

What do we need to standardise?

Open discussion
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dnssd standardisation

- We're making progress with the requirements document
 - draft-ietf-dnssd-requirements-01
 - Some further updates likely from previous discussion
- But what is it that we think we need to standardise?
 - What are the component elements of a solution?
 - Not concerned yet with how we break this into I-Ds
 - Would like some initial candidate set of components
- We present some initial thoughts here
 - Which may also point to further requirements tweaks

1: Proxying mDNS/DNS

- We need a mechanism to proxy dns-sd over mDNS to dnssd over unicast DNS
- This might (potentially) be defined in a similar way to a DHCP relay
 - And we (potentially) have Stuart's hybrid proxy on the table
- Need to be able to publish and resolve services
- Not proposing we need a way to proxy (forward) link-local mDNS on one link to another

2: Service discovery zone enumeration

- We use the word 'zone' here in the absence of anything better
 - May or may not have anything to do with a “DNS zone”
 - We don't use the word 'scope' to avoid multicast confusion
 - Any better ideas welcome!
- How do you discover zones that you can use for advertising services or discovering them?
 - Not concerned yet how this is done, rather that it's a necessary element of the solution
- A zone could be based on topology or physical location or organizational group or whatever else
 - Not necessarily aligned with topology

3: Change notification

- Problem is opening a service browse window, there's nothing there, but how soon does a new service appear once available?
 - Changes need to be propagated quickly
 - How do you register changes?
- We will likely lose some immediacy in responses when extending dns-sd
 - Further, does a proxy with a positive answer to a query send the answer immediately, wait and poll for more answers, or both?
- Might consider DNS-LLQ here
 - Expired I-D: draft-sekar-dns-llq-01

4: How to publish to DNS?

- New clients are often not allowed to directly update the DNS
 - Though DHCP clients often can do so, indirectly
 - We need to publish availability of services
- We may need something like the existing I-D on DHCP address registration
 - draft-ietf-dhc-addr-registration-04
 - But for dns-sd
 - And noting DHCPv6 is not universally available

5: interop with other SD protocols

- Outside scope of current dnssd WG charter
 - We do say our dnssd solution must not conflict with other existing SD protocols
- We may want to later define how to proxy some other SD protocol to unicast DNS
 - So we might want to agree now to do nothing consciously to preclude that
 - e.g. UPnP or WS-Discovery to unicast DNS

Sufficient?

- Have we presented an appropriate set of solution components here?
 - Anything missing?
 - Possible API extensions?
- Note: we will need some solution to the naming/labeling problem
 - Andrew Sullivan has contributed well to this, and will talk later this session
 - Naming solutions are outside our charter; documenting the issues we find that need to be solved is