Bandwidth Aggregation for Network Access (BANANA)

IETF 96 – Berlin, Germany
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BANANA Scenario

Host A

CPE

LTE

DSL

Concentrator

Internet

Host B
Proposed Solutions

- MPTCP Proposal(s) (will be merged into one)

- GRE Tunnel-Based Proposals
  - GRE Tunnel Bonding

- Other solutions (MIP-based, LISP-based, etc.) do not appear to have currently active drafts
Other BANANA Drafts

- **Problem Statement**: Bandwidth Aggregation for Internet Access

- **Considerations for Bandwidth Aggregation**
BANANA Considerations

- Per-flow vs. Per-Packet multiplexing?
- UDP load-balanced or bypassed?
- End-to-end TCP connections vs. middlebox termination?
- MTU and fragmentation handling?
- IP address usage?
BANANA Considerations

- Different solutions entail different trade-offs
- One solution for all? Or multiple solutions for multiple deployment scenarios?
- Considerations document attempts to provide a good explanation of the trade-offs, not to select a single proposal.
Tonight from 8:00pm to 10:00pm in Shoeneberg

Agenda Items:
- Related Broadband Forum (BBF) Work
- MPTCP Solution(s)
- Update on GRE Tunnel Bonding Deployment
- Considerations
- Common Work/Next Steps

BANANA mailing list: banana@ietf.org
To subscribe: https://www.ietf.org/mailman/listinfo/banana
Some of this work currently has no IETF home:
- Problem Statement/Considerations
- Standard GRE Tunnel-based solution
- MPTCP-based solution?

Is this work we should be doing in the IETF?

If so, where/how?
- Bring it here to INTAREA?
- Hold a real BOF, and consider forming a WG?