APNIC 46

Registry Improvements Update

RDAP and MyAPNIC

Topics

- Registration Data Access Protocol (RDAP)
  - Usage
  - Server Improvements
  - Cross-RIR Consistency
- MyAPNIC Performance
- Miscellaneous

RDAP

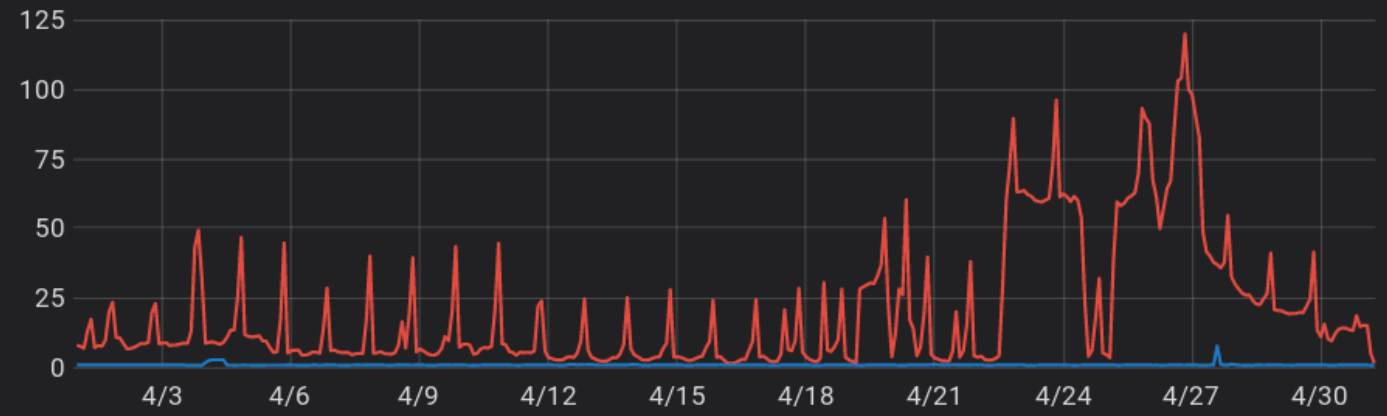
- Replacement for port-43 Whois services (RFC 3912)
- Supports queries, but not updates
- Major features:
  - Standardised data structures
  - Internationalisation support
  - Bootstrap (find authoritative server)

RDAP - Usage

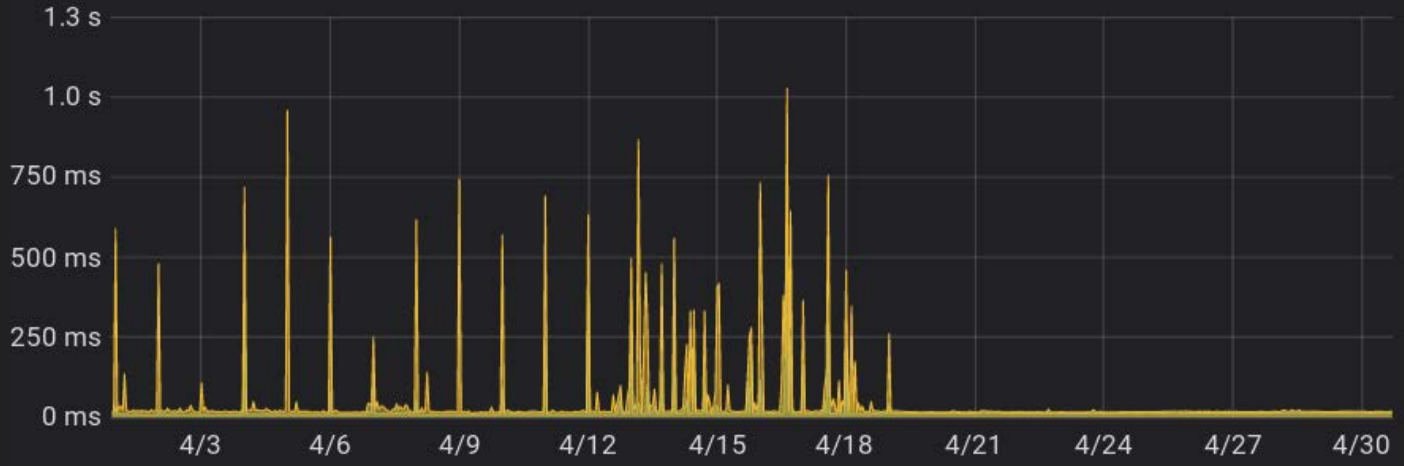
- For the past year:
  - Port-43 Whois: 500 qps, spikes of up to 2,000 qps
  - RDAP: 10 qps, spikes of up to 50 qps
- Usage comparatively small, but still significant
- We are working to remove barriers to adoption

