SRV6 Data Plane for Mobile Core

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SRv6: A Smooth Transition & Pragmatic Approach to Change

1. Drop in SRv6 to replace GTP-U in data plane without changing the control plane.
2. Gradually introduce SRv6 features as needed.
3. Optionally add advanced mobility support either at global, 5G slice level, or for a particular set of flows.
SRv6 Demo

- **Huawei 5G Slicing and Anchorless Mobility**
  - Uses OAI open source to create multiple LTE slices.
  - Will initially use SRv6 gateways in data plane to carry GTP information.
  - No change to 3GPP control plane N2, N3, N4, or N6.
  - We are considering two options for SRv6 GWs:
    - VPP
    - Kernel modification
  - Implementation will follow draft-ietf-dmm-mobile-uplane

- We are working on a plan to integrate Huawei’s OAI and Sprint’s MCORD demos to show end to end SRv6 data plane between eNB-SGW and SGW-PGW.
SRv6 Demo

Obstacles:
- OAI implementation combines SGW and PGW into a single module
- There is not really a N9 interface.
- OAI is not planning to provide separate SGW and PGW modules
SRv6 Demo: Next Phase

- SRv6 integration into eNB and S-PGW