

# Advertising DNSSD zones using DNSSD

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# Problem

- When a lot of services are advertised, mDNS is expensive
- In order to maintain an accurate list of services, devices must be always listening to multicast

# Proposed Solution

- Advertise availability of zones for service discovery using DNSSD
- If infrastructure registration is possible, do it that way
- If not, use mDNS
- Even though mDNS discovery of DNSSD zones still relies on mDNS, the number of mDNS queries is significantly reduced

# How it works

- Choose a zone that has a name that can't appear in the DNS
- Advertise one zone for each type of service—e.g., SRP dataset, Discovery Proxy link
- Client discovers availability of service and list of zones
- When querying in unspecified zone (or explicitly in one of the advertised zones), client sets up DNS Push connection to one of the servers offering each browsing domain (zone) and queries that zone in addition to (or instead of) mDNS
- Servers are assumed to be using SRP replication where appropriate; Discovery Proxies should all have the same data

# Current Status

- There is an implementation in tvOS
- Current implementation advertises:
  - legacy browsing domains for each advertised zone
  - NS record for each zone
  - mDNS only
- Draft needs to be updated to reflect what we've learned from experience:
  - Probably better to register a DNSSD service instead of NS record/legacy browsing domain
  - One service to advertise is “local Discovery Proxy”; if available, client can turn off mDNS

# Request to WG

- Please review the document
- Please comment
- Please consider adoption