Issues with CAPWAP

Transport Area comments
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Items

• UDP Checksum
• PMTU Discovery
• Congestion Control
• Performance of lock-step
• NAT Traversal
UDP checksum

- Performance is not a reason for skipping the UDP checksum
- Redundancy is a plausible reason
- But for IPv6...
  - UDP-Lite has potential for middle box traversal issues
PMTU Discovery

- Avoiding IP fragmentation is good
- Some middle boxes drop IP fragments
- Blindly limiting to the minimum size can impact performance
- A solution based on RFC 4821 could be built using existing protocol elements
Congestion Control

• All protocols need to consider congestion control (RFC 2914) (fairness and collapse)

