Interim Trust Anchor Repository

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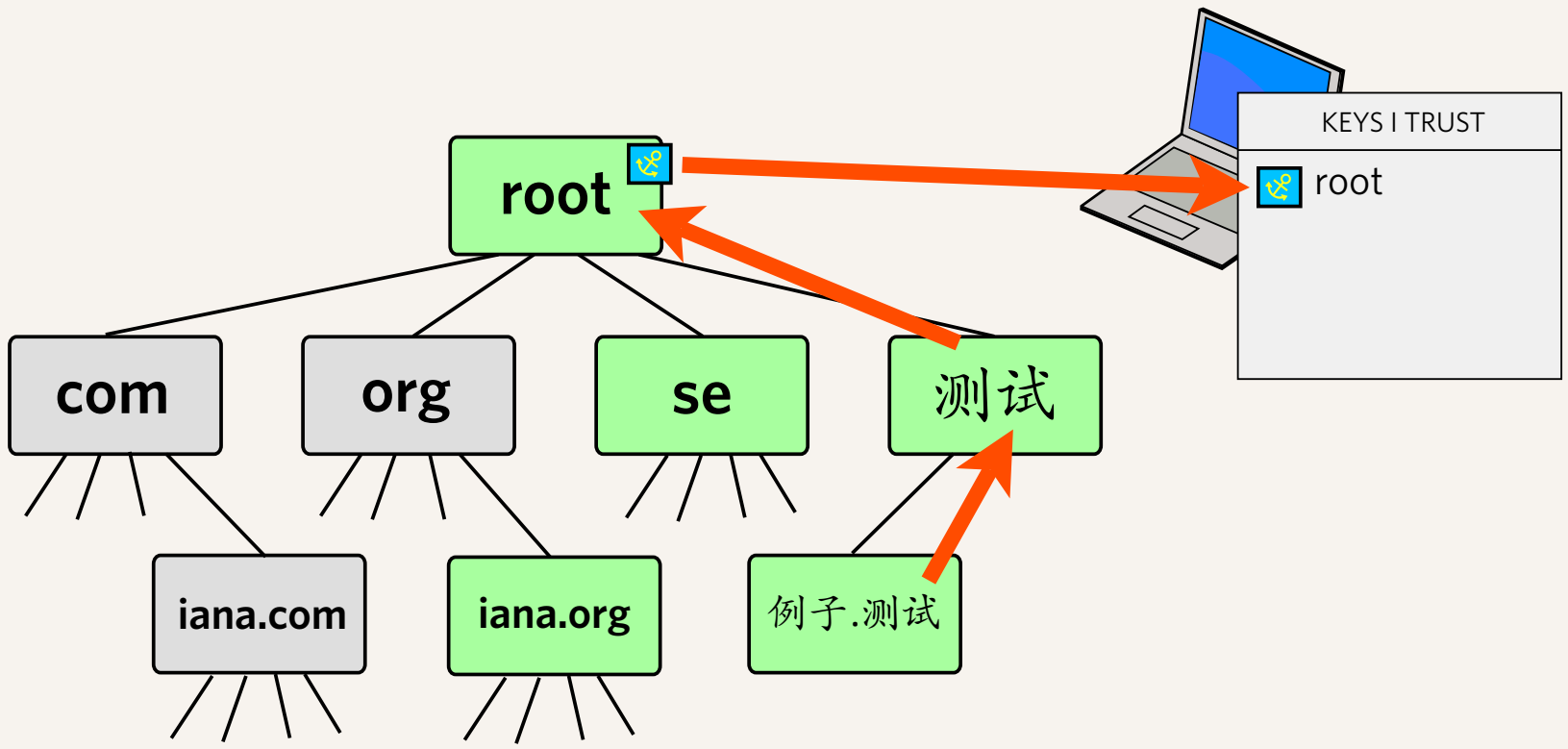
- Whereas, in the interests of aiding DNSSEC deployment, the ICANN board believes that DNSSEC trust anchors for Top Level Domains should be made available conveniently to the DNS community.
- It is **hereby resolved** that the Board instructs IANA staff, as an interim measure, to create and maintain a Registry of DNSSEC trust anchors for

