

the

Registration Directory Service (RDS-WHOIS2) Review

Draft Report including F2F#3 agreements and action
items
REC11 SUBGROUP REPORT - SECTION 3.8
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RDS-WHOIS2 Review Team
RDS-WHOIS2 Review Team
3030 July 2018



3 Objective 1: Assessment of WHOIS1 Recommendations Implementation

3.8 WHOIS1 Rec #11: Common Interface

[SUBSECTION NUMBERS WILL BE ADJUSTED WHEN ADDED BACK TO MASTER DOC]

1.1.1 Topic

Subgroup 1 - WHOIS1 Rec11 Common Interface is tasked with investigating, analyzing, and drafting recommendations (if needed) to address the following Review objective:

Consistent with ICANN's mission and Bylaws, Section 4.6(e)(iv), the Review Team will (a) evaluate the extent to which ICANN Org has implemented each prior Directory Service Review recommendation (noting differences if any between recommended and implemented steps), (b) assess to the degree practical the extent to which implementation of each recommendation was effective in addressing the issue identified by the prior RT or generated additional information useful to management and evolution of WHOIS (RDS), and (c) determine if any specific measurable steps should be recommended to enhance results achieved through the prior RT's recommendations. This includes developing a framework to measure and assess the effectiveness of recommendations, and applying that approach to all areas of WHOIS originally assessed by the prior RT (as applicable).

The specific [WHOIS1 Recommendation](#) assessed by this subgroup appears below:

WHOIS Recommendation #11: Common Interface

It is recommended that the Internic Service is overhauled to provide enhanced usability for consumers, including the display of full registrant data for all gTLD domain names (whether those gTLDs operate thin or thick WHOIS services); operational improvements should include enhanced promotion of the service to increase user awareness.

Noting the target of the above recommendation, the subgroup agreed to examine operational improvements, including enhanced promotion of the service to increase user awareness. Specifically, the subgroup agreed to examine these questions:

- ⦿ Has the creation and deployment of the WHOIS microsite at the direction of the board met this recommendation, considering the old Internic service still exists unchanged?
- ⦿ Does the WHOIS query service provided through the microsite (the common interface) provide clear and reliable access to full registrant data for all gTLD domain names?
- ⦿ What promotional efforts has ICANN undertaken to increase user awareness of the common interface?
- ⦿ Does the common interface provide clear instructions on how to notify ICANN, the sponsoring registrar and/or the registrant regarding data accuracy issues?

1.1.2 Summary of Relevant Research

To conduct its research, all members of this subgroup reviewed the following background materials, posted on the :

1. (2012) and
2. , including
 - 1.
 - 2.
3. WHOIS1 Implementation Briefings on Recommendations 5, 8, 10, 11: ,
- 4.
5. Documents cited in briefing on Recommendation 11 include
 - 1.
 - 2.
- 6.

In addition, the subgroup requested additional materials from ICANN Org

- ⦿ Available statistics on: use of the common interface, uptime, requests for help using the tool and what usage data is tracked by ICANN;
- ⦿ The Team/Department that implemented and maintains the common interface;
- ⦿ Any challenges with implementation and maintenance of the interface.

These materials included in written responses provided by ICANN Org:

- ⦿ , and
- ⦿ .

Finally, the subgroup applied the RDS-WHOIS2 review team's to measure and assess the effectiveness of recommendations and conducted individual reviews of the common interface by making and comparing lookup results.

1.1.3 Analysis & Findings

This recommendation has been fully implemented by provision of the new portal at “whois.icann.org”. Over 4 million queries were made in a 6 month period in 2017, showing significant usage. The common interface may become even more important after May 25th and the GDPR enforcement is in effect.

The briefing indicates that there has been a 99.9% up time for the common interface (meaning the time that the common interface was reachable from the internet) but other statistics on usage are not tracked. .

Individual team members have raised the issue that access to RDS data through the common interface may have become less reliable in recent months as timeouts or rate-limitations implemented by contracted parties prevent data access by users through the common interface.

According to information provided by ICANN staff It may not be practical to track other data elements associated with usage such as causes of lookup failures.

ICANN staff indicated that even the number of lookup failures cannot be calculated with precision. Because the current WHOIS protocol does not enforce any standard error handling, failures must be inferred. As the failure rate is not currently being calculated or tracked, no information was available on failure causes and frequency of failures either.

Users are encouraged to file a contractual complaint ticket if they identify any issues with the WHOIS record. A link to file a ticket is provided on the page where results are displayed.

ICANN Contractual Compliance proactively monitors registrar WHOIS availability and will send registrars a compliance notice if it is not available within the required scope of the RDS SLAs. Registrar and registry web-based WHOIS services are also tested during registry and registrar audits.

If the result returned by the registry or registrar is blank or is a very small package of data then the web page could display blank fields. If the returned result is in a format that cannot be parsed this too could cause the web page to display blank fields. In either case, users could look at the raw record displayed below the form for more information. If users identify any issues with the WHOIS record, they are encouraged to file a contractual complaint ticket. A link to file a ticket is provided on the page where results are displayed.

1.1.4 Problem/Issue

The common interface recommendation was intended to ensure that anyone looking up a WHOIS record could do that easily and from one source. The InterNIC was not overhauled, but a common interface was provided as an additional resource.

