Overflight of IETF work enabling Mobility and Nomadicity: The view from 10km

IETF Approach to Mobility and Nomadicity

? Consonant with the general IETF approach the focus is on building pieces that fit into many architectures, rather than creating a single best architecture using a systems-engineered approach.

- Where possible, dependencies among specific pieces are limited.

- Aim is to allow for varying approaches, depending on different meanings of "best" in specific deployments.

- For all deployments, we presume "best" includes both interoperation with non-mobile Internet and with other mobile nodes.

Piles of Pieces

? Network topologies

? Service Delivery

? Location

Network Topologies

- ? Available building blocks
  - Mobile IP v4
  - Mobile IP v4
  - VPNs and Tunnels
  - SCTP
- ? Works in progress
  - Location/ID split (e.g. HIP)
  - Non-PI Multi-Homing
  - Shim6

Service Delivery

? Basic aim is to allow transport and service to be independent where useful.

- SUBMIT

    ? Provides message submission credentials independent of topology; can be paired with TLS for confidentiality

- DIAMETER/Radius Extension

    ? Allow for single credential set to be used with multiple service providers

- SIP/Presence

    ? Allows user to receive service based on availability and preference, even across service provider

Location

? Single data format

- – Can be used by multiple using protocols

- – Can be tied to presence

- – Can be tied to resources