RDAP - Server Improvements

- Separate from port-43 Whois service
- Pregenerate RDAP responses at startup, rather than processing on a per-query basis
- Server is available at https://github.com/APNIC-net/rdapd
- Currently working on deployment to GCP to further improve response times



1. Queries per second



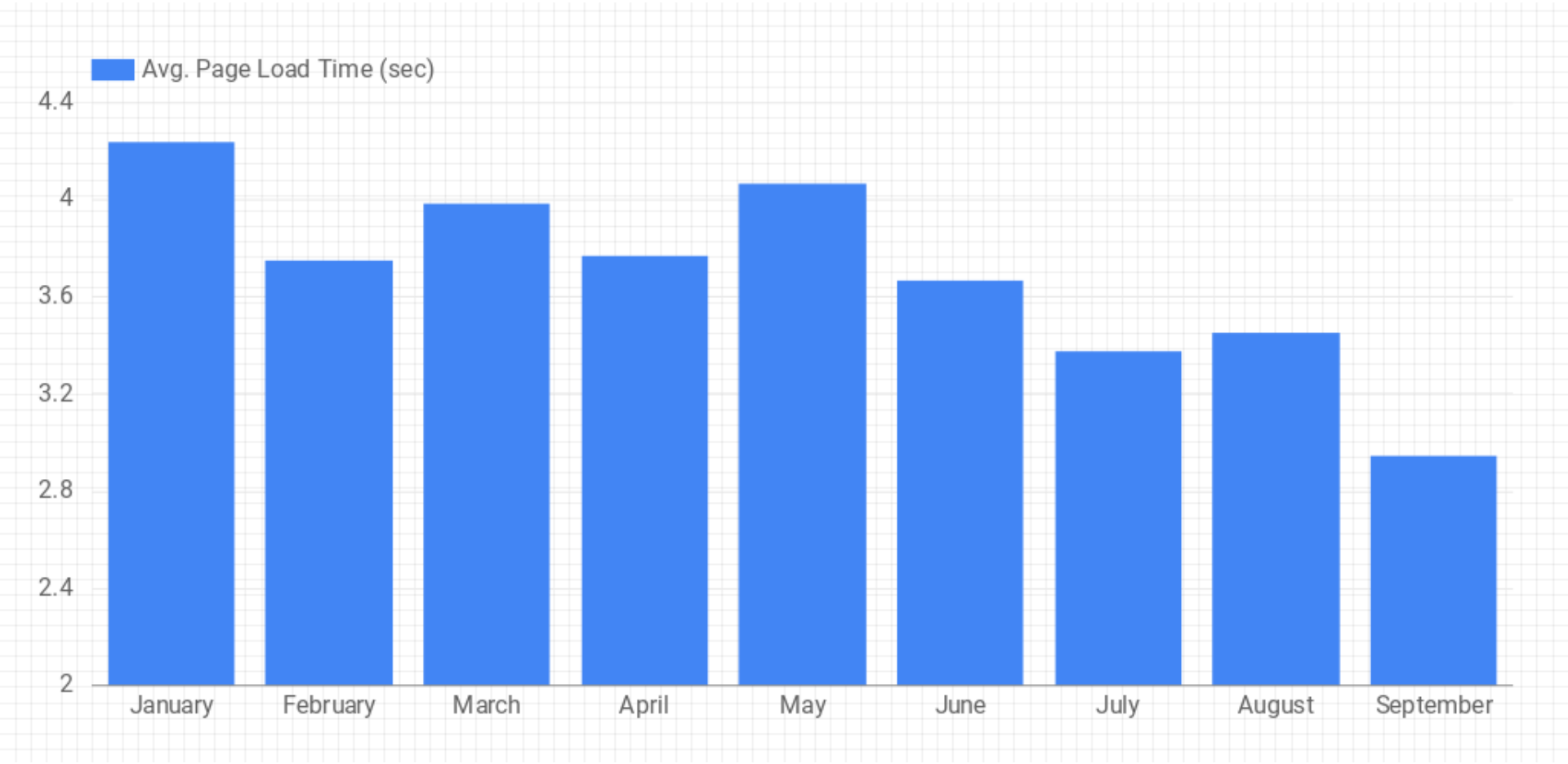
2. Query response time

RDAP - Cross-RIR Consistency

- Each RIR has an RDAP service
- These (mostly) conform with the specifications, but the specifications allow substantial flexibility
- To address this, the RIRs are working together on cross-RIR consistency
  - Currently planning on publishing an RIR-specific RDAP profile

MyAPNIC Performance

- Performance remains problematic
- A key focus for APNIC technical staff
- Currently working on front-end and application-layer improvements
- Separately, infrastructure staff are investigating cloud options


Avg. Page Load Time (sec)
4.4
4
3.6
3.2
2.8
2.4
2
January
February
March
April
May
June
July
August
September

Miscellaneous

- bcrypt password hashing in Whois
- RPKI publication service
- Registry event-sourcing

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Questions?

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