



Directory Services at ARIN

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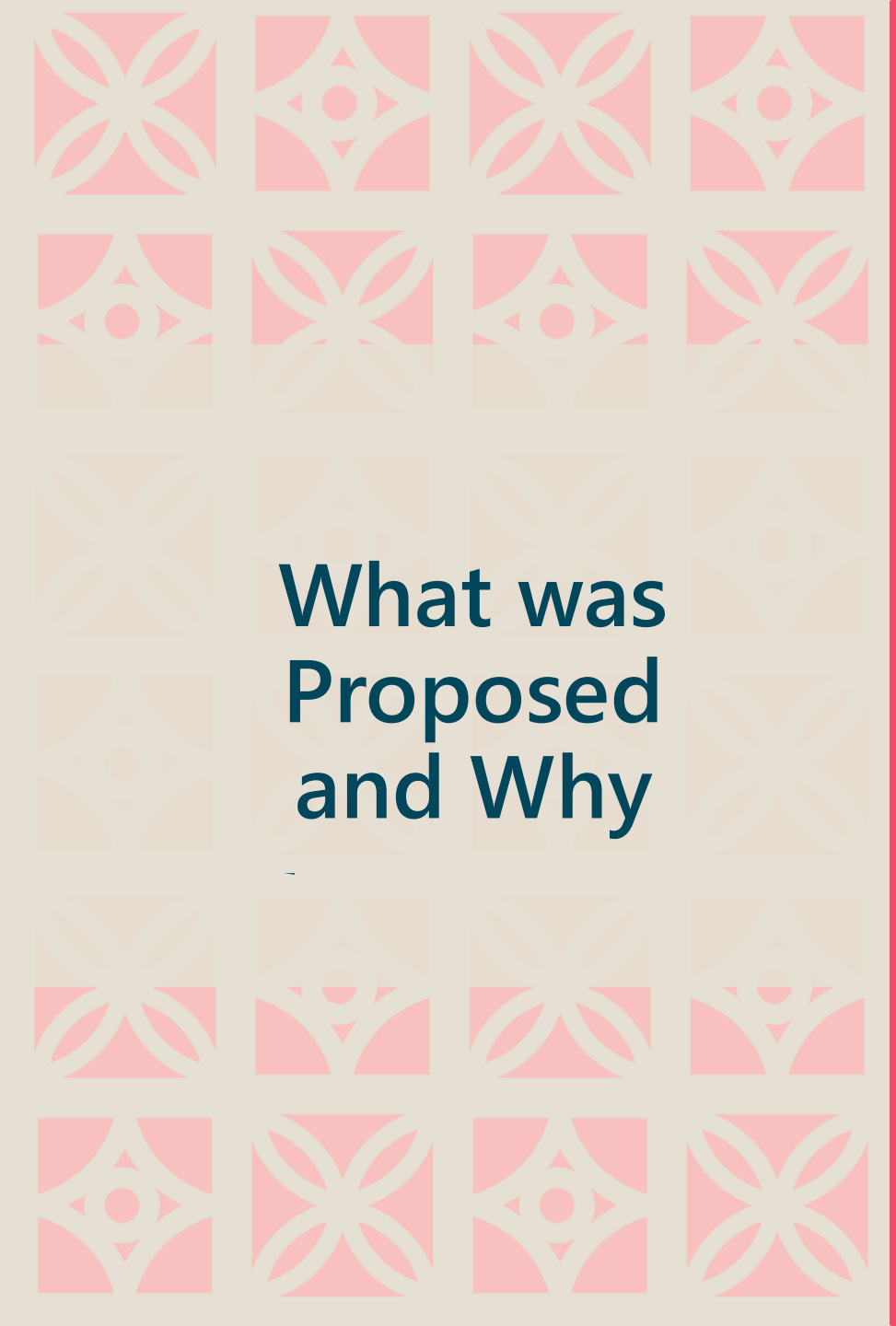
Director of Communications





ARIN conducted a Community Consultation on the future of its Directory Services from 14 August to 14 September.

Based on community feedback, we have a path forward!



What was Proposed and Why

- Retiring three legacy data-access services, leaving RDAP as ARIN's single standardized directory service.
- Supporting multiple redundant services that return the same information creates administrative and operational overhead.
- Consolidating to one protocol reduces ARIN's attack surface, streamlines operations, and lowers future overhead.
- Feedback was gathered from the ARIN-consult mailing list and cross-posted NANOG threads.

