

# Including Additional Records for DNSSD in DNS Push Subscriptions (draft-tlmd-push-dnssd-additional-00)

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# Motivation

- When a DNS Push update indicates that a service is available, the DNS Push client needs to do additional DNS lookups or create additional DNS Push queries in order to get the information required to actually use the service.
  - Additional both latency and work once a DNS service has been selected

# Goal

- This document extends the DNS Push Notification [RFC8765] to specify a way to include additional data specific to DNSSD [RFC6763] in DNS Push subscriptions.
  - Where with mDNS, we generally get all the information we need to actually use a service in the additional section of the same mDNS response that included the list of services, which is not possible with DNS Push as currently defined.

# Gap

- Section 12 of RFC6763 recommends that DNS servers that have support for DNS-SD include all of this information in the additional section of the DNS response.
- However, DNS Push explicitly forbids including responses to a DNS Push subscription with different owner names than the name provided in the original subscription.
  - Well noted that the owner name of a PTR response and that of a SRV response COULD be different in the context of RFC6763

# Proposal

- When sending a DNS Push request, the DNS Push client MAY include a DNS Push Additional Request secondary TLV.
- This TLV indicates to the DNS PUSh server that it should include **relevant** additional records of a specified type, and specifies a limit as to the number of DNS Push responses that can trigger additional data.

# PDU Extension

- A DNS Push Additional Request TLV consists of:
  - **Count** - The number of records matching the original DNS Push query that are allowed to trigger additional data subscriptions.
  - **RRtypes** - One or more RRtypes.
- Whenever a DNS Push subscription is made that includes the DNS Push Additional Request secondary TLV, the DNS Push should include a "additional requests" data structure representing additional DNS Push subscription sets that can be added automatically based on responses to the base subscription.
  - This can have at most the number of entries specified in Count. Each entry is a subscription set.

**QUESTIONS?**

