

DNS Discovery Update

draft-ietf-ipngwg-dns-discovery-03.txt

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Recap

- Want to be able to get name res config, e.g.:
 - DNS server list
 - Own domain name
 - Suffix search path
 - mDNS enabled flag
- DDDT recommendation was:
 - If no DHCP svr, use DNS: try SRV or TXT, and if that doesn't work then a new record type
- In London
 - Presented strawman using TXT records
 - Got pushback on TXT
 - Also some concern about anycast

Changes since draft -02

- Address change
 - was 1 well-known site-scoped anycast address
 - now 3 well-known site-scoped addresses
 - can be used either as anycast or unicast at admin's option
 - hopefully resolves anycast concerns
- Split into two levels of compliance
- Changed from TXT to a new record type

Level 1 Compliance

- Deployable now, no protocol needed
- Just use defaults, e.g.:
 - DNS Server List = { fec0:0:0:ffff::1, fec0:0:0:ffff::2, fec0:0:0:ffff::3 }
 - assumes other draft reserves SLA=ffff for IANA assignments
 - Own domain name = MAY do a PTR lookup on fec0:0:0:ffff::1 and use domain name in NS record
 - but see next slide
 - Search path = same as today (e.g., computed from own domain name)
 - mDNS enabled = only if no servers respond

Level 2 Compliance

- “CFG” records
 - Basically same as TXT record proposal with “TXT” replaced with “CFG”
 - record syntax may be improved upon in next draft pending DNS expert review
 - If no config received for a given attribute, then just use default
 - Draft still used “.local.arpa” as placeholder
- Post I-D deadline improvement
 - Host just does a CFG query for its own address (i.e., same name as for a PTR query)
 - Admins use wildcard records for site-wide config, and for subnet-specific overrides

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