Establishing Local DNS Authority in Split-Horizon Environments

draft-ietf-add-split-horizon-authority-06

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Update Summary

- Address all comments except one from WGLC review
- Addressed comment from DHCP review
DHCP Review

• If the DHCP authentication option exceeds the maximum DHCPv4 option size, the long-options mechanism (RFC3396) needs to be used.
  - Long-options mechanism is supported in most DHCP implementations.
Other comments from the WG

- To claim the entire parent zone, the claimed subdomain will be represented as an asterisk symbol "*".

```
{
  "identifier": "pvd.example.com",
  "expires": "2025-05-23T06:00:00Z",
  "prefixes": ["2001:db8:1::/48", "2001:db8:4::/48"],
  "splitDnsClaims": [{
    "resolver": "dns.example.net",
    "parent": "example.com",
    "subdomains": ["*"],
    "algorithm": "SHA384",
    "salt": "abc...123"
  }]
}
```
Other comments from the WG

• For interoperability purposes, implementations MUST support the "mandatory to implement" hash algorithms defined in Section 2.2.3 of Message Digest for DNS Zones [RFC8976].
  ▪ SHA-384 (MUST) and SHA-512 (SHOULD)
Other comments from the WG

• Internal domains be kept in a child zone of the local domain hints advertised by the network to reduce the frequency of changes to verification records.

```json
{
  "identifier": "pvd.example.com",
  "expires": "2025-05-23T06:00:00Z",
  "prefixes": ["2001:db8:1::/48", "2001:db8:4::/48"],
  "splitDnsClaims": [{
    "resolver": "ns1.internal.example.com",
    "parent": "internal.example.com",
    "subdomains": ["* . internal.example.com"],
    "algorithm": "SHA384",
    "salt": "abc...123"
  }]
}
```
Pending comment from the WG

- Expand DNSSEC Section (TODO Ben)
Ready to progress to the next stage after addressing the last pending issue.