draft-hollenbeck-regext-epp-delete-bcp

**Best Practices for Deletion of Domain and Host Objects
in the Extensible Provisioning Protocol (EPP)**

IETF-118 DNSOP and REGEXT Working Groups

Goals

- Explain the recommendations of RFCs 5731 and 5732 regarding host and domain object deletion

- Prescribe known and possible practices for object deletion to reduce the risk of DNS resolution failure and to ensure data consistency

- Describe "best" practices for community consideration

Problem

- RFCs 5731 and 5732 state that domains SHOULD NOT be deleted if they are associated with subordinate host objects (e.g., deleteme.example and ns1.deleteme.example) and that host objects SHOULD NOT be deleted if they are associated with dependent domain objects (e.g., dependent.example with NS record ns1.deleteme.example).

- If deleteme.example and dependent.example have different sponsoring registrars, then deleteme.example's registrar cannot update dependent.example to disassociate it.

- In order to delete deleteme.example, its sponsoring registrar will typically rename ns1.deleteme.example to an external "sacrificial nameserver" to maintain consistency among objects managed by the registry. Renaming to presumed non-existent hosts has created domain hijacking vulnerabilities (e.g., if dependent.example's NS record becomes ns1.does-not-exist.**example2**, then a malicious actor may register does-not-exist.**example2** and hijack dependent.example).

- deleteme.example may have dozens of subordinate host objects and thousands of dependent domains sponsored by a variety of registrars.

Changes in v01

- Added Gautam Akiwate as co-author
- Reorganized to list various practices with pro and con lists
- Expanded concerns around use of as112.arpa
- Added section on explicit delete with restore capability
- Added section on narrow vs. wide glue policy
- Best practice recommendations section is TBD

Help!

- This issue has both DNSOP (delegation management) and REGEXT (delete processing) aspects

- Is one WG a better home for this than the other?

- We need help identifying what we as a community think are the "best" practices

- We need help identifying any practices, benefits, or detriments we missed