RPKI Publication in Parent

Mikhail Puzanov | 19 May 2022 | RIPE 84

Hosted and Delegated RPKI

- **Hosted CA**

  - Parent (RIR) maintains all keys and objects and publishes them.

  ➕ It's easy.

  ➖ We store your private keys.

- **Delegated CA**

  - Child CA maintains all keys and objects and publishes them.

  ➕ No extra trust required

  ➖ You have to maintain objects and publish them.

What is publication in parent?

- Service for delegated CAs.

- Also known as

  - Hybrid RPKI

  - 'Publish in Parent' from APNIC

  - ARIN Publication Service for Delegated RP

- The delegated CA creates objects and sends them to the parent.

- Parent CA keeps the objects in its repository.

Why use this service?

- Good availability, can withstand high load

- ~25 delegated repositories under RIPE NCC trust anchor
  - Statistically, some of them are broken at any time

- RIPE NCC RRDP repository is cached by two CDNs

- Having a delegated CA does not imply maintaining infrastructure

Some Technical Details

- Not currently planning for many CAs — APNIC has 4 clients, ARIN has 5

- MVP is based on Krill as a publication server

- Redundancy using primary-standby setup

- Will reconsider the implementation based on the uptake

Status

- Being tested in staging environment

- Production launch is planned for Q2

- If you want to be included in the friendly-customer trial, let us know (rpki@ripe.net)

Questions ?

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