

Reserved Interface Identifiers

draft-krishnan-ipv6-reserved-iids-02.txt

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Background

- Certain IIDs have been reserved for use in predefined applications and contexts
- Reusing these identifiers can cause two classes of issues
 - The node who mistakenly configures an address with such an IID will be flooded with requests that it cannot serve
 - Another node on the link that wants this service might give up because of this. E.g. an MN looking for a home agent
- Should avoid using these interface identifiers for both stateless autoconfig and DHCPv6 addresses

Possible solutions

- Add a normative reference to each specification that reserves an interface identifier.
 - Does not scale very well since the reserved IIDs may be defined in multiple RFCs
 - Trouble keeping the referring documents up-to-date
 - The reserving document may be at a lower standards maturity level than the referring document (downref issue)
- Create an IANA registry to list the reserved IIDs such that all documents can reference them
 - This is the recommended solution
 - Easy for all new drafts to look at one location

Open issues

- Cannot do anything about malicious use of these reserved IIDs
- Cannot enforce compliance from existing implementations
 - Still a good idea for new implementations and implementations in the process of being updated
- Need to identify the affected RFCs and inform authors

Conclusion

- Questions?
- Way forward
 - Adopt as wg item?
 - Proceed as individual submission