

This is not about political or linguistic splintering of the Internet



Limited Domains and Internet Protocols

This is not about DNS

Image:
dreamstime.com

Fact 1: many types of limited domain are appearing

- Home & small office networks
- In-vehicle networks
- Sensor networks
- IoT edge networks
- Enterprise networks
- Data & hosting centres
- etc.

Fact 2: limited domain technologies are appearing

- Differentiated Services
- Service Function Chaining
- Segment Routing
- Autonomic Networking (ACP)
- Homenet (HNCP...)
- Deterministic Networking
- etc.

The challenge

- IETF doctrine: Internet standards should be universal in scope and applicability.
- But in the context of limited domains, some standards need to be limited in applicability.
- A limited use requirement potentially adds complexity.
- Inevitably, a protocol intended for a particular scenario *will* be used elsewhere.
- The challenge is to reconcile these aspects.

To Be Done

- Derive common aspects of Limited Domains
- Show that some protocols should be defined to work within a Limited Domain Boundary.
- Make the case that the IETF needs to define a Limited Domain Boundary mechanism.
- Read **draft-carpenter-limited-domains**
- Contact Brian Carpenter or Sheng Jiang
- Discussion in ANIMA and INTAREA sessions.