draft-ietf-regext-rfc7484bis

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2021-03-09

Status

- RFC7484: to find the authoritative RDAP server for the object you are looking for.
- Objective:
  - together with RFC748*, move up to Standard level.
- Next slides:
  - Two errata against RFC7484
  - Minor changes
  - Shepherd comments
  - Next Steps

Errata 1

Errata ID: 5460
Status: Reported
Type: Technical
Publication Format(s) : TEXT
Reported By: Pieter Vandepitte
Date Reported: 2018-08-14

Section 8 says:

```
In the case of a domain object, the client may first query the DNS
to see if the respective entry has been delegated or if it is
mistyped information by the user.  The DNS query could be to fetch
the NS records for the TLD domain.  If the DNS answer is negative,
then there is no need to fetch the new version of the registry.
However, if the DNS answer is positive, this may mean that the
currently cached registry is no longer current.  The client could
then fetch the registry, parse, and then do the normal matching as
specified above.  This method may not work for all types of RDAP
objects.
```

Notes:

I would remove the whole section. The point is: if the DNS answer is positive, then you need to fetch the registry. But if the answer is negative, this does not mean anything because it it possible that a registered domain is not delegated.

- updated in -00 (next slide), but I'm also fine with removing the whole paragraph. comments?

Changes -

If the query data does not match any entry in the client cached registry, then the client may implement various methods, such as the following:

o   In the case of a domain object, the client may first query the DNS to see if the respective entry has been delegated or if it is mistyped information by the user. The DNS query could be to fetch the NS records for the TLD domain. If the DNS answer is negative, then there is no need to fetch the new version of the registry. However, if the DNS answer is positive, this may mean that the currently cached registry is no longer current. The client could then fetch the registry, parse, and then do the normal matching as specified above. This method may not work for all types of RDAP objects.

If the query data does not match any entry in the client cached registry, then the client may implement various methods, such as the following:

o   In the case of a domain object, the client may first query the DNS to see if the respective entry has been delegated or if it is mistyped information by the user. The DNS query could be to fetch the NS records for the TLD domain. If the DNS answer is positive, this may mean that the currently cached registry is no longer current. The client could then fetch the registry, parse, and then do the normal matching as specified above. If the DNS answer is negative, then the domain may be registered but not delegated or may not be registered, therefore it does not help to know if the cached registry is current or not. This method may not work for all types of RDAP objects.

Errata 2

```
        [
          ["xn--zckzah"],
          [
            "https://example.net/rdapxn--zckzah/"
            "http://example.net/rdapxn--zckzah/"
          ]
        ]
      ]
   }
It should say:

{
      "version": "1.0",
      "publication": "YYYY-MM-DDTHH:MM:SSZ",
      "description": "Some text",
      "services": [
        [
          ["net", "com"],
          [
            "https://registry.example.com/myrdap/"
          ]
        ],
        [
          ["org", "mytld"],
          [
            "http://example.org/"
          ]
        ],
        [
          ["xn--zckzah"],
          [
            "https://example.net/rdap/xn--zckzah/",
            "http://example.net/rdap/xn--zckzah/"
          ]
```

Capture d'é

- agree. updated in -00

Changes

The optional "description" string can contain a comment regarding the content of the bootstrap object.

Per [RFC7258], in each array of base RDAP URLs, the secure versions of the transport protocol SHOULD be preferred and tried first. For example, if the base RDAP URLs array contains both HTTPS and HTTP URLs, the bootstrap client SHOULD try the HTTPS version first.

Base RDAP URLs MUST have a trailing "/" character because they are concatenated to the various segments defined in [RFC7482].

JSON names MUST follow the format recommendations of [RFC7480]. Any unrecognized JSON object properties or values MUST be ignored by implementations.

Internationalized Domain Name labels used as entries or base RDAP

The optional "description" string can contain a comment regarding the content of the bootstrap object.

Per [RFC7258], in each array of base RDAP URLs, the secure versions of the transport protocol SHOULD be preferred and tried first. For example, if the base RDAP URLs array contains both HTTPS and HTTP URLs, the bootstrap client SHOULD try the HTTPS version first.

All RDAP endpoints referenced by the URLs in the array MUST return identical responses for the same RDAP query.

Base RDAP URLs MUST have a trailing "/" character because they are concatenated to the various segments defined in [RFC7482].

JSON names MUST follow the format recommendations of [RFC7480]. Any unrecognized JSON object properties or values MUST be ignored by implementations.

