

Extensions for Scalable DNS Service Discovery

WGLC draft-ietf-dnssd-hybrid-03

Stuart Cheshire

95th IETF, Buenos Aires, Argentina, April 2016

Working Group Last Call

17th - 31st March

Comments from:

- Tom Pusateri
- Tim Chown
- Ray Hunter
- Ted Lemon
- Markus Stenberg
- Ralph Droms
- Dave Thaler

Tom Pusateri

Clarifications & Additions

Various editorial improvements

Need to state that it is not possible to build NSEC next record relations

Tim Chown

Clarifications & Additions

Various editorial improvements

Need discussion of scalability to campus-size networks

Ray Hunter

Clarifications & Additions

A service that moves to a new link appears as a new service

Multicast queries and replies are never forwarded anywhere

Analogy: Hybrid Proxy is like DNS server, except its data comes from the population of a local link, not a text file

Analogy: It's like phoning a friend and asking them to do a local multicast query for you

Perhaps add ASCII-art diagram showing client, proxy, and responding devices

Ted Lemon (1)

Clarifications & Additions

Shorten Abstract

With current mechanism you have to name every link

- Do we need a “Multicast DNS Link Merging” draft?

Can Hybrid Proxy actively push data via DNS Updates, instead of waiting for a client to ask?

- Protocol is driven by client queries, not service announcements
- In steady state, services are completely silent until a client queries for them

Discussion of rich-text link names

Ted Lemon (2)

Clarifications & Additions

How is domain delegation accomplished?

Mention ULAs

Use TTL=0 for all DNS responses?

Allow resolution of .local names on other links?

Do we need change notifications?

- Is continuous polling okay on enterprise networks?

Don't repeat zone apex discovery algorithm here

SOA should increment on every change

Markus Stenberg

Clarifications & Additions

Multicast Duplication?

- A Proxy on the link can have an up-to-date cache, whereas a remote device may not

TTL limiting?

- Maximum?
- Minimum?

Document disallows having a device actively doing Multicast DNS queries and then pushing up the results using DNS Update

- Maybe that would be a different proposal?

Another request for a “Multicast DNS Link Merging” draft

Ralph Droms

Clarifications & Additions

Clarification on caching behaviour and when queries are issued

- Single Query
 - If have cached answers (or cached negative answer) return that
 - If no relevant cached data, issue local Multicast DNS query
- Query with subscription for change notifications
 - Return any cached answers immediately
 - Issue local Multicast DNS query (including Known Answer list)
 - Return additional results as they become known

Dave Thaler

Clarifications & Additions

Various typographical fixes

Multiple Hybrid Proxies per link for redundancy?

Translate Punycode unicast queries into UTF-8 queries on the multicast side?

Mention potential DoS attack from high rate of bogus queries

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