IETF 102 DNS-SD   TOM PUSATERI

RE-CHARTER THOUGHTS

WI–FI MULTICAST IS NOT DEPENDABLE

▸ From draft-ietf—dnssd-mdns-relay Section 2:

"Note that it is becoming increasingly common for a multicast link to be smaller than its corresponding unicast link. For example it is becoming common to have multiple Wi-Fi Access Points on a shared Ethernet backbone, where the multiple Wi-Fi Access Points and their shared Ethernet backbone form a single unicast link (a single IPv4 subnet, or single IPv6 prefix) but not a single multicast link."

WHAT DOMAIN AM I IN?

▸ Wifi + Cellular confuses domain search

▸ On campus, users want to associate with the campus

▸ location is more important than DHCP domain name

  ▸ traits like bluetooth proximity beacons could help

  ▸ or credentialed domain independent of attached network

CAN I TETHER?

Who are you?

SERVICES ARE PERSONAL

▸ Most services now require authorization

▸ attached network is irrelevant

▸ I want to search for services on the .tompusateri domain

▸ Independent of what network they're on or their location

▸ campuses want to offer different services to student, faculty, or employees but not guests

TODO

▸ DISCOVERY Proxy started as unicast/multicast hybrid

  ▸ still useful in a unicast-only world as a sync point

  ▸ relies on domain name from DHCP, static config, or .local for domain enumeration

▸ DNS-SD clients can operate unicast-only but domain discovery on cellular requires intervention

▸ Need a framework for authorizing users for unique service offerings