What Did the Community Tell Us?

RWhois

No commenter argued for keeping it on its own merits.

Whois-RWS

Uncontested in principle with one functional parity gap to close first.

Port 43 WHOIS

24 of 43 comments opposed retirement or wanted a much longer transition.



RWhois



RWhois Feedback

- RWhois drew almost no independent objection. Every commenter who addressed it explicitly said they were fine with retiring it.
- Where it came up favorably, it was as a possible proxy or bridge to RDAP rather than a service worth preserving.

Assessment: *Low risk. No operational objections were raised, and no tooling dependency was cited.*

Recommendation: *Proceed on the retirement timeline described in the consultation.*

RWhois: Next Steps



- 1. Engineering Department:** Develop and publish a migration tool and share recommendations for an open-source RDAP server.
- 2. Customer Technical Services and Communications Departments:** Run a direct outreach campaign to organizations using RWhois: convert to the RDAP client or discontinue local clients and report reassignment information directly to ARIN.
- 3. Communications Department:** Support a 365-day community countdown to retirement beginning when the migration tool is made public.



Whois-RWS



Whois-RWS Feedback

- Retirement is not contested on principle. The one detailed comment asked that RDAP reach full feature parity with RWS first.
- The request centers on CIDR more-specifics queries, breaking out reassignments within a larger block, which RWS supports today but RDAP does not yet expose cleanly.

Assessment: *Low risk, with one perceived functional gap. Hierarchy walking should be closed in RDAP before RWS is switched off, or users lose a capability they rely on today.*

Whois-RWS: Two Services, Two Paths

Whois-RWS API

- Confirm that all parity requirements have been met.
- Coordinate documentation updates to clarify API functionality.
- Identify outreach mechanisms and start the countdown to API retirement.

Whois-RWS web UI

- Complete development for baseline Advanced RDAP Search parity with **whois.arin.net**.
- Launch the beta alongside a user insight campaign and retirement plan outreach.
- Run the beta in parallel for a suggested six months to gather input and allow graceful transition.
- Retire **whois.arin.net**, redirecting traffic to Advanced RDAP Search.



Port 43 WHOIS

Discussion Themes

Compatibility Layer or Proxy

Proposed repeatedly as a middle ground for Port 43. Viewed as more costly than keeping native WHOIS running.

Security Versus Convenience

Is Port 43's lack of encryption ARIN's problem to fix, or a risk users accept by choice?

Backward-compatibility Precedent

Analogies to rotary dialing, ICANN's earlier domain WHOIS-to-RDAP mandate, and the RPKI rollout were used on both sides.

Client Ecosystem Readiness

RDAP clients are not yet ubiquitous in OS distributions, which undercuts a near-term retirement.

