

In [resolutions](#) (2017.11.02.29 - 2017.11.02.31) the Board requests the ICANN Security and Stability Advisory Committee (SSAC) conduct studies to present data, analysis and points of view, and provide advice to the Board on the topics around DNS name collision. In response, SSAC formed the Name Collision Analysis Project. This project is organized into three studies. The [first study](#), which provided a primer on the topic of name collision and a list of datasets that either existed at the time of the study or would need to be generated to support further analysis, was finalized on 19 June 2020 after submission to the Board and a public consultation period.

The second study, with a somewhat revised scope as described in "SSAC2021-02: Revised Study Two Proposal for the Name Collision Analysis Project," focuses on four key areas:

- Perform a study of ICANN Collision Reports.
- Perform an Impact and Data Sensitivity Analysis with respect to name collisions.
- Respond to Board Questions relating to Study Two.
- Produce a final report on Study Two

This [document| section of a larger document] addresses the board questions identified in resolution 2017.11.02.30:

*(1) a proper definition for name collision and the underlying reasons why strings that manifest name collisions are so heavily used;*

*(2) the role that negative answers currently returned from queries to the root for these strings play in the experience of the end user, including in the operation of existing end systems;*

*(3) the harm to existing users that may occur if Collision Strings were to be delegated, including harm due to end systems no longer receiving a negative response and additional potential harm if the delegated registry accidentally or purposely exploited subsequent queries from these end systems, and any other types of harm;*

*(4) possible courses of action that might mitigate harm;*

*(5) factors that affect potential success of the courses of actions to mitigate harm;*

*(6) potential residual risks of delegating Collision Strings even after taking actions to mitigate harm;*

*(7) suggested criteria for determining whether an undelegated string should be considered a string that manifest name collisions, (i.e.) placed in the category of a Collision String;*

*(8) suggested criteria for determining whether a Collision String should not be delegated, and suggested criteria for determining how remove an undelegated string from the list of Collision Strings; and*

*(9) measures to protect against intentional or unintentional creation of situations, such as queries for undelegated strings, which might cause such strings to be placed in a Collision String category, and research into risk of possible negative effects, if any, of creation of such a collision string list.*

Regarding the question of "harm," the study group focused on the potential for harm. The connotation of "harm" may include numerous things, from cybersecurity risks to reputational damage to physical impacts, making it difficult to appropriately apply scale and context to this otherwise broad term within the scope of name collisions. Real-world, demonstrable harm has been difficult to identify due to the limitations in both available data and the lack of clarity around the definition of harm. Where the study group found evidence of actual, clear harm, we have called that out specifically.

The responses to the board questions are not intended to address (a) the probability of an end user being harmed in any of these manners, (b) the frequency with which these harms would occur, (c) the degree of harm (if any) that could be incurred by any particular end user, (d) whether the existing end system's intended to exploit negative answers in designing its systems, nor (e) whether such harm could be avoided or mitigated in ways other than refusing to delegate strings. Instead, we have focused on offering information that will help the board with their decisions regarding domains on, or even yet to be added, to the collision string list.

Throughout the NCAP study efforts, the study group has considered collisions at level below the TLD level and alternate roots as out of scope.