

Well known site local
unicast addresses
to communicate with
recursive DNS servers

draft-ietf-ipv6-dns-discovery-07.txt

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Issues from -06 last call

- Some people just don't like it...
- Choice of terminology “DNS resolver”
- Intended use:
 - Questions about “last resort”
 - Confusion with LLMNR
 - Bootstrapping vs ongoing use
- Overriding the mechanism
- How many well known addresses are needed?
- How to inject host routes?
- SL vs Global

Some people just don't like it...

- Lot of it is a question of taste and assumptions on the relation of stub-resolver to recursive server.
- However, the authors (and the wg at last meeting) think there is enough value to go forward.

Terminology

- DNS resolver refers to a function in the protocol, not to the daemon running.
- We now use the terminology: “recursive DNS server” as suggested.

Intended use (“Last resort”)

- Intended for ongoing use and not just for bootstrapping.
- Intended to populate a stub resolver's list of available recursive servers only if that list is otherwise unpopulated.
- Provides reliability through redundancy using three unicast addresses.

Overriding the mechanism

- Stub resolver implementations MAY be configured by default using those (well-known) addresses.
- Stub resolvers MUST implement mechanisms for overriding this default, for example: manual configuration, L2 mechanisms and/or DHCPv6.

How many well known addresses?

- Important to have more than one
 - When multiple recursive DNS servers actually exists, if one goes down, the system will fail over to the second one quicker than the routing system will converge
- 3 is a compromise complexity vs reliability
- Multiple addresses remove incentives to use anycast addresses

How to inject host routes?

- This is an orthogonal issue to what the hosts do
- Non-exhaustive list of possible options
- Still we want to say something
- Simplified original text

Remaining issue: SL vs Global

- One of the (very) few proposals actually specifying to use SL
- The rationale for SL is (at best) weak
- The reserved prefix in the SL range may conflict with other people's usage of that particular subnetID in the SL range.
- Suggestion (not in -07):
ask IANA to allocate a specific non globally routable (intentionally ambiguous) prefix.

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