In an anycast deployment there may be a reason to create a node in a location where the expected use of a particular site does not warrant the cost of keeping local copies of the zones:

- if a zone is very large, or
- if the anycast cluster serves many zones from which only a few are expected to receive significant traffic.
Create a specification for proxies that act like authoritative DNS servers.
Clear RD bit when forwarding a query
Cache the original TTL, do not reduce the TTL as time goes by
Cache replacement strategy

Modelled after secondary DNS server except applied to a cache: monitor the SOA based on timeout, in response to notify and by looking at SOAs in replies. The cache may try to delay accepting a new SOA and load new hot cache items first.
A proxy with a cache may implement aggressive negative caching.

What about the EDNS Client Subnet Option? Is support needed?
Feedback, Questions?

Contact me at <philip@nlnetlabs.nl>

https://github.com/NLnetLabs/draft-homburg-dnsop-igadp.git