Zero DNS failure domain transfers with DNSSEC

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Background

- We wanted to be able to transfer a DNSSEC signed domain
  - with no breakage in verification Looked at:
    - current transfer processes
    - what steps are needed from DNS and DNSSEC perspective.
    - when problems may arise
    - who gets the blame
  - Change as little as possible

DNSSEC keys

- Private keys shared by new and old operator
  - Problem free transfer possible.
- Prior operator does not want to share the private keys with new one.
  - Need new keys that are trusted by DNS resolvers
    - How to establish trust?
      - Add DS entries to registry
    - How to transfer trust?

Complication: multiple parties

• Registration

Details

- See:
  - https://www.dns-oarc.net/files/workshop-200905/gudmundsson.pdf
  - ??
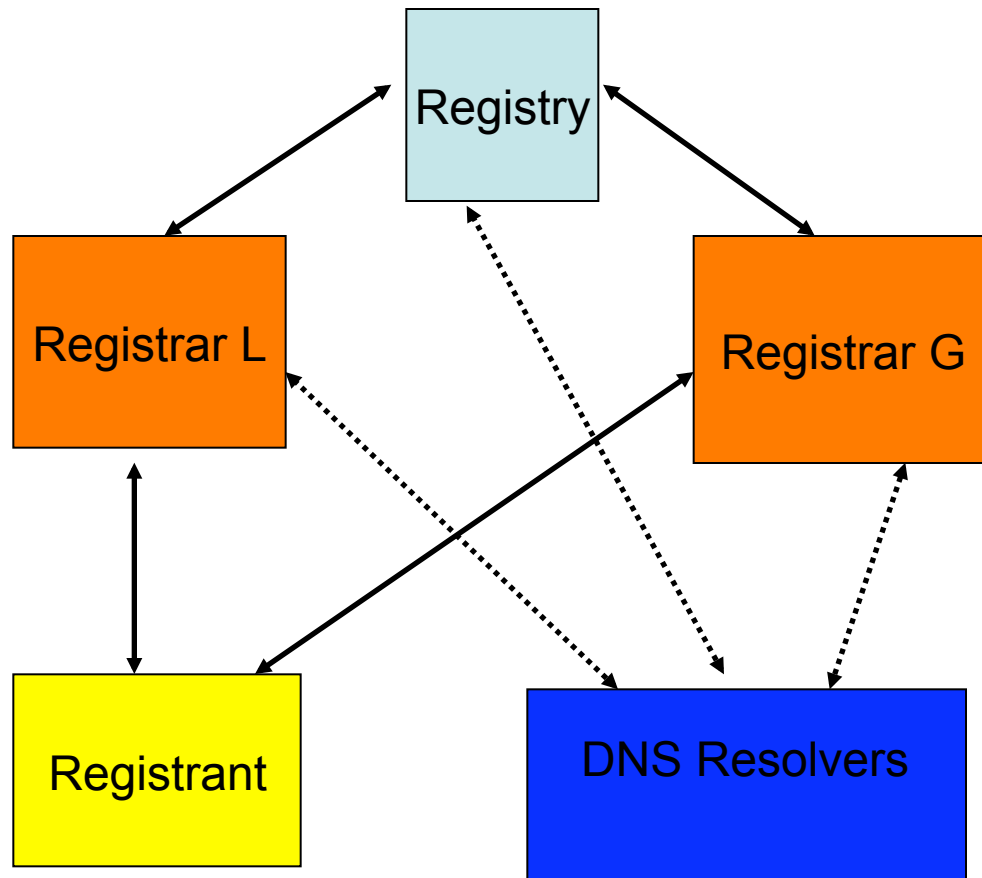
Summary: Smooth transfer

- Requires assistance by loosing registrar
  - Not much but some
    - We want to minimize
- Requires new flows through registry
  - New key flows from G via registry to L
  - Registry tells L when to stop serving domain