Public Comment Summary Report

Universal Acceptance Roadmap for Domain Name Registry and Registrar Systems

Open for Submissions Date:
Wednesday, 31 August 2022

Closed for Submissions Date:
Monday, 31 October 2022 (extended from 17 October 2022)

Summary Report Due Date:
Monday, 14 November 2022 (extended from 26 October 2022)

Category: Technical

Requester: ICANN org

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Open Proceeding Link:
https://www.icann.org/en/public-comment/proceeding/universal-acceptance-roadmap-for-domain-name-registry-and-registrar-systems-31-08-2022

Outcome:
ICANN org received multiple comments from various organizations on the significance and content of the report published. Comments noted the significance of the study, appreciated the detailed testing results provided in the appendices of the study, and provided some detailed input on the content of the report. Input on additional follow up work was also provided. ICANN org will update the report based on the feedback on the content and consider additional topics suggested, including studies on Internationalized Domain Name (IDN) variants and Universal Acceptance impact of security applications, for follow up work.

Section 1: What We Received Input On

The Universal Acceptance (UA) Roadmap for Domain Name Registry and Registrar Systems proposed how to test these systems for UA-readiness, based on the Universal Acceptance Readiness Framework. A registry and a registrar system were tested, and the results were reported in appendices. The study was published for review and feedback by the relevant technical community.

Section 2: Submissions

Organizations and Groups:

Name	Submitted by	Initials
Internet Service Providers and Connectivity Providers Constituency	Christian Dawson	ISPCP
Business Constituency	Business Constituency	BC
Registries Stakeholder Group	Registries Stakeholder Group	RySG
Registrar Stakeholder Group	Zoe Bonython	RrSG
Internet Infrastructure Coalition	Internet Infrastructure Coalition	I2C
At-Large Advisory Committee	ICANN Policy Staff in support of the At-Large Community	ALAC
Cross-Community Working Party on ICANN and Human Rights (CCWP-HR)	Cross-Community Working Party on ICANN and Human Rights (CCWP-HR)	CCWP-HR

Section 3: Summary of Submissions

Submission 1 (ISPCP):
ISPCP believes that the effort undertaken in these reports is strong and good for both Registry and Registrar efforts around UA.

Submission 2 (BC):
The BC supports the Roadmap, with two further suggestions for testing plans.

Submission 3 (RySG):
The Registries Stakeholder Group (RySG) appreciates the opportunity to comment on the UA Roadmap for Domain Name Registry and Registrar Systems and recognizes the amount of work by ICANN Staff and the consultants involved in developing this Roadmap and in executing the testing effort. The RySG believes that the work would have benefitted from earlier consultation with a broader cross-section of CPH technologists and deeper collaboration between ICANN Staff and the Contracted Party House (CPH) technical experts, especially with regard to reviewing the illustrative registry and registrar architectures that were used to produce this roadmap.

The RySG provides feedback with regard to the inclusion in the study of corporate web and email, the assumption of interactions between Registry and Registrant, extending the scope to internal registry interfaces, and other issues.

Submission 4 (RrSG):
The Registrar Stakeholder Group (RrSG) welcomes the opportunity to provide feedback regarding the Universal Acceptance Roadmap for Domain Name Registry and Registrar Systems. The RrSG would like to thank ICANN org staff and third-party consultants for their

considerable work involved in preparing and testing this universal acceptance (UA) roadmap and notes that this does not translate into additional obligations from the registrars.

Submission 5 (i2C):
The Internet Infrastructure Coalition is supportive of the work being done with regards to Universal Acceptance and hopes that similar roadmaps will be built for other parts of the ecosystem, outside of the root zone.

Submission 6 (ALAC):
The ALAC believes that the Roadmap will highlight the issue of UA compliance within the registry and registrar communities, and will assist the community to achieve compliance.

However, there are a few areas where the ALAC believes the Roadmap could be improved, including work on Internationalized Domain Name (IDN) variants, discussion on the role of resellers, and taking into account the continuing changes to access mechanisms for registration data.

Submission 7(CCWP-HR):
CCWP-HR welcomes the work of ICANN to release the document in line with Workstream 2 Recommendations on ICANN Transparency. The roadmap provides a study that can serve as a proof of concept to ensure that there is a clear, consistent approach with clear procedures and requirements for Registrars to ensure universal acceptance in their infrastructure, systems, and applications. Their analysis shows that, primarily, the document is a good first step in ensuring that the Internet is more inclusive, especially for communities that use non-Roman scripts and people who do not speak English.

