

# RDAP in .CZ

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# Agenda

- Motivations
- Implementation
- Experiences
- Future



# Motivations

- Request from registrant of co.cz to redirect whois queries
- Doing redirects in port 43 whois is not easy
- .. lets wait what new protocol can provide



# Motivations

- Registrars are using port 43 whois for various purposes:
  - Simpler for easy tasks then EPP
  - Domain availability service
- Port 43 whois is strictly rate-limited, however registrars IP addresses has less strict limits.
- Current manual firewall changes don't scale - rate limiting based on authentication would be better



# Motivations

- We provide web application called DomainBrowser – authenticated web whois
  - For registrants to see all their domains, contacts, nameservers and dnssec keys regardless on registrar ownership
  - Each contact in registry can possess authentication through our identity service mojID
- RDAP with authentication can complete this service by adding CLI/API access



# Motivations

- Newborn protocol needs implementations to confirm it is viable
- Testing new technologies is part of CZ.NIC strategy



# Implementation

- We implemented RDAP service as a “copy” of port 43 whois
  - The same data, policies, rate limits...
- Frontend part made in django-rest-framework
- Launched at the end of 2014 (based on drafts)



# Implementation

- Supported queries:
  - domain, entity, nameserver
  - no search possibility
  - no authentication
- Specific extensions
  - cznic\_nsset, cznic\_keyset
  - our own set of object states





# Implementation

- <https://rdap.nic.cz/domain/nic.cz>
- <https://rdap.nic.cz/entity/CZ-NIC>
- <https://rdap.nic.cz/nameserver/a.ns.nic.cz>
- [https://rdap.nic.cz/cznic\\_nsset/CZ.NIC](https://rdap.nic.cz/cznic_nsset/CZ.NIC)
- [https://rdap.nic.cz/cznic\\_keyset/CZ.NIC](https://rdap.nic.cz/cznic_keyset/CZ.NIC)



# Experiences

- RFC's released in March
- Short after we participated in `rdap.viagenie.ca` tests and realized that there are quite a few differences between RFC's and drafts
- New version is just being tested



# Experiences

- Registrars as entities?
- We have separated namespace for contact handles and registrar handles => collisions
- So currently registrars are not considered as entities
- No way how to query registrar details like in port 43 whois



# Experiences

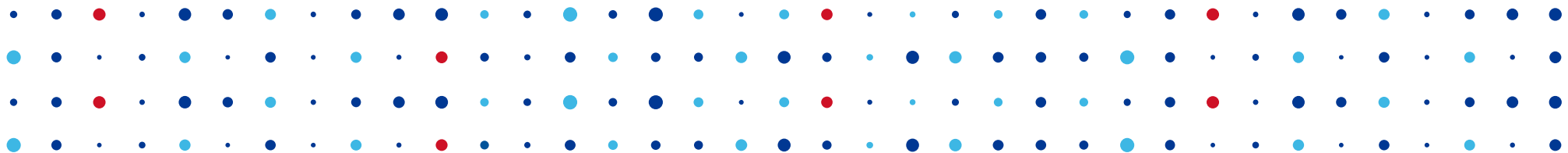
- Different values in 'status' fields
- Majority could be mapped to fields registered in RDAP JSON Values registry operated by IANA, but there is still overlap
- Can we/Should we register all these values?



# Future

- Get compliant with RFC's
- Better marketing in our community
- Offering redirection service for registrants
- Implement searches (how about domain by entity?)
- Integration with our Identity service





# Thank You

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