Public Comment Summary Report

Name Collision Analysis Project (NCAP) Study 2 Documents

Open for Submissions Date:
Thursday, 27 January 2022

Closed for Submissions Date:
Friday, 18 March 2022

Summary Report Due Date:
Monday, 4 April 2022

Category: Technical

Requester: Other

ICANN org Contact(s): jennifer.bryce@icann.org


Outcome:
The NCAP Discussion Group thanks the contributors for their thoughtful inputs to this Public Comment proceeding. The NCAP Discussion Group will consider and incorporate the input as it continues its work and develops the draft NCAP Study 2 report. The NCAP Discussion Group’s response to each comment and changes to the documents published in this proceeding will be recorded and published as part of the draft NCAP Study 2 report.

Section 1: What We Received Input On
The NCAP Discussion Group sought input on two draft work products that contribute to the NCAP Study 2 goals to understand how measurements taken at various layers of the DNS hierarchy convey the impact of name collisions, and to understand the impact of name collisions:

● A Perspective Study of DNS Queries for Non-Existent Top-Level Domains: This study aims to understand the distribution of DNS name collision traffic throughout the DNS hierarchy and provide insights into where and how DNS data can be collected and assessed.
● Case Study of Collision Strings: Case studies of .corp, .home, .mail, .internal, .lan, and .local using DNS query data from A and J root servers. The case studies highlight changes over time of the properties of DNS queries and traffic alterations as a result of DNS evolution.
Section 2: Submissions

Organizations and Groups:

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<th>Name</th>
<th>Submitted by</th>
<th>Initials</th>
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<tr>
<td>ICANN Organization Office of the Chief Technology Officer (OCTO)</td>
<td>Matt Larson</td>
<td>OCTO</td>
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<tr>
<td>Internet Service Providers and Connectivity Providers Constituency (ISPCP)</td>
<td>Christian Dawson</td>
<td>ISPCP</td>
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<td>Registries Stakeholder Group (RySG)</td>
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Individuals:

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Section 3: Summary of Submissions

There were three submissions to this Public Comment proceeding, from ICANN org’s Office of the Chief Technology Officer (OCTO), the Internet Service Providers and Connectivity Providers Constituency (ISPCP), and the Registries Stakeholder Group (RySG). For the purpose of this summary, key themes from each of the comments are highlighted below.

OCTO cites some concerns with the documents published in the Public Comment proceeding and suggests several areas in which the documents should be revised. These include:

- OCTO suggests that, if it was the NCAP Discussion Group’s intention for the documents to relate to the NCAP Study 2 goal of understanding the root cause of name collisions, the NCAP Discussion Group should revise both documents to explicitly describe how they relate. At present, OCTO notes the documents do not appear to be related to understanding the root cause of most name collisions.

- OCTO notes several areas in the documents published for Public Comment in which the NCAP Discussion Group presents findings but does not provide quantitative analysis of such findings. For example, OCTO notes that the Case Study “shows an increasing volume of queries for undelegated TLDs over time, but does not quantify any significant impact of this increased volume on the root server system (RSS)... The document should be revised to specify which, if any, of these increases has a significant impact on the RSS, on end users, or on resolvers, by showing the significance.”

- OCTO believes that both documents published in the Public Comment proceeding “contain numerous conclusions that are not supported by the data reported in the documents.” As such, OCTO encourages the NCAP Discussion Group to revise the documents to “ensure that all the stated conclusions are supported by the data included in the documents.”

ISPCP “encourage[s] the NCAP team to take as collaborative approach as possible in seeking to definitively address the goals of NCAP Study 2. It is important to look beyond the Case Studies listed, and to learn from the experiences of those who operate the DNS root and related
resolvers. OCTO and the ICANN contracted parties should be advised, as should the ISPs who represent the world’s largest and most trafficked DNS resolvers."

**RySG** “supports retaining controlled interruption, recognising it is an effective tool for identifying name collisions. The RySG encourages the NCAP Discussion Group, and ultimately the Board, to resist the urge to let perfect be the enemy of the good by adding unnecessary complexity to controlled interruption procedures and creating a new process. The RySG is supportive of the NCAP Discussion Group continuing with the hypothesis that ‘controlled interruption is effective’ based on the data.”

**Section 4: Analysis of Submissions**
Of the three submissions to this Public Comment proceeding, only the submission from OCTO suggested specific amendments to the documents, as summarized in ‘Section 3: Summary of Submissions’. ISPCP and RySG do not provide specific comments on the text of the documents but provide high-level comments regarding the NCAP Discussion Group’s approach.

**Section 5: Next Steps**
The NCAP Discussion Group will consider and incorporate the input received during this Public Comment proceeding as it continues its work and develops the draft NCAP Study 2 report. The NCAP Discussion Group will also make specific updates to the documents published in this proceeding as appropriate, to be published as appendices to the draft NCAP Study 2 report.