CCWP-HR implores ICANN to consider the comments and recommendations provided, which would ensure that universal acceptance is implemented more closely with international law and best practices.

Section 4: Analysis of Submissions
This section provides an analysis of the submissions along with rationales for any recommendations from the ICANN organization.

Submission 1 (ISPCP):
Comment #1: … we are generally supportive of the efforts made within this study and, in particular: 1. Appendix A: Registry Testing 2. Appendix B: Registrar Testing

Response: Thank you for the support. As such systems can vary considerably in different implementations, it should be noted that the report presents some examples of testing and does not represent a full set of possible test cases.

Comment #2: …we seek to discuss IDN variants. We understand that IDN variants are not considered in this study. This needs to be clear to those who are following this roadmap.

Response: As noted in the report, IDN Variants were not considered, but some text was provided to help guide for those who want to start planning the support. A follow up study may be done focusing on IDN Variants after the relevant policies are confirmed by the community.

Comment #3: …we feel security as it relates to IDNs and UA would be a valuable topic of discussion. We note that the methodology used in this document is both robust and measurable, and security applications would add undesired complexity. However, DNS-based firewalls, URL filtering, and tools of this ilk rely, in part, on DNS for validation. We see opportunities for IDNs to be mishandled or ignored by security vendors that may choose to ignore UA as a priority. Operators, for example, could choose to ignore entire IDN-based TLDs.

Response: While the report is targeting the development of the registry and registrar platforms and related services, the security perspective as described is also a good topic to investigate. ICANN org will coordinate with UA Steering Group on prioritizing and planning the work as a separate study.

Submission 2 (BC):

Comment #1: Break down the UA-readiness testing plan into categories of completion. If a registrar completes these 5 tests they can be classified as 60% ready, if they complete another 5 then 80% ready, and if they clear these additional 5 then they are classified as 100% ready. A similar provision can also be made for Registries."

Response: While the proposal has merits for identifying fully UA-ready systems, doing such conformance test plan is by itself a separate project. Such work was not in the scope of the current study.

Comment #2: Add provisions for SSAD/SSAD Light/WHOIS Disclosure System as part of the testing framework. The document currently contains test cases only for Extensible Provisioning Protocol (EPP), WHOIS and Registration Data Access Protocol (RDAP). Given that ICANN is working on SSAD/SSAD Light/WHOIS Disclosure System, there should be a test plan anticipated for universal acceptance of domain names and email addresses. it will be helpful to have this case in the document, even if only as a placeholder, so that test cases are developed when SSAD technical details become available.

Response: While the SSAD/WHOIS Disclosure System will have UA-readiness considerations, the project work is ongoing at this time to make proper recommendations. This could be looked at when the project has progressed further.

Submission 3 (RySG):

The RySG comments are labelled and numbered as they appear in the RySG document, to ease the mapping of the response to the comments.

Comment #0 (Introduction): … collaboration between ICANN Staff and the Contracted Party House (CPH) technical experts and the overall effort would have benefited from earlier consultation with a broader cross-section of CPH technologists

Response: ICANN Staff connected with RySG during the Contracted Parties (CP) Summit in November 2022 to discuss the mechanism for connecting earlier, for the future studies, and how to bring further input from CPH technical people to this work. ICANN staff will follow up with RySG further.

Item #1: Text engages in mild over-reach related to ccTLDs

Response: The report will use the text suggested by RySG.

Item #2: Unsupported scope expansion to corporate web and email

Response: The intent was to provide all possible control points that may be encountered by the registry or registrar systems. The text will be updated to suggest this as an optional scope item, as suggested by RySG.

Item #3: Unidentified/missing reference

Response: The reference will be updated appropriately.

Issue: Language introduces ambiguity regarding implementation flexibility

Response: The report will use the text suggested by RySG.

Item #4: Assumption of interactions between Registry and Registrant

Response: Similar to item #2, the intent was to provide all possible control points that may be encountered. The report will use the text suggested by RySG.

Item #5: Scope extends to internal registry interfaces

Response: Similar to item #2, the intent was to provide all possible control points that may be encountered. The report will use the text suggested by RySG.

Item #6: Unsupported and potentially confusing statements about unstandardized registry API interfaces.

Response: Clarification will be added that this was not about requirements for Contracted Parties.

