APLUSP (A+P) BoF

IETF 76 – Hiroshima
November 8-13, 2009

Wednesday: 13:00-15:00

Chairs:
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Note Well

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Logistics

• Note taker and jabber scribe?
• Meeting Materials (Slides, Agenda, etc.)
  – https://datatracker.ietf.org/meeting/76/materials.html
• Jabber/XMPP
  – aplusp@jabber.ietf.org
• Mailing List
  – shara@ietf.org
  – http://www.ietf.org/mailman/listinfo/shara
Agenda

13:00  BoF Goals                                         (Chairs, 20)
13:20  Overview of Address + Port                      (Pierre Levis, 30)
       draft-levis-behave-ipv4-shortage-framework-02
13:50  Address + Port in a Mobile Environment        (Behcet Sarikaya, 15)
       draft-sarikaya-aplusp-dsmip-00
       draft-sarikaya-aplusp-pmip-00
14:05  Issues with Address + Port                    (Dave Thaler, 20)
14:25  Open Discussion                                 (all, 30)
14:55  Next Steps                                      (chairs, 15)
APLUSP BoF Scope

• BoF is limited to discussion of Dual-Stack Lite encapsulation scenario
  – To encourage IPv6 adoption
  – Other A+P scenarios add additional complexity
  – We are still learning what needs to be developed for A+P deployment

• We are not deciding between the four solutions
  – That is a Working Group decision
APLUSP BoF Scope

• Define requirements for IPv4 address and port borrowing applied to dual-stack lite
• Document and resolve IP suite of protocols problems with A+P applied to dual-stack lite
• Define **requirements** for provisioning A+P
  – Address assignment and port borrowing
  – Other endpoint coordination for routing, port assignment
Why A+P in Dual-Stack Lite

- Dual-stack lite uses IPv4-in-IPv6 encapsulation to provide IPv4 service over IPv6 core
- In SP deployment, NAT is in SP core
- A+P moves NAT back to subscriber endpoint
Work Outline

• A+P is in early stage of development
• Prototypes have demonstrated packet forwarding
• Some impacts of A+P already known; others will be discovered
  – Provisioning, operation
  – Unexpected side-effects on other protocols
• Need to explore those impacts in a constrained problem space
APLUS BoF: Goal

• Decide: should IETF take on this work?
  – Problem statement clear / solvable?
  – Who will help with charter text?
  – Who is willing to write / edit documents?

  – Who thinks the work should be taken on?
    Should NOT be taken on?
APLUSP BoF: Goal

• Should this work be Experimental? Standards Track?

• Should a new WG be formed for this work?
• Should this work be a new work item in an existing WG?
• Should this work be added to existing work item in an existing WG?