Second year of RDAP in .CZ

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Agenda

- Development
- Conformance testing tools
- RFC doubts
- IANA registrations
- RDAP clients tested
- Future



Development – first version

- Deployed in December 2014
- Python, Django, Django-rest-framework
- Based on drafts
- Only queries, no searches
- Registrar as entity issue
- Details in presentation from ROW #3 http://regiops.net/



Development – recent changes

- New version released in March 2016 as part of FRED software and published at https://fred.nic.cz
- Updated according final RFCs
- Status mapping prepared for https://tools.ietf.org/html/draft-gould-epp-rdap -status-mapping-00
- Extension prefix renamed from cznic_ to fred_
- Tested according existing conformance tools



Conformance testing tools

- Viagenie conformance tests
 - Send email to support@viagenie.ca
 - Fill received request form
 - Use received access to http://rdap.viagenie.ca/
- APNIC conformance tests
 - Clone https://github.com/APNIC-net/rdap-conformance
 - Fill configuration file and run



RFC doubts – 404 or 400

- There are quite a few situations where it's unclear whether return 404 or 400
 - IDN domain if IDN is not supported
 - TLD that is out of scope
- Tested RDAP servers behave differently



RFC doubts – expiration date

- Is expiration correctly defined in spec?
 - RDAP The object instance has been removed or will be removed at a predetermined date and time from the registry.
 - EPP <domain:exDate> element that contains the date and time identifying the end of the domain object's registration period.
- Could it be a date only?



RFC doubts – mandatory fields

- What fields are mandatory in each structure?
- RFC has example of minimal nameserver but not other objects



IANA registries

- RDAP extensions + RDAP JSON Values
 - Extension specification at https://fred.nic.cz/rdap-extension/
 - Application via https://www.iana.org/form/protocol-assignment
 - Adding prefix "fred" for our software specific extensions
 - Adding new event action for ENUM domains
 - Submitted 18.3 -> Completed 30.3



IANA registries

- RDAP Bootstrap registry for DNS
 - Available via https://rzm.iana.org
 - Process smooth:
 - Request was first received: Thursday, 17 March 2016 16:21:54 UTC
 - All contact confirmations were received: Thu Mar 17 16:28:04 UTC 2016
 - The request was sent for USDOC/VRSN implementation: Mon Mar 21 19:18:49 UTC 2016
 - The request was completed by ICANN on: Tue Mar 22 14:54:50 UTC 2016
 - Small glitches resolved



RDAP clients tested

- ARIN Ruby https://github.com/arineng/nicinfo
- ARIN JS https://github.com/arineng/rdap_webspa
- CentralNic Perl https://github.com/jodrell/rdapper
- Registro.br Go https://github.com/registrobr/rdap-client
- DNSBelgium Java https://github.com/DNSBelgium/rdap
- CNNIC Java https://github.com/cnnic/rdap
- Metareg. PHP https://github.com/metaregistrar/rdap-client



Future

- Fix problem with registrars
- Provide all status values
- Implement authentication
- Implement searches
- Maybe work on prototype of full RESTful service via POST/PUT/PATCH/DELETE http methods



Thank You

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