ARIN 45

VIRTUAL MEETING

RPKI Update

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Agenda

- Current Status
- Recent Updates
- Upcoming Updates

Current Status

- Community has focused on Routing Security
- NANOG sessions dedicated to both RPKI and IRR deployments
  - NANOG 78 (February 2020)
  - NANOG 79 (June 2020)
- Starting to see uptick in delegated users

RPKI Statistics

	Oct 2012	Apr 2013	Oct 2013	Apr 2014	Oct 2014	Apr 2015	Oct 2015	Apr 2016	Oct 2016	Apr 2017	Oct 2017	Apr 2018	Sep 2018	Apr 2019	Sep 2019	Jan 2020	May 2020
Certified Orgs		47	68	108	153	187	220	250	268	292	328	361	434	591	793	913	1,125
ROAs	19	60	106	162	239	308	338	370	414	470	538	604	1,013	4,519	5,454	6,130	7,717
Covered Resources	30	82	147	258	332	430	482	528	577	640	741	825	1,953	5,816	7,514	8,597	11,109
Up/Down Delegated		0	0	0	1	2	1	2	2	2	1	1	1	1	1	1	8

RPKI Functionality Added in the Last Six Months

- Repository Generation changed to run every five minutes
- Added RRDP support as an alternative to rsync for repository retrieval
- Changed the default validity period of a Route Origin Authorization (ROA) to 825 days
- Delegated RPKI server updated to support RFC 8183 Up/Down protocol
  - Much time spent testing the various delegated software implementations to ensure interoperability
- Added the capability to list and delete ROAs in Reg-RWS
  - This feature was requested in the suggestion ACSP 2018.16
- Updated ARIN's TAL to include the HTTPS URI alongside the existing rsync URI
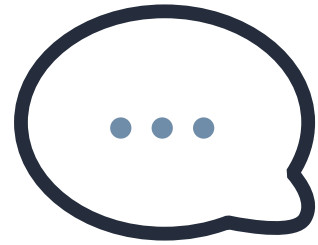
Future RPKI Functionality

- In the process of upgrading from an IBM 4765 to IBM 4767 HSM
  - Simplifying the interface between the HSM and the ARIN RPKI application
  - Removing architectural limitations of the old HSM that limited RPKI actions
    - For example, we will no longer have a limit on the existing maximum number of CRL entries per organization
  - Simplifying our key signing ceremonies
- Adding additional enhancements such as
  - Notification to tech and routing contacts for automatic ROA renewals
  - UI improvements in ARIN Online
  - Synchronization between IRR and RPKI

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Thank you.

Any Questions?

Discussion