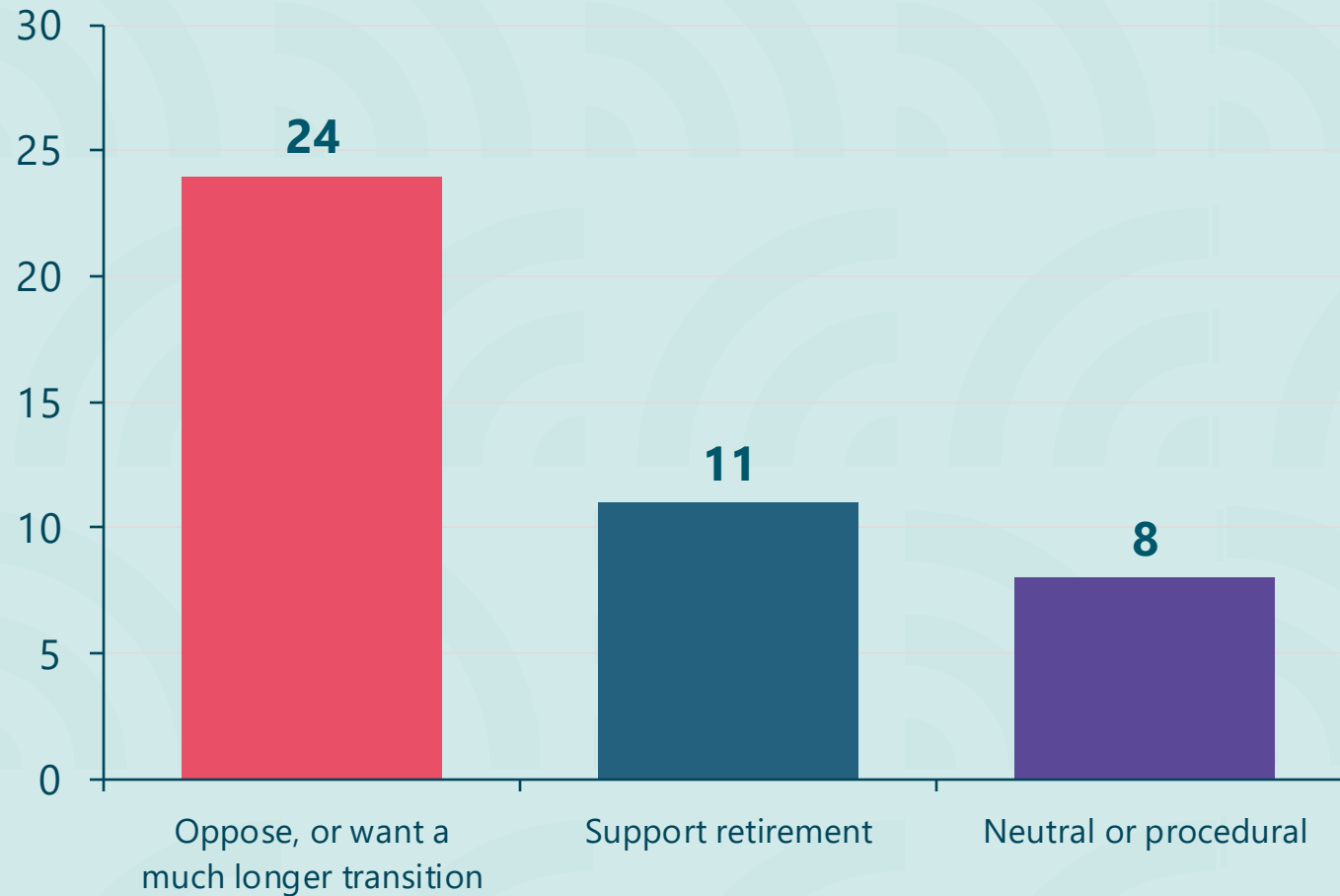
Communication Plan

Concrete plan to notify and migrate the current Port 43 user base needs to be made public

Data Visibility

Top queriers resolve to cloud provider addresses; ARIN has limited insight into WHOIS traffic.

Sentiment on Retiring Port 43 WHOIS



43 Substantive Comments Received

Port 43 was the only piece of the proposal that generated real debate. Opposition splits:

- 56 percent against
- 26 percent in favor
- 19 percent neutral

RWhois and Whois-RWS drew almost no objection by comparison.



Major Points of Opposition

- RDAP client tooling is not yet shipped by default across common OS distributions, so a hard cutover would break scripts and workflows built on Port 43.
- The original announcement seemed to be vague on timeline and communication plan, leaving affected users unable to prepare.
- There is no compelling justification for retiring a simple, working service.

The Security Argument, and the Answer to It

Strongest Case for Retirement

Port 43 WHOIS is unauthenticated and unencrypted, leaving it susceptible to man-in-the-middle tampering.

