Identifiers, Identities and E2E

Some questions raised in combining
draft-iab-internet-identities
and
draft-iab-e2e-futures

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Identities

- Identifiers and Identities in an E2E context
  - Identities:
    - IP addr
    - 5-tuple IP session identity
    - DNS names
    - URLs
    - URNs
    - HFS
    - Public / Private Key pair
Issues with Deviant Identities

- IP address have the property of identifier / locator / forwarder overload

- Attempting to constantly update DNS-based identities implies the use of Dynamic DNS and implied performance implications for data retrieval

- URN resolution mechanisms appear to embed a URN back into a URL
  - in what way does explicit resolution compromise the URN identity properties?

- Identity Discovery?
  - Is a structured identity space a necessary prerequisite for identity lookup?
Issues with Deviant Ends

- L3-Mobile and L3-multi-homed ends
- Distributed multi-step ends
- Replicated ends
- Variable ends
- Hidden ends
- Selectively-Hidden ends
- Proxy-assisted ends
- Identity-assurance of ends
Common Issues

- Are the properties of currently well-known identities able to encompass the full range of behaviour and characteristics of ends?
- How are identities being changed to match particular end behaviours and desired end characteristics?
- Is placing crypto inside an identity helpful or not?
- Do we need more identity spaces?
- Altered identity attributes?
- How do NATs alter the picture?
  - Are application-based identities a natural outcome of application level gateways?
- Is this all just a case of placing more RRs in DNS?