RIPE NCC RPKI Validator 3

Maybe we need a better name ;)

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But, why?

- Stability
- Maintainability
- Redundancy
- Memory footprint
- Deployment and updates
Features 1/2

- ROA validation
  - Export compatible with version 2.x
- Router Certificates
  - Supported, but not seen in the wild
- RPKI-RTR version 1
  - Including router certificates
  - Incremental updates
Features 2/2

- **SLURM (local filters and whitelist)**
  - In progress..

- **UI**
  - If you want secure access, use a proxy
  - Some support for internationalisation

- **API**
  - Browsable, self-documented, API (swagger)

- **CLI**
  - No time to implement now, but willing to work with you
Architecture

Validator

API

RTR  RTR  script

rpki repo
Validation vs fetching

- Offline repo does not block validation
- TA is pending until all repos tried
Separating validation and fetching

Overview for LACNIC RPKI Root

<table>
<thead>
<tr>
<th>Summary</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust Anchor could be validated</td>
<td>Yes</td>
</tr>
<tr>
<td>Last completed validation</td>
<td>2018-03-20 03:18:44</td>
</tr>
<tr>
<td>Processed Items</td>
<td>4059 0 0</td>
</tr>
<tr>
<td>Repositories</td>
<td>1 0 0</td>
</tr>
</tbody>
</table>

Validation Issues

No validation problems found

Repositories

<table>
<thead>
<tr>
<th>URI</th>
<th>Type</th>
<th>Status</th>
<th>Last checked</th>
</tr>
</thead>
<tbody>
<tr>
<td>rsync://repository.lacnic.net/rpki/</td>
<td>RSYNC</td>
<td>DOWNLOADED</td>
<td>Mar 20, 2018, 3:18:39 PM</td>
</tr>
</tbody>
</table>

Showing 1 to 1 of 1 entries
Known issues

• Reporting on pending Trust Anchors
  - Somewhat confusing still, shows objects before TA is done
  - Trust Anchors are pending after restarts

• SLURM (local exceptions)
  - Not finished, will be soon..

• No UI for Trust Anchor management
  - May remain a feature… but will document API usage
Please let us know what you think

GitHub:
https://github.com/RIPE-NCC/rpki-validator-3

Please create issues:

• We will fix bugs
• We are careful about features..

Deployment:

• RPM (Centos7)
• Docker
• Generic build
• <your build here>