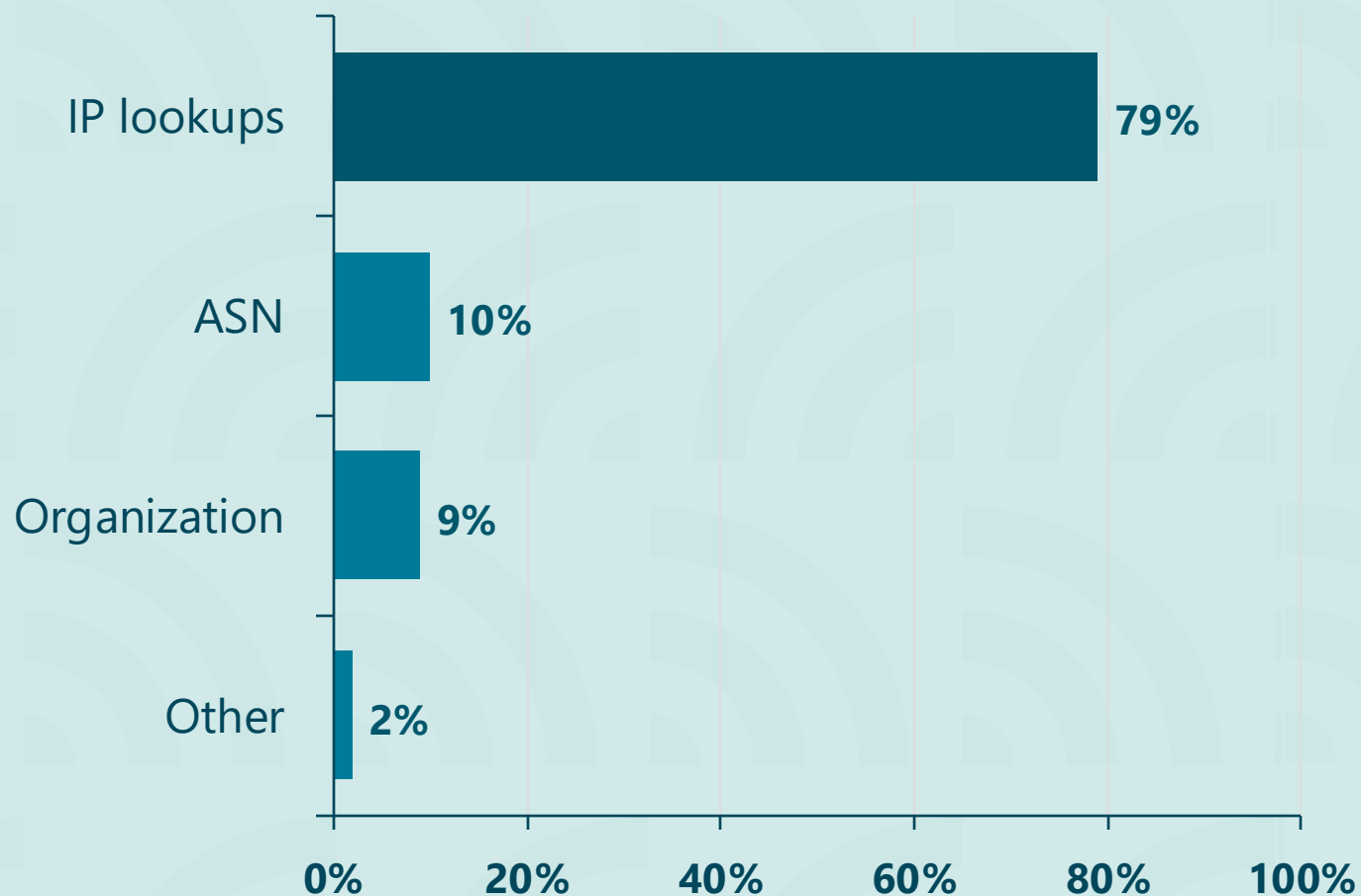
Technical debt: maintaining a legacy protocol indefinitely carries an ongoing engineering cost.

The Counter Argument

The risk falls on the consumer who chooses to use WHOIS, not on ARIN.

RDAP adoption is growing organically, which makes a forced sunset unnecessary. Bootstrap queries jumped fourfold.

Usage Data Snapshot



Two Caveats

- Visibility into who is querying is limited. The top 10 users over a seven-day window all resolved to cloud provider addresses, which obscures the real end users.
- ARIN's Engineering Department believes that building and operating a WHOIS-compatible proxy in front of RDAP would be more effort and operational risk than keeping the existing service running longer.

Next Steps for Services

RWhois

- Work on RWhois migration tool will be scheduled
- Upon completion, sunseting and communications plan will launch on a 365-day timer

Whois-RWS API

- Remaining RDAP parity questions will be resolved
- Documentation will be updated and sunset will proceed as scheduled for July 2027

Whois-RWS Web UI

- Development of advanced RDAP search beta is underway
- Both web services will run in parallel for at least 6 months
- Sunset date to be determined



...and Port 43 WHOIS?

We heard you.

- We will continue to monitor RDAP adoption in OS distributions and query traffic.
- When we reach the milestones you stated as critical, we will consult with the community again to revisit the potential of retirement.

QUESTIONS AND COMMENTS?

Thank You

