RDAP Test Suite

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Introduction

- A tool to easily and automatically test RDAP implementations (only servers currently).
- Flexible enough to test multiple implementations.
- Graphical display of test results.
- Keep records of old tests to see evolution.
- Possibility to launch a specific test or run the full test suite by implementers.
Server Implementation
Test Profile

- Purpose of the profile:
  - List server paths.
  - List various existing and non-existing test data to be exercised by the test suite.
  - List supported features.

- The profile info is provided by the server implementer.
Server Implementation Test Profile

General Configuration:

Connectivity
Server URL:
Base path: (for example, "/rdap" if domain requests look like "/rdap/domain")
Rate-limiter value (requests per sec, 0 if disabled):
Are absolute or relative requests supported, or both?: (is the full hostname required in the HTTP GET request?)

Paths
Existing record: (for example "/domain/viagenie.ca")
Permanently redirected record:
Temporarily redirected record:
Non-existing record:
Record requiring credentials (request getting blocked):
Server Implementation
Test Profile

Specific options (same idea for IP addresses, AS and entities):

Domain names
Is domain search supported? (y/n):
Is IDN domain search supported? (y/n):
Existing LDH FQDN (no trailing dot):
Existing A-Label IDN:
Existing U-label IDN:
Existing in-addr.arpa record:
Existing ip6.arpa record:

Nameservers:
Is nameserver search supported? (y/n):
Is IDN nameserver search supported? (y/n):
Existing nameserver in LDH format:
Existing IDN NS in A-label form:
Existing IDN NS in U-label form:
Example Tests

• Check of response validity: ensure response uses valid HTTP headers, is valid JSON, contains the (few) mandatory fields, etc. as defined in RFC 7480 (HTTP in RDAP) and RFC 7483 (JSON response).

• Functional check of RDAP server: valid processing of HTTP methods (RFC 7480) and query processing as defined in RFC 7482 (RDAP Query Format).
Result - Warning

RFC 7483: Section 4.2: Format of “link” element
RFC 7480: Section 4.3: Server MUST ignore query parameters
Future work

- Develop a specific suite for the ICANN gTLD RDAP profile.
Live demo
Questions?

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