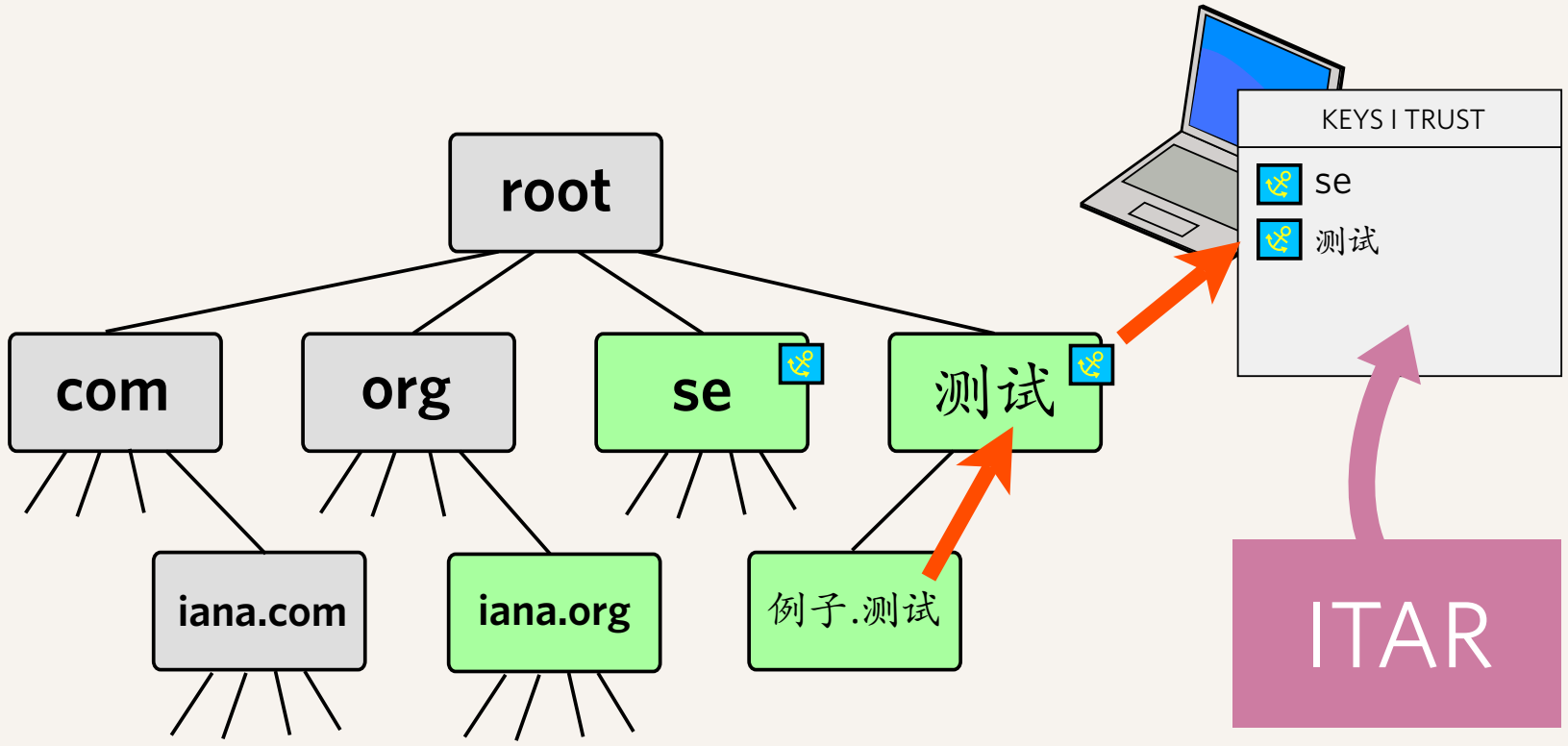
30 April 2008

What is the ITAR?

- Interim Trust Anchor Repository
- A mechanism to publish keys of top-level domains that currently implement DNSSEC
- If the root zone is DNSSEC signed, such a repository is unnecessary
  - Therefore this is a stopgap measure
  - Should be decommissioned when the root is signed
- ICANN Board voted to implement in April 2008, based on community requests



If the root was signed



It isn't so there are multiple trust

- anchor repositories

Proposed registry details

- Supports different types of DNSSEC signing
  - DS hashes either SHA-1 or SHA-256
  - DNSKEYs in any algorithm (agnostic implementation)
- Published in number of formats
  - List on website; XML structured format; Master file format
  - Should work with major software implementations
  - Implementors should not be putting special ITAR provisions in code — this is meant to go away when

Acceptance Model

- TLD operator can submit DS key data via web form
  - DS record validated against DNSKEY data in the DNS
    - Must match before the DS key is made active in the registry.
    - DNSKEY does not need to be in the DNS at time of submission (to allow for pre-deployment), but needs to validate prior to publication.
  - Administrative and Technical contacts for the domain must consent to the listing

Removal Model

- Identical to acceptance model, without the technical test
- List of revoked trust anchors will be provided

Exit Strategy

- ITAR will be decommissioned within x days of the DNS root being signed.

Limitations

- The ITAR will only operate for top-level domains
  - i.e. the keying information that would otherwise go in the root.
  - IANA will not accept anchors for descendants of top-level domains
    - Even if the relevant TLD is not signed

Why are we doing this?

- There is interest in having the DNS root zone signed with DNSSEC
- There are many unanswered questions that inhibit deployment
  - “Layer 9” issues — political, etc.
- IANA has had an operational testbed for some time signing the root zone
  - Aim is to be operationally ready once policy is set
- ITAR will assist early-adopters utilise the technology until root signing is solved

Thanks!

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