Item #7: Exports and Reports contains unnecessarily normative language

Response: The report will use the text suggested by RySG.

Item #8 Missing precision in description of verification steps

Response: The UA Roadmap report will be updated to align with the steps discussed in UASG026.

Item #9: Unsupported implications regarding EPP futures

Response: The intent was to make the reader aware of some developments in IETF regarding this issue. The report will use the suggested text.

Item #10: Potentially confusing statements about IDN variant labels

Response: The report will use the text suggested by RySG.

Item #11: Precision with respect to Root Zone Label Generation Ruleset

Response: The report will be updated by adding the footnote suggested by RySG.

Item #12: Missing external interactions

Response: As stated in the report, the architecture drawings were kept generic on purpose, as there can be variation on architecture of different systems. The tables will be updated as suggested by RySG.

Submission 4 (RrSG):
Comment #1: It is the understanding of the RrSG that the UA roadmap does not place obligations on any contracted parties, but serves the purposes of raising awareness of UA and to assist contracted parties with becoming UA-ready and will not result in eventual contractual obligations.

Response: Yes, the purpose of the report is to raise awareness, to assist relevant parties and to provide a possible technical direction, but not to propose obligations on contracted parties.

Submission 5 (i2C):
Development of additional roadmaps will be considered based on the community need and input. Current suggestions by i2C are noted.

Submission 6 (ALAC):
Comment #1: The report has chosen not to consider the issue of Internationalized Domain Name (IDN) variants, presumably as the policy for delegating top-level variants (as well as for harmonizing policies on IDN variants at the second level) is being created as we speak.

Response: As noted in the report, IDN Variants were not considered, but some text was provided to help guide for those who want to start planning the support. A follow up study may be done focusing on IDN Variants after the relevant policies are confirmed by the community.

Comment #2: The report does not mention the role of resellers. Given that the role of resellers is important, and they need to be UA-ready as well, an analysis of their operations and software use--such as standalone software or API-integration to registrars--would enhance the completeness of the report.

Response: The report was intended for registries and registrars. While resellers play an important role in domain registration and management, the resellers are out of scope of this study. Nevertheless, many resellers have a similar infrastructure as registrars and can therefore take the registrar tests as a blueprint to adjust to the peculiarities of their systems.

Comment #3: The report also does not take into account the continuing changes to the access mechanisms for registration data, although it does mention WHOIS and Registration Data Access Protocol (RDAP). An analysis of the impact of regulatory frameworks such as the General Data Protection Regulation (GDPR) and its possible impact on UA Readiness of Registries and Registrars would also be useful.

Response: Pursuant to the Interim Registration Data Policy for gTLDs, which provides that the contracted parties must continue to implement measures consistent with the Temporary Specification for gTLD Registration Data, much of the registrant contact data (e.g. registrant name, postal address, email address, telephone number) may be redacted from public Registration Data Directory Services. This is in response to requirements under applicable data protection laws, such as the GDPR, concerning the processing of personal data within registration data. As the data is redacted, there is no adverse effect on UA-readiness.

Submission 7 (CCWP-HR):

Comment #1: While we welcome the study, we recommend that the study clearly recommends that registries and registrars should publish policies setting out the implementation of universal acceptance.

Response: The purpose of the report is to raise awareness, to assist relevant parties and to provide a possible technical direction, but not to propose obligations on contracted parties. Please also see the comment by RrSG.

Comment #2: Furthermore, the study should set out clear metrics by which registries and registrars should assess and evaluate their implementation of Universal Acceptance.

Response: The aim of the current work was to provide guidance to parties on supporting UA. Defining metrics or a conformance test plan for UA was not in the scope of current work. Developing metrics would require separate follow-up work, if needed by the community.

Comment #3: Finally, the study can set recommendations for registries and registrars to regularly disclose to ICANN their progress toward achieving universal acceptance as set out in this roadmap.

Response: Such a recommendation is out-of-scope of this study as the current study does not aim to set any obligations on the contracted parties but only share the technical roadmap in case they choose to become UA-ready.

Section 5: Next Steps

Based on the comments received, ICANN will update and publish the report. In addition, ICANN staff will connect to RySG to check the possibility to bring CPH technical teams into the discussion on the UA Roadmap. ICANN staff will also investigate the need for a new version of the report in the future, or additional studies, based on the new topics suggested for UA, such as IDN Variants, Roadmap for ISPs, SSAD/WHOIS Disclosure system, and security and firewalls.