mdnsext requirements

draft-lynn-mdnsext-requirements

Kerry Lynn <kerlyn@ieee.org>
Stuart Cheshire <cheshire@apple.com>
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mdnsext requirements

Scalable

Usable

Deployable
Scalable

• Enable DNS-based Service Discovery across lots of links (LoL)
• Suitable for both local (zero-config) and global (little-config) use
• Scalability in terms of:
  – Network traffic
  – CPU and memory requirements on network entities
• Architecture
  – Common terminology/concepts (e.g. many subnets may “map” to a link, many links may “map” to a subnet)
  – Granularity of services available on a server (extend the traditional notion of service?)
Usable

• Zero configuration operation possible but not mandatory. Zero-config is supported by the protocols, but administrative control is also available on networks or in situations where that is desirable (e.g. user opts-in for service to be publicly visible)

• A smooth continuum of operation and experience from local link to site to global, rather than wildly different incompatible modes of operation at different network scales

• User interface (huge flat list is not user friendly)
Deployable

• Incremental deployability (e.g. "islands" of infrastructure-less functionality can be merged)

• Identify what changes to existing network elements will be required, and attempt to minimize those changes (e.g. may be easier to revise the clients)

• Suitable out-of-the box defaults should enable zero-config use on many small- to medium-sized networks, while still allowing for administrative control in networks where that's appropriate
Secure

• Authorization versus authentication (e.g. which services are authorized to advertise?)
• Avoid manual config of every service entry in a directory