

Deprecation of the 'Autonomous System Originations' Field

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**History:** 

Proposal 7 July 2021

**Draft Policy** 18 November 2021

Revision 16 December 2021

Revision 13 September 2022

Revision 21 September 2022



#### Latest Staff and Legal Review (5 October 2022)

#### Staff Understanding

- ARIN-2021-8 would remove the entirety of ARIN policy surrounding Autonomous System Originations, including guidelines for ARIN's origin AS data collection and publication.
- The problem statement identifies issues with efficient access to OriginAS data, but the policy statement proposes elimination of the data altogether, rather than proposing potential solutions to the identified shortcomings.
- Staff recommends careful consideration of impacted customers and their ability to find alternatives to information contained in the OriginAS field within the stated implementation timeframe.
- Staff understands this Draft Policy to have two implementation milestones; one for removal of the policy language, and one for removal of the field and all data contained in that field from ARIN databases. Staff recommends the second be adjusted to two years from adoption rather than a fixed date that may need to adjust as the Draft Policy moves through the PDP



#### Latest Staff and Legal Review (5 October 2022)

- Implementable as Written?: Yes
- Impact on ARIN Registry Operations and Services: Involves removal of fields and database objects of significant scope.
- Legal Review: No material legal issue
- Implementation Timeframe Estimate: Three months for removal of the policy language.
  Second timeframe will be followed according to the text, if adopted, but not within fewer than nine months from adoption
- Implementation Requirements:
  - Customer education and outreach with appropriate sunsetting lead times
  - Staff training
  - Updates to public documentation
  - Updates to internal procedures and guidelines



#### **Current Text (21 September 2022)**

#### Problem Statement:

In the last two decades ARIN has developed multiple services which provide mechanisms for Internet Number Resource holders to publish information about their routing intentions.

The optional 'OriginAS' field was invented before RPKI existed in practice. At that time, ARIN's Internet Routing Registry (IRR) followed a weak authorization model compared to available and in use today such as RPKI. The 'OriginAS' data was an improvement compared the other mechanisms that were available at that time.

However, there are issues with consumption of the data in the OriginAS field:

Consuming the 'OriginAS' field in a high-scale automated pipeline is challenging. The consumer needs to enter into a 'Bulk Whois Data' agreement with ARIN, download a multiple-gigabytes XML file (which is only generated once a day), parse this XML file, and then extract the OriginAS field. Querying objects one-by-one via the HTTPS interface does not scale well.



#### **Current Text (21 September 2022)**

- Policy Statement:
  - 1. Remove Section 3.5 "Autonomous System Originations" of the NRPM in its entirety.
  - 2. Removal of 'OriginAS' field from the database
- Timetable for Implementation:
  - 1. Removal of Section 3.5: Immediate after ARIN Board adoption.
  - 2. Removal of 'OriginAS" field from the database: December 31st 2024.



#### **Relevant Statistics:**

- 16,624 that have an Origin AS field filled out and do not appear in IRR or RPKI.
- Directly-registered resources:
  Legacy blocks: 22,302
  Legacy blocks that have an OriginAS value set: 1,400 (6.3%)
- Contracted blocks (RSA/LRSA): 49,489
  Contracted blocks (RSA/LRSA) that have an OriginAS value set: 27,599 (55.8%)



#### **Relevant Statistics:**

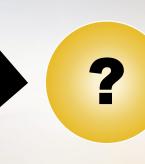
- Total number of blocks: 71,791
- Total number of blocks that have an OriginAS value set: 28,999 (40.4%)
- Of the 28,999 blocks that have an OriginAS value set, the number NOT in IRR or RPKI: 16,624 (57.3%)



#### **Question for the Community**

1. Will the impacted customers have the ability to find alternatives to information contained in the OriginAS field within the stated implementation timeframe?

### **Any Questions**



## Discussion