However, the common interface has no metrics that can be used to determine its overall effectiveness. Metrics and SLAs could be used to address this and also to proactively detect non-compliance. Lack of tracked metrics to ensure the tool provides the data it should or is consistent in providing the data is not helpful for a full assessment of the effectiveness of the implementation.

The lack of metrics on failures and causes thereof also did not allow any analysis of whether failure rates in lookup requests have increased in recent months.

The RT also noted that contracted parties can have valid reasons to implement reasonable limitations in the ability of third parties, including ICANN, to access their RDS data such as prevention of abusive harvesting by third parties, ensure the stability of their service and other such reasons as may evolve over time. Limiting this ability of contracted parties may be too restrictive and prevent adoption of necessary measures to discourage or prevent abuse.



The RT further noted that as a result of the implementations of the GDPR Temporary Specification by contracted parties, registrar and registry interpretations may now result in different registration data returned by WHOIS for the same domain name (e.g., the registry may redact data that the registrar may display and the registrar must provide contact details that the registry does not have or show. As a result, access to RDS data in the common interface has become less reliable as only one of the two possible results is displayed.

1.1.5 Recommendations

Based on its analysis, members of this subgroup agree that this WHOIS1 recommendation has been fully-implemented. However, to address the issues identified above and to ensure future usability, the recommendations below are provided. A recommendations should apply to the current common interface as well as any future replacements for it.

Recommendation R11.1: The ICANN Board should direct the ICANN Organization to define metrics or SLA's to be tracked and evaluated to determine consistency of results of queries and use of any common interface (existing or future) used to provide one-stop access to registration data across all gTLDs and registrars/resellers. Specific metrics that should be tracked for any such common interface include:

- ⦿ How often are fields returned blank?
- ⦿ How often is data displayed inconsistently (for the same domain name), overall and per gTLD)?
- ⦿ How often does the tool not return any results, overall and per gTLD)?
- ⦿ What are the causes for the above results?
- ⦿

Findings: The current common interface (whois.icann.org) has no metrics that can be used to determine its effectiveness. It is therefore difficult to determine if effectiveness can and/or needs to be improved and what specific steps would be necessary for such improvement.

Rationale: Metrics and SLAs could be used to address this and also to proactively spot non-compliance or implementation issues that affect the provision of the service.

The significance of the recommendation can only be appropriately assessed after its implementation as the prevalence of lookup failures is currently unknown. Anecdotal evidence suggests the existence of lookup issues. By generating metrics that will assist in recognizing systemic issues or noncompliance, the recommendation aligns well with ICANN's Strategic Plan and Mission as it helps foster a healthy, resilient and secure identifier ecosystem. The recommendation is in compliance with scope Review Team set

Impact of Recommendation: This recommendation will impact WHOIS service SLAs and data accessibility by identifying potential issues with service delivery by contracted parties. ICANN compliance will be impacted by receiving an additional tool to verify compliance with contractual service levels. Users of the WHOIS service will be positively impact by reductions in lookup failures as a result of appropriate use of these metrics.

Feasibility of Recommendation: The RT believes this recommendation is feasible as basic log data for analysis is already being collected and generation of metrics from this data should not create a significant operational or technical impact.

Implementation:

Initially, the ICANN community should define (by public comment or other mechanisms) what metrics should be tracked. Based on this determination ICANN org should analyze whether the logs currently generated for the service provide sufficient data for these metrics, and if necessary (and legally possible) expand the logs generated. Building upon the logs, ICANN should create the recommended metrics in regular intervals for analysis by ICANN compliance to allow them to proactively investigate failure causes and - if possible – create or suggest remedies.

Priority: This recommendation has a low priority and should be implemented by existing teams.

Level of Consensus: No F2F3 objections

Recommendation R11.2:

The ICANN Board should direct the ICANN Organization to continue to maintain the common interface to keep up to date with new policy developments or contractual changes for contracted parties to ensure that the common interface will display all publicly-available WHOIS output for each gTLD domain name registration available from contracted parties, i.e., both the registry and registrar WHOIS output port 43 could be shown in parallel.

Findings: As noted above, registry and registrar interpretations of GDPR and the differential requirements for registries and registrars under the Temporary Specification, RDS lookups at registries and registrars may result in different registration data returned by WHOIS for the same domain name depending on where the lookup is performed.

Rationale: The common interface must be maintained to adapt to such changes, to ensure that it continue to display all publicly-available WHOIS output regardless of which source is more complete or more authoritative.

Impact of Recommendation: A display of divergent results between registry and registrar may cause some level of confusion in users, but ultimately having more complete information available will benefit the users of the common interface.

Feasibility of Recommendation: This recommendation will need to be assessed for compliance with applicable laws.

Implementation: This recommendation can be directly implemented by ICANN after the legal assessment is completed

Priority: This recommendation has a high priority and should be implemented by the existing teams for the maintenance of the common interface.

Level of Consensus: No F2F3 objections

1.1.6 Possible impact of GDPR and other applicable laws

GDPR and other applicable laws may result in legal issues for ICANN with regard to the public display of personal information through its common interface portal. As described above, certain impacts, such as inconsistent results from registries and registrars already exist. This underlines the necessity for ICANN to keep abreast of current and future legal and technical requirements and keep the common portal usable for its users