Internationalized Domain Name labels used as entries or base RDAP

Suggestion from Gavin Brown

Comment on the mailing list (on the same subject)

- George Michaelson

```
How about this:

----
All RDAP endpoints referenced by the URLs in the array MUST return
identical responses for the same RDAP query, except that the "notices"
data structure MAY contain an object informing the client of the
identity of the endpoint. If such an object is provided it SHOULD use
the registered notices and remarks type value of "service node
identification" and it SHOULD be returned by all endpoints.

The "notices" structure is only permitted at the top level of a
response and contains information about the service or response rather
than about the object involved.
----

Which requires in IANA considerations:

----
 IANA is requested to add that value to the
https://www.iana.org/assignments/rdap-json-values/rdap-json-values.xhtml
registry.
----
```

Changes - other

- updated refs.
- updated to TLS1.3 (Patrick Mevzek)

Comments on Mailing List

- impact of fetching json files for IANA? Response from IANA (KD): no issue
  - (they use a CDN and the file is as big as any javascript framework file one fetch almost on every page…)

```
Because these registries will be accessed by software, the download
demand for the RDAP Bootstrap Services Registries may be unusually
high compared to normal IANA registries.  The technical
infrastructure by which registries are published will need to be
reviewed and might need to be augmented.
```

```
Because these registries will be accessed by software, the download
demand for the RDAP Bootstrap Services Registries may be unusually
high compared to normal IANA registries.  The technical
infrastructure by which registries are published has been put in
place by IANA to support the load.  Since the first publication of
this RFC, no issue have been reported regarding the load or the
service.
```

- change to SRV records?
  - are we reopening the whole discussion again?
- restrict to https only URL in the services array?

Comments from Doc Shepherd

MY ANSWERS ARE IN BOLD AND UNDERLINED

Should we mention in both the Abstract and Introduction sections that this doc obsoletes RFC 7484? **OK**

RFC 8259 obsoletes RFC 7159 for the JSON format. Throughout the doc, it would be good to replace references to RFC 7159 with RFC 8259. **OK**

Knowing that this spec allows the http scheme (beside the https scheme) in the IANA bootstrap files, wonder if we should at the least discontinue using the http scheme in our examples, so as not to inadvertently encourage the http scheme use? **NOT SURE NEEDED BUT OK**

Is an Implementation Status section needed for elevating RFC 7484 to Internet Standard? **YES. SEE LATER SLIDE**

Section 1:

   Querying and retrieving registration data from registries are defined in Registration Data Access Protocol (RDAP) [RFC7480] [RFC7482]   [RFC7483].

Should we mention RFC 7481 here as well since it covers RDAP security? **NOT SURE NEEDED BUT OK**

Section 2:

   The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT",   "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [RFC2119].

For consistency, should we append " when specified in their uppercase form" (as done in rfc7482bis and rfc7483bis)? **NOT SURE NEEDED BUT OK**

Comments from Doc Shepherd

Section 4:

The entry for the root of the domain name space is specified as "".

Unless missed, didn't find such an entry in https://data.iana.org/rdap/dns.json. Is this sentence extraneous now? **DISAGREE THIS ENTRY IS NEEDED**

Section 5.1:

Should we only use the IPv4 space reserved for documentation (RFC 5737) in the example here? The IESG review of rfc7482bis and rfc7483bis pointed to using number resources (IP address space and AS numbers) reserved for documentation purposes in related examples. **SOME EXAMPLES ARE USING THOSE. WILL UPDATE TO TRY TO USE ONLY**

For the present example:

   client chooses one of the base URLs from this array; in this example,   it chooses the only one available, "http://example.org/". The   {resource} specified in [RFC7482] is then appended to the base URL to   complete the query. The complete query is then "https://example.org/ip/192.0.2.1/25".

Is there http/https inconsistency here vis-a-vis "http://example.org/" and "https://example.org/ip/192.0.2.1/25"?

GOOD CATCH. WILL FIX

Comments from Doc Shepherd

Section 5.2:

Should we only use the IPv6 space reserved for documentation (RFC 3849) in the example here?

SOME EXAMPLES ARE USING THOSE. WILL UPDATE TO TRY TO USE ONLY

In the present example, should we avoid using extraneous 0 as in the 0200 hextet in 2001:0200::/23? https://data.iana.org/rdap/ipv6.json seems to avoid so.

THE COMPACT FORM IS WITHOUT A '0'. HOWEVER, IT WAS SHOWN TO MAKE CLEAR THE BIT MATCHING. I CAN REMOVE.

Section 5.3:

Should we only use the AS numbers reserved for documentation (RFC 5398) in the example here?

WILL DO

Comments from Doc Shepherd

Section 8:

   In the case of a domain object,…   …This method may not work for all types of RDAP objects.

Could we omit saying "This method may not work for all types of RDAP objects" given we are here talking about domain objects only?

FROM ERRATA, SUGGEST TO REMOVE THE WHOLE PARAGRAPH

   Some authorities of registration data may work together on sharing their information for a common service, including mutual redirection [REDIRECT-RDAP].

[REDIRECT-RDAP] refers to an expired draft: https://tools.ietf.org/html/draft-ietf-weirds-redirects-04.

I'M NOT AWARE THAT THIS WORK HAS BEEN PUBLISHED AS RFC. BUT STILL RELEVANT TO TALK ABOUT. SO SUGGEST LEAVING AS IS

Implementation Status

- Need an implementation status section.
- If you have an "implementation" that fetch and parse one of the bootstrap files, please send me email (marc.blanchet@viagenie.ca) so I can collect it.
- Already known:
  - mobile app RDAP Browser
  - ICANN lookup tool
  - IANA publisher of the files

Next Steps

- given:
    - changes agreed during this presentation/discussion will be applied
    - receiving implementation information from implementors
- are we ready for publication?