Personal Mobile Router

NEMO WG, IETF 67

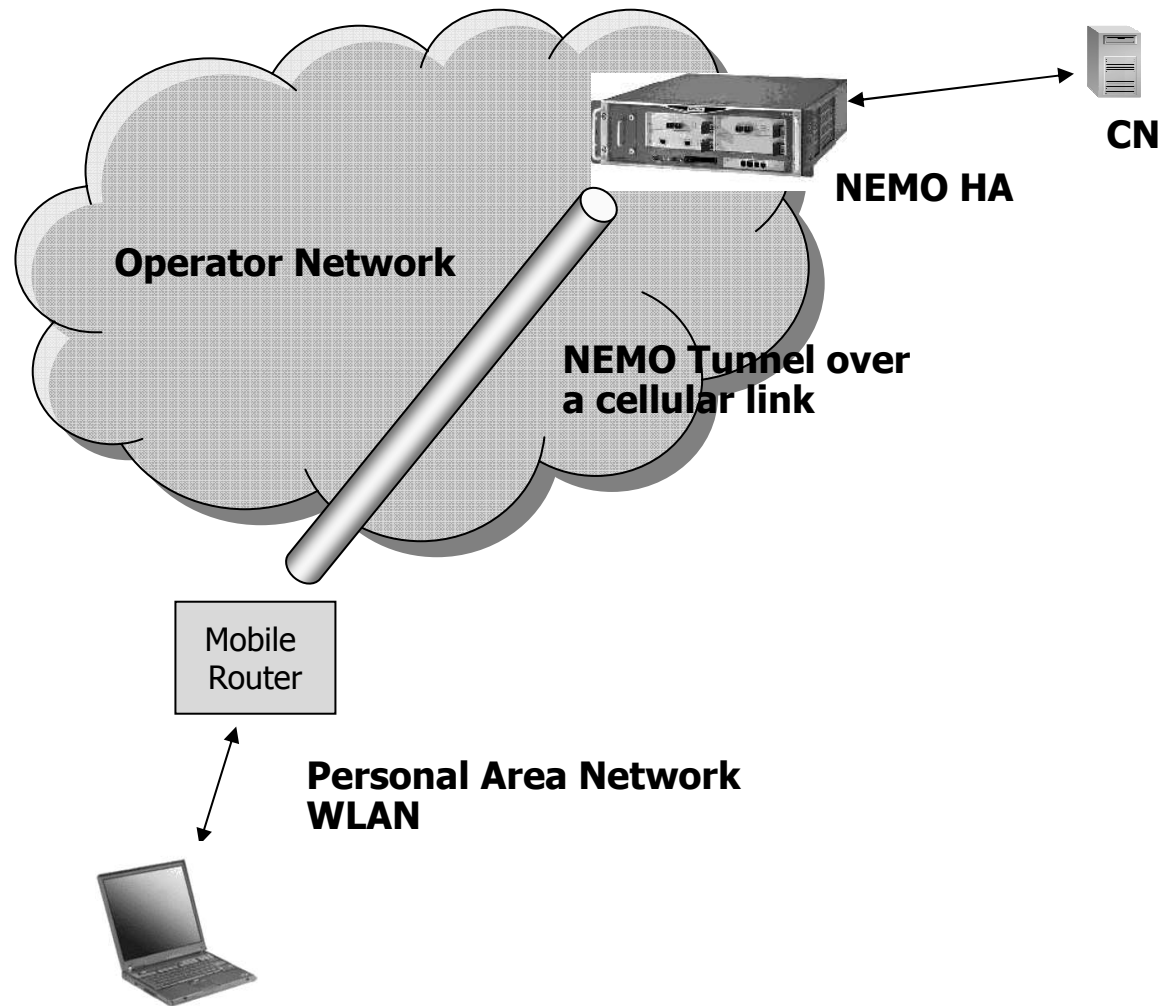Vijay Devarapalli (vijay.devarapalli@azairenet.com)

Goal

- Show an use case for NEMO in the personal mobile router space

Personal Mobile Router

- Could be a cell phone or a wireless router
  - Uplink is a cellular link
  - Downlink would be WLAN/Bluetooth/etc
- Acts as a personal gateway for each user providing connectivity and mobility to devices owned by the user
- Operator configured

Personal Mobile Router

CN

NEMO HA

Operator Network

NEMO Tunnel over
a cellular link

Mobile
Router

Personal Area Network
WLAN

Current Situation

- Many such devices are available in the market today
  - IPv4
  - Typical solution is to use a NAT on the mobile router
- A solution would be needed for IPv6
  - Many CDMA operators plan to use MIPv6
    - Not enough MIPv4 home addresses to hand out
  - NEMO is a candidate here

Route Optimization

- Route optimization would be nice to have between two personal mobile routers
  - Otherwise all traffic between two mobile routers goes through the Operator home agent all the time
  - "Local breakout" is an attractive feature
- Good thing is that both mobile routers belong to the operator and are configured by the operator
  - Makes the solution a bit easier
  - These are not two random mobile routers