

DNS Push Additional Data

Status update

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Why?

- mDNS tries to send relevant additional data in responses
- DNS Push doesn't provide an equivalent mechanism
- This means that when we are discovering a service, we wind up doing multiple round trips
- We also don't get as much benefit from compression because Push responses are separate

What to do

- Previously we talked about a fairly general mechanism
- This didn't really solve the problem, e.g. for PTR lookups this would be a massive amount of data, and there's no real way to say which we want unless we already know the service instance name
- So: get the service instance name either from a PTR query or because we already know it
 - Do an SRV query and ask for additional data in the response
 - Response includes SRV record, TXT record (same name) all AAAA and/or A records on hostname pointed to by SRV record
 - Response format accommodates this
 - Such a push subscription is implicitly subscribing to changes on all related records, so whenever any of those records change we'd get a new push update

Next Steps

- We need to do a new version of the document
- It's not clear how big a rush there is on this, but we are definitely seeing performance issues on constrained networks, so maybe this is a bit urgent
- No current proposed action for the working group now