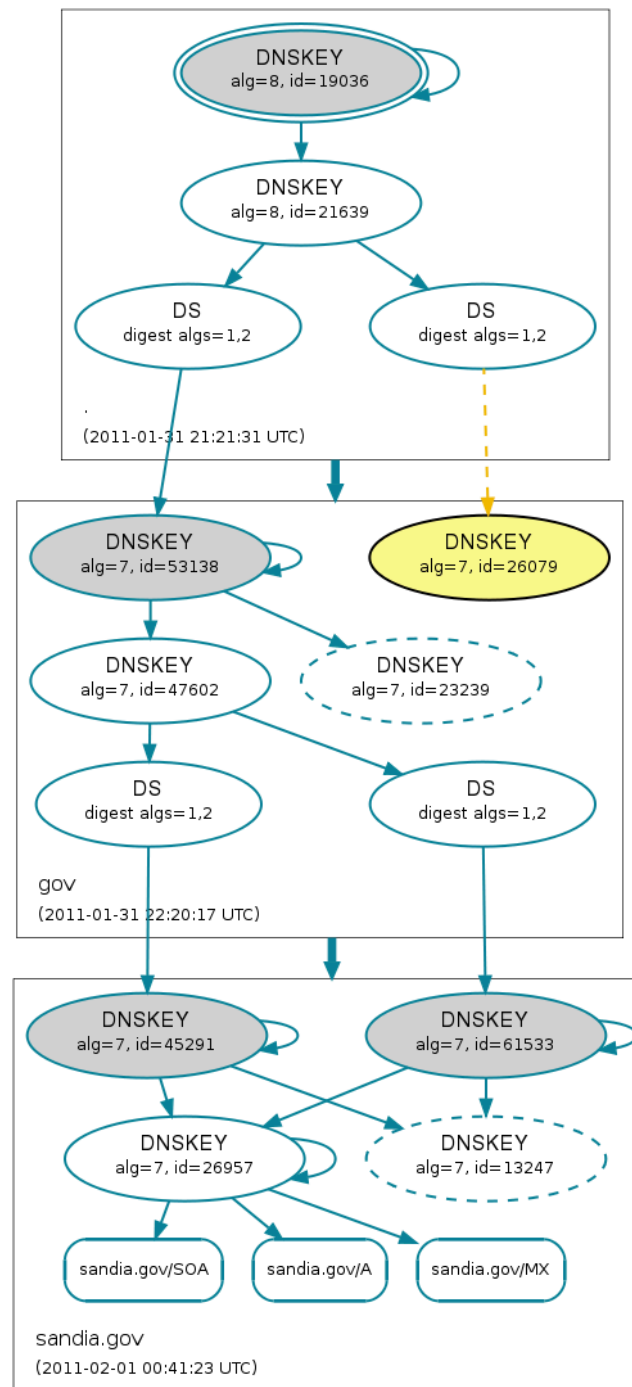


Sandia is a multiprogram laboratory operated by Sandia Corporation, a Lockheed Martin Company, for the United States Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000.

DN visua

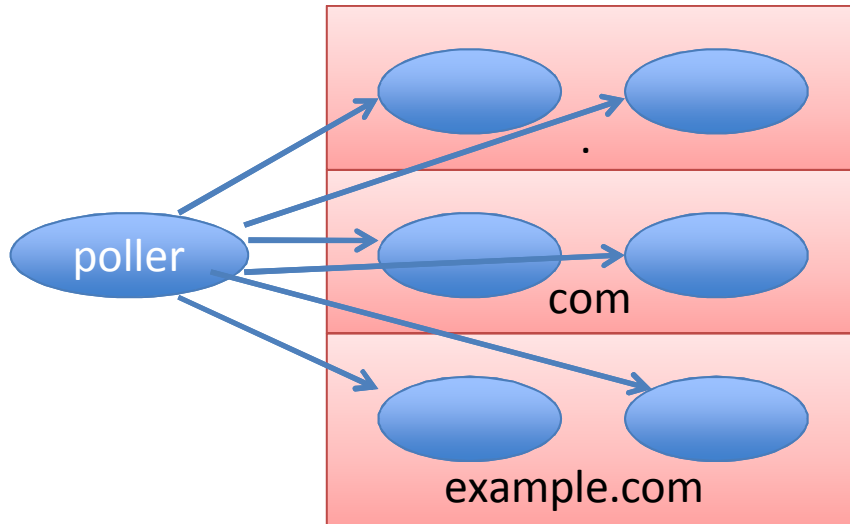
- Describes complex relationships graphically
- Facilitates...
 - understanding DNSSEC
 - identifying problems with DNSSEC
 - troubleshooting DNSSEC

(Image from <http://dnsviz.net/>)



DNS analysis

- From single vantage point, using delegation chain (active)

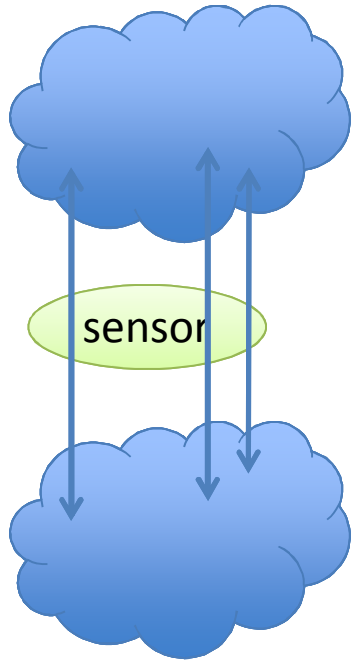


- From single vantage point, targeted (active)

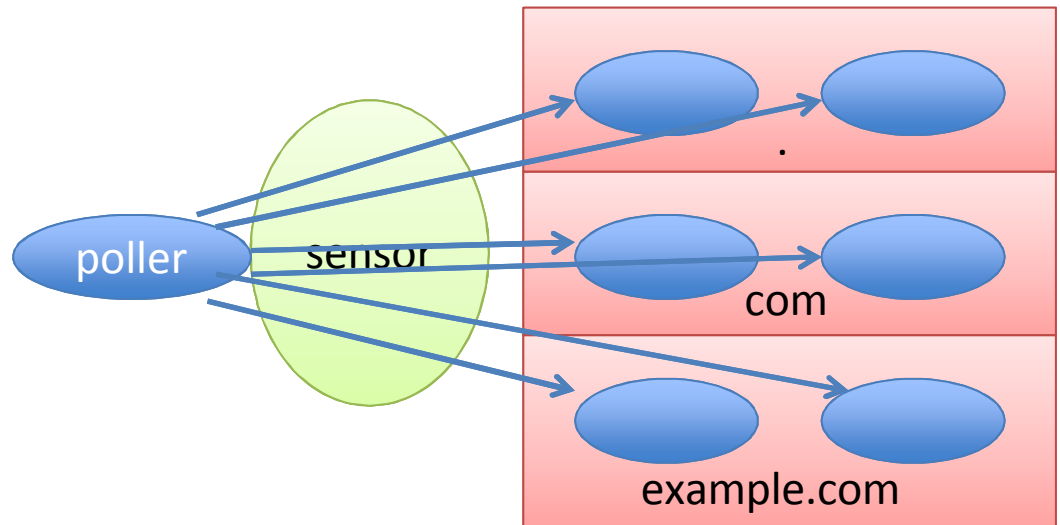


DNS analysis

- Using passive DNS



- Passive/active approach



Historical analysis

- DNSSEC is dynamic
 - DNSKEY rollovers
 - RRSIG lifetimes
- Historical analysis provides...
 - DNSSEC view at a given point in time
 - DNSSEC changes over time

