# draft-troan-v6ops-6to4-to-historic-01 @IETF80

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# Issues with 6to4

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| Outbound Black Hole |
| Inbound Black Hole |
| No Return Relay |
| Large RTT |
| PMTUD failure |
| Reverse DNS failure |
| Bogus Address Failure |
| Faulty 6to4 Implementations |
| Difficult Fault Diagnosis |

Properties: Internet-wide tunnel. Requires forward and reverse path relays for 6to4 to native connections.
Requires a globally routed IPv4 address. Does not traverse NAT, does not work with A+P or other shared address scenarios.

# Summary

- Proposal:
  - RFC3056 and RFC3068 to historic
- Guidance to implementers:
  - If the implementation continues to support 6to4, then the 6to4 functionality MUST NOT be enabled by default.
  - If the implementation continues to support 6to4, then the Source Address Selection algorithm [RFC3484] MUST use a 6to4 address as a last resort. I.e. only use it the node has no other means of IPv6 connectivity and the destination is IPv6 only.

# RFC2026, 4.2.4 Historic

"A specification that has been superseded by a more recent specification or is for any other reason considered to be obsolete is assigned to the "Historic" level.  (Purists have suggested that the word should be "Historical"; however, at this point the use of "Historic" is historical.)"

# RFC2026, section 6.2 Advancing in the Standards Track

"When a standards-track specification has not reached the Internet Standard level but has remained at the same maturity level for twenty-four (24) months, and every twelve (12) months thereafter until the status is changed, the IESG shall review the viability of the standardization effort responsible for that specification and the usefulness of the technology. Following each such review, the IESG shall approve termination or continuation of the development effort, at the same time the IESG shall decide to maintain the specification at the same maturity level or to move it to Historic status.  This decision shall be communicated to the IETF by electronic mail to the IETF Announce mailing list to allow the Internet community an opportunity to comment. This provision is not intended to threaten a legitimate and active Working Group effort, but rather to provide an adminis trative mechanism for terminating a moribund effort."

# RFC2026, section 6.4 Retiring a Standard

"As the technology changes and matures, it is possible for a new Standard specification to be so clearly superior technically that one or more existing standards track specifications for the same function should be retired.  In this case, or when it is felt for some other reason that an existing standards track specification should be retired, the IESG shall approve a change of status of the old specification(s) to Historic.  This recommendation shall be issued with the same Last-Call and notification procedures used for any other standards action.  A request to retire an existing standard can originate from a Working Group, an Area Director or some other interested party."

# Next: