Last MonAmi6 WG meeting

(MObiles Nodes And Multiple Interfaces in IPv6)

69th IETF, Chicago July 2007

Motivations and Scenarios

for Using Multiple Interfaces and Global Addresses

draft-ietf-monami6-multihoming-motivation-scenario-02.txt

T. Ernst (INRIA)

N. Montavont (ENST-B)

R. Wakikawa (Keio U)

C-W Ng (Panasonic)

K. Kuladinithi (U. Bremen)

Introduction

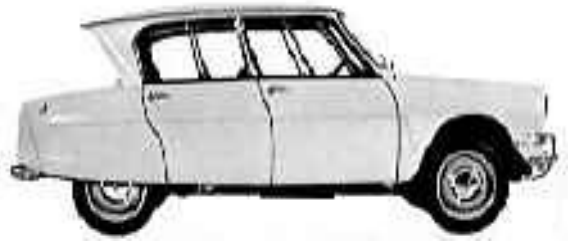
- Document to be taken in a broader sense
  - not bound to mobility usages; nomadic and fixed usages have the same needs
  - we barely mention addresses
- Structure
  - Scenarios
  - Goals and benefits of multihoming
  - Analysis (1 vs n interfaces)
  - Generic Issues

Section 3: Scenarios (1/2)

- Mona: Need for Ubiquitous Access to the Internet
- Oliver: Need to Redirect Established Sessions
- Nami: Need to Set Up Preferences
- Alice: Need to Select the Best Access Technology
- Max: Need to Dispatch Traffic over Distinct Paths
- Ingrid: Need for Reliability
- Roku (6) Need to Accelerate Transmission

Section 3: Scenarios (2/2)

- Have realistic scenarios matching the NEMO WG RO use cases:
  - for automotive (scenario 3.5):
    - new text , now focus on ITS



    - refer to CALM (ISO TC204 WG16) and Car-2-Car Communication Consortium (cf NEMO WG)
  - for aeronautics: Got text from Frank Schreckenbach (DLR - German Aerospace Center)
  - for personal mobile router (consumer electronics): Text welcome

Section 4: Goals & Benefits

- 4.1. Permanent and Ubiquitous Access
- 4.2. Reliability
- 4.3. Flow Redirection
- 4.4. Load Sharing
- 4.5. Load Balancing/Flow Distribution
- 4.6. Preference Settings
- 4.7. Aggregate Bandwidth

Section 5: Analysis

	Single Interface	Multiple Interfaces
Ubiquitous Access	No	Maybe
Flow Redirection	Yes	Yes
Reliability	Maybe	Yes
Load Sharing	Yes	Yes
Load Balancing/Flow Distribution	No	Yes
Preferences	Yes	Yes
Aggregated Bandwidth	Maybe	Yes

Section 6: Generic Issues

- Is the current list complete ?
  - source address selection
  - recovery delay
  - change of e2e path characteristics
  - transparency

- Since we barely mention about addresses, "address selection" should be "path selection". OK ?

Next Steps

- Need to list requirements for achieving the multihoming goals ? e.g.:
  - ability to keep sessions continuously opened (this implies mobility support and transparency)
  - ability to divert flows,
  - ability to monitor link status,
  - ability to use multiple paths simultaneously
  - ability for the user/application to make choices
- Shall we deal with QoS / Fast handover aspects ?

Next Steps Right After Chicago

- July 07: Complete the document with text around aeronautics and personal mobile router scenarios and issue a new version
- August 07: Issue a WGLC
  - is everyone happy with the draft ?
  - is August appropriate time for WGLC ?