ARIN 49
POWERED BY PARTICIPATION

Routing Security Update

Brad Gorman

What's New Since ARIN 48

- ARIN-NONAUTH Shutdown - Completed
- ARIN Publication Service for Delegated RPKI
- RPKI Statistics
- Expanded Training Opportunities
- Planned Product Development

ARIN-NONAUTH IRR Shutdown

ARIN-NONAUTH IRR Shutdown

Leading Up to 4 April

- Consultation with the Community
- Notice sent to all Points of Contact linked to Maintainer/Org
- Reminders posted to the arin-announce mailing list
  - 180, 120, 90, 60, 30, 15, 7 days
- Presented *IRR Spring Cleaning* at NANOG 83
- NANOG mailing list updated monthly beginning in Dec 2021
- Multiple ARIN Blog and social media posts

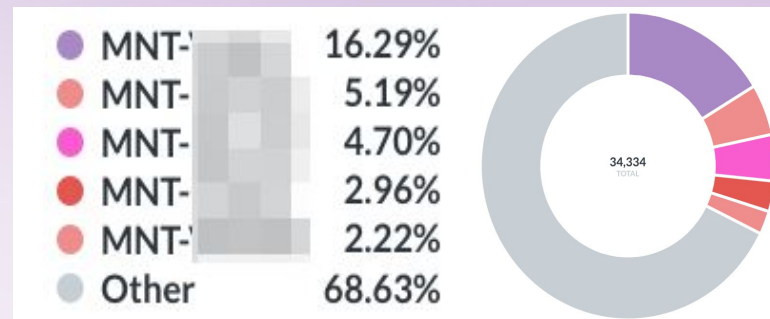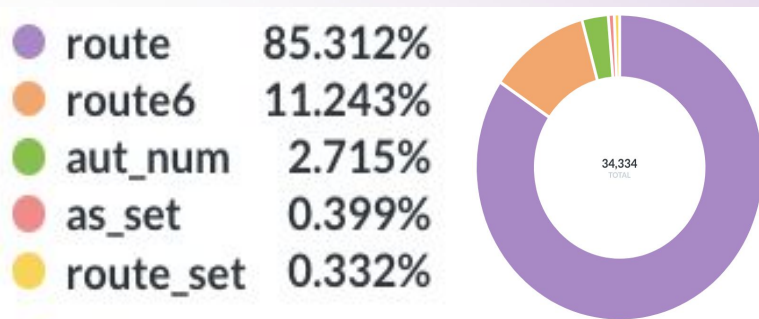# ARIN-NONAUTH IRR Shutdown - Completed

On 4 April 2022 at 12:00 EDT

- NRTM datastream stopped
- Updates locked
- Email template entry method deprecated
- Final snapshot of database available at ftp://ftp.arin.net/pub/rr

ARIN-NONAUTH IRR Shutdown

Final State of the Database

- 34,334 Objects
  - 33,151 route(6):
  - 932 aut-num:
  - 137 as-set:
  - 114 route-set:

- Five Orgs account for > 30% Objects

route	85.312%	
route6	11.243%	
aut_num	2.715%	
as_set	0.399%	
route_set	0.332%	

34,334
TOTAL

MNT-	16.29%	
MNT-	5.19%	
MNT-	4.70%	
MNT-	2.96%	
MNT-	2.22%	
Other	68.63%	

34,334
TOTAL

ARIN-NONAUTH IRR Shutdown

ARIN-NONAUTH IRR Shutdown help requests

- Approximately 120 calls, web tickets, emails, and chat sessions
  - Legacy resources
  - Explanation of impact
  - Assist creating objects in the ARIN (auth) database

- RADb stopped ARIN-NONAUTH mirroring on 26 March

ARIN's Publication Service for Delegated RPKI

ARIN's Publication Service

Based on RFC 8181 that defines a publication protocol that enables the separation of the Certificate Authority (CA) and the publication repository. The intent is to reduce the number of repositories in the global RPKI infrastructure and simplify the requirements of an organization who wants to run their own CA but not maintain a high availability repository.

ARIN's Publication Service

- Development started September 2021, completed December 2021

- Beta trial ran from January 2022 into February 2022

- Product released on 1 March 2022

The service allows for organizations to manage their ROAs, run the Certificate Authority (CA) and put their directly-issued resources from ARIN into the repository. Additional capabilities are planned for future development.

RPKI Usage Statistics

RPKI Usage

A growing number of organizations are taking advantage of the RPKI services offered by ARIN

- **45,742** ROAs
  - \+ 4,094 since 1 Jan 2022 / **9.9%** increase
  - \+ 19,253 since 20 Apr 2021 / **73%** increase

- **2,562** Valid Resource Certificates
  - \+ 360 since 1 Jan 2022 / **16%** increase
  - \+ 933 since 20 Apr 2021 / **63%** increase

Routing Security Feature Development

What's in the pipeline

- Two-factor Authentication (2FA)

- RPKI Object auto re-roll

- Tighter integration of RPKI / IRR

- Dashboard changes highlighting Routing Security services

Expanded Training Opportunities

Recent and Upcoming Training

ROA-thon

held on Sunday afternoon

RPKI 201

Advanced topics using ARIN's RPKI services

"Enhance Your Routing Security using ARIN's Hosted RPKI"
Refreshed on-demand webinar material

View ARIN's on-demand webinars and instructional videos
https://www.arin.net/reference/training/

Routing Security Ideas or Questions?

- **Contact us — Don't be bashful!**
  - Brad Gorman: bgorman@arin.net
  - Routing Security team: routing.security@arin.net
  - Ask ARIN: https://www.arin.net/contact/#ask-arin

- **Need a Feature? Make a Suggestion!**
  - https://www.arin.net/participate/community/acsp/

- **Service Issues?**
  - https://arin.statuspage.io/

Thanks!