Registries Stakeholder Group Statement

Name Collision IPv6 Research Study

Date statement submitted: 22 December 2025

(this is a copy of the comment submitted via the ICANN public comment platform)

Reference url:
https://www.icann.org/en/public-comment/proceeding/name-collision-ipv6-research-study-20-10-2025

Background[1]

ICANN org seeks input on the Controlled Interruption IPv6 Research Study Summary Report, which proposes the use of ffff::127.0.53.53 in the AAAA record for future controlled interruption activities.

Controlled interruption is a phase in the establishment of a new generic top-level domain (gTLD) that is designed to reduce the risk of name collision. During controlled interruption, certain DNS resource records, designed to interrupt resolution processes, are temporarily published at and below the gTLD name. The content of these DNS records is intended to minimize any harm that arises from such interruption.

When the concept of controlled interruption was developed in 2014, no suitable equivalent address could be found for IPv6-enabled hosts. A research study has been performed to identify one or more IPv6 candidate prefixes that may be suitable for use during controlled Interruption.

Documents

- Controlled Interruption IPv6 Research Study Summary Report (pdf, 152.82 KB)
- ICANN Controlled Interruption IPv6 Research Study - Report 2 (pdf, 718.2 KB)
- ICANN Controlled Interruption IPv6 Research Study - Report 1 (pdf, 492.08 KB)

Related RySG comments

- RySG comment on the Draft NCAP Study 2 Report and Responses to Questions Regarding Name Collisions (February 2024)

Registries Stakeholder Group (RySG) comment

The gTLD Registry Stakeholder Group (RySG) acknowledges and appreciates the Name Collision IPv6 Research Study undertaken by ICANN. The Summary Report notes, and the RySG agrees that the need for an IPv6 Controlled Interruption methodology has increased substantially since the 2012 Round of New gTLDs since the deployment and use of IPv6 has increased substantially since that time.

[1] Background: intended to give a brief context for the comment and to highlight what is most relevant for RO's in the subject document – it is not a summary of the subject document.

Unfortunately, the Summary Report does not provide context for how this proposal will be implemented and its impact on the Name Collision Framework as specified by the Name Collision Analysis Project Study 2 Report (NCAP). Specifically, is the only change to be that the proposed candidate will be added to the IPv4 Controlled Interruption step? Or, will there be other changes to the Framework and process specified?

The NCAP Report carefully explained the process the NCAP Study Group found was necessary. The NCAP Report also noted that evolution of the process was likely and would need to be accommodated. The RySG requests that ICANN investigate the impact on the NCAP Report and propose an implementation plan to be reviewed by the community, similar to how it has approached the review of this research study.

Pending the review of the implementation plan, the RySG agrees that, based on the results of the research studies, the use of Candidate 1 (ffff::127.0.53.53) (also represented as (::ffff:7f00:3535)) as the AAAA record in the next round of Controlled Interruption activities is a good choice.