

At-Large Workspace: Name Collision Analysis Project (NCAP) Study 1

Public Comment Close	Statement Name	Status	Assignee (s)	Call for Comments Open	Call for Comments Close	Vote Open	Vote Close	Date of Submission	Staff Contact and Email	Statement Number
31 March 2020	Name Collision Analysis Project (NCAP) Study 1	<div>ADOPTED</div> <div>14Y, 0N, 0A</div>	Drafting team volunteer(s): Justine Chew Gregory Shatan			31 March 2020	03 April 2020	31 March 2020	Roy Arends roy.arends@icann.org	AL-ALAC-ST-0320-04-01-EN

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Brief Overview

Purpose: This Public Comment proceeding seeks input on the draft Name Collision Analysis Project (NCAP) Study 1 report produced by the Office of the CTO.

Current Status:

The report presents the findings for Study 1 of the Name Collision Analysis Project (NCAP). The purpose and scope of Study 1 were defined in a [July 2019 Request for Proposal](#) (RFP). This draft of the report addresses the first two goals of Study 1, as stated in the RFP:

1. "Production of a summary report on the topic of name collision that brings forth important knowledge from prior work in the area. The report will be a primer for those new to the subject. The report will be based on an examination of all relevant prior work on the issue of name collisions."
2. "Creation of a list of datasets used in past name collision studies; an identification of gaps, if any; and creation of a list of additional data sets that would be required to successfully complete Studies 2 and 3."

This draft of the report contains the following sections addressing tasks from the RFP:

- a name collision primer (task 2a)
- a review of pertinent previous work (tasks 1 and 2c)
- evidence of harm caused by name collisions (task 2b)
- mitigation techniques and their technical impact (task 2d)
- an initial list of data sets that would be needed for Studies 2 and 3 (tasks 3 and 4)

Next Steps:

After the input of the community, this report will be finalized and presented to the ICANN Board.

Section I: Description and Explanation

Name Collision refers to the situation where a name that is defined and used in one namespace may also appear in another. Users and applications intending to use a name in one namespace may actually use it in a different one, and unexpected behavior may result where the intended use of the name is not the same in both namespaces. The circumstances that lead to a name collision could be accidental or malicious.

The ICANN Board asked the ICANN Security and Stability Advisory Committee (SSAC) to study the impact of name collisions and advise the Board on their effects and possible mitigation. In response, SSAC started the NCAP effort and designed Study 1, the first of three name collision studies intended to address the Board's request.

The scope of NCAP Study 1 is larger than usual work undertaken by SSAC, so the ICANN organization's Office of the CTO (OCTO) is facilitating the work and has engaged a contractor to perform Study 1.

The result of Study 1 is a report that the ICANN organization is seeking community input on.

Section II: Background

Study 1 concerns name collisions in the context of top-level domains (TLDs), where the conflicting namespaces are:

- the global Internet Domain Name System (DNS) namespace reflected in the root zone overseen by the Internet Assigned Numbers Authority (IANA) Function; and
- any other namespace, regardless of whether that other namespace is intended for use with the DNS or any other protocol.

On 2 November 2017, the ICANN Board passed [resolutions \(2017.11.02.29 ‐ 2017.11.02.31\)](#) requesting the ICANN Security and Stability Advisory Committee (SSAC) to conduct studies to present data, analysis, and points of view, and provide advice to the Board.

Following the Board resolution, the SSAC began project planning in December 2017 for the work necessary to address the Board's request. In January 2018, the SSAC Name Collision Analysis Project (NCAP) Work Party ("NCAP WP") was formed and prepared a plan calling for three studies. Also created was the NCAP Administration ("NCAP Admin"), a smaller group comprising the NCAP WP leadership and SSAC leadership, which guides the NCAP effort both within SSAC and in the larger ICANN community.

In June 2018, the ICANN organization's CEO, after input from the Board, assigned the ICANN org's Office of the CTO (OCTO) to be responsible for completing the NCAP studies since SSAC does not have the administrative infrastructure to undertake and manage such a large project.

In September 2018, SSAC published "SSAC Proposal for the Name Collision Analysis Project", which proposed three consecutive studies to address the Board's request. OCTO proposed minor changes to the proposal and, after discussion between SSAC and OCTO, an updated version of the proposal was published in February 2019.

In April 2019, the NCAP Discussion Group ("NCAP DG") was formed to allow interested members of the larger ICANN community to also participate in the NCAP project. This group consists of both the SSAC NCAP WP and any interested community members.

Because of resource constraints, OCTO has outsourced the completion of Study 1 to a contractor; The contractor was engaged by and has reported to OCTO, and also has had periodic interaction with the NCAP DG.

The result of this work is presented in this Public Comment.

Section III: Relevant Resources

[Draft Name Collision Analysis Project \(NCAP\) Study 1 Report](#)

ICANN Board resolutions (2017.11.02.29 ‐ 2017.11.02.31): <https://www.icann.org/resources/board-material/resolutions-2019-03-14-en#2.h.1>

NCAP Study 1 RFP: <https://www.icann.org/news/announcement-2019-07-22-en>

Section IV: Additional Information

Section V: Reports

FINAL VERSION SUBMITTED (IF RATIFIED)

The final version to be submitted, if the draft is ratified, will be placed here by upon completion of the vote.



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FINAL DRAFT VERSION TO BE VOTED UPON BY THE ALAC

The final draft version to be voted upon by the ALAC will be placed here before the vote is to begin.



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DRAFT SUBMITTED FOR DISCUSSION

The first draft submitted will be placed here before the call for comments begins. The Draft should be preceded by the name of the person submitting the draft and the date/time. If, during the discussion, the draft is revised, the older version(S) should be left in place and the new version along with a header line identifying the drafter and date/time should be placed above the older version(s), separated by a Horizontal Rule (available + Insert More Content control).

The ALAC thanks OCTO, NCAP WP members and NCAP DG members in driving, overseeing and commenting on the work that has been undertaken in producing this NCAP Study 1 Report, and we acknowledge the report as useful primer on the subject of Name Collisions. We look forward to further deliberation by the relevant groups and their onward action with respect to the third goal of Study 1, which is to determine if the NCAP Project will proceed onto a Study 2.