Safeguarding Registry Integrity: ARIN's Approach to Preventing Fraud

11 June 2025

John Sweeting, Chief Experience Officer

American Registry for Internet Numbers

Agenda

- ARIN's Integrity Mission
- Registry Threat Landscape
- RIO Team Formation
- Org Create Updates
- Oversight Activities
- Fraud Deterrence
- Community Partnership

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Our Commitment to Registry Integrity

Maintaining accuracy and uniqueness of the registry's data is central to ARIN's mission.

Resource fraud and abuse impacts everyone in the ARIN community.

ARIN is proactively taking steps to address and prevent misuse.

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The Growing Challenge of Registry Integrity

ARIN issued space vs. Transfer Market space

Fraudulent activities targeting the ARIN registry have escalated, including identity theft and hijacking.

Increased requests to create accounts by organizations using registered agents for the purpose of requesting IPv4 resources.

These fraudulent activities threaten registry accuracy, community trust, and the availability of scarce IPv4 resources.

Threats to ARIN

Identity and Entity Fraud

- Impersonation or fraudulent requests for Org IDs for otherwise valid business entities
- Compromised accounts leading to unauthorized actions

Unauthorized Resource Management

- Unauthorized reassignments or reallocations of IP number resources
- Abuse of NRPM 4.10 (IPv6 transition) policies for improper reassignments or out-of-region announcements

Routing Hijacks and Misinformation

- Malicious or erroneous routing announcements (e.g., Bogon announcements)
- Unauthorized or fraudulent entries in 3rd party IRRs
- Out-of-region customers creating Org IDs "to expand in ARIN's service region", but ~30% found announcing ARIN resources out-of-region within 60 days

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Formation of Registry Integrity and Oversight Team

New Registry Integrity and Oversight (RIO) team has been established to focus specifically on addressing fraud, policy abuse, and integrity-related concerns.

The team is comprised of 3 members, including manager Reese Radcliffe, reporting to the Chief Experience Officer (CXO).

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Registry Integrity Initiatives

Expanded vetting process for new organizations and proactive audits and reviews of existing Org IDs.

Continued scrutiny and verification of resource transfers (Number Resource Policy Manual 8.2, 8.3, and 8.4).

https://www.arin.net/participate/policy/nrpm/#8-transfers

Stronger cross-team collaboration processes within ARIN (Compliance, Legal, Registration Services).

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Actions Taken – ARIN updated Org Create Procedures

- Introduced procedures for flagged **Org Create** requests that require additional validation.

- Video verification is used to confirm identity, authority, and organization legitimacy prior to RSA signature.

- *Government photo ID is required.*

26 February 2025

Enhancing ARIN's Org Create Vetting Process

By Reese Radcliffe – Registry Integrity and Oversight Manager

At ARIN, we are committed to maintaining the integrity of the Internet number resource registry. As part of this commitment, we are introducing an additional verification step to strengthen the validation process for new Organization ID (Org ID) requests.

Read more at:

https://www.arin.net/blog/2025/02/26/enhancing-org-create-vetting/

Actions Taken –
Expanded Section 12 Reviews

- Number Resource Policy Manual (NRPM), Section 12, provides authority for ARIN to execute and fully audit organizations suspected of Registration Services Agreement (RSA) and/or policy violations.

- The RIO Team is tasked with identifying and implementing all Section 12 audits. All audits are conducted with authoritative contacts for the organization.

- Video verification is used to confirm identity, authority, and organization legitimacy prior to providing the requirements for completing the Section 12 audit. Government photo ID is required.

- Customer is provided a timeline for addressing the violations.

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NRPM 4.10 Abuse

- Number Resource Policy Manual (NRPM), Section 4.10, provides customers the opportunity to request IPv4 resources for the purpose of IPv6 transition.

- This policy is highly abused using the following abuse vectors:
  - Announced Out of Region
  - Reassigned/reallocated to customers
  - Leasing as IPv4 space
  - Announced with no associated IPv6 being announced

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Threat Statistics

Org Create:
- Completed: 62 (58 successful, 4 abandoned or withdrawn)
- In Progress: 27

NRPM 4.10 Fraud & Abuse Cases:
- Completed: 23
- In Progress: 7
- Pending Review: 286

Section 12 (Resource Review/Revocation) Cases:
- Completed: 12
- In Progress: 6
- Pending Review: 14

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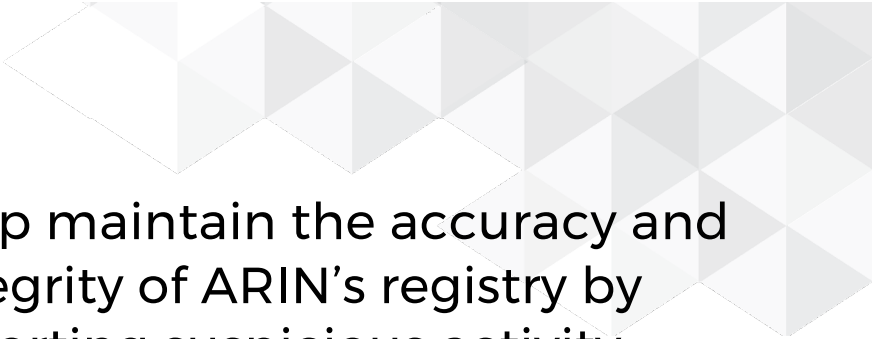
Note: YTD as of 30 May 2025

ARIN Is Exercising Increased Vigilance

- Proactively identifying, preventing, and addressing fraudulent activities through increased review and verification processes.

- Analysts have been trained to identify potential fraud and abuse and refer cases to the RIO team for more in-depth investigation.

- Violations of out-of-region policies represent a significant source of abuse
  - Total Organizations on Watchlist: 32
  - Confirmed Violations: 10

- Actively participating in investigations with Law Enforcement

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ARIN is committed to strengthening trust and security on the Internet.

Join us in protecting the Registry system.

- Help maintain the accuracy and integrity of ARIN's registry by reporting suspicious activity

  https://www.arin.net/reference/tools/fraud_report/

- Stay informed on policy updates

- Encourage your organization to use secure, up-to-date contact and organizational records

- Engage with ARIN through policy consultations and community discussions

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Need more information?

ARIN Registration Services can help!

Phone
Monday-Friday
7:00 AM–7:00 PM ET
+1.703.227.0660

Chat
Monday-Friday
10:00 AM–4:00 PM ET

... or find ARIN here at NANOG 94

ARIN Customer Service Desk
NANOG Showcase in the Plaza
Exhibit/Foyer Area

Sponsor Room
Plaza Court 2+3, Concourse
Level

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Thank you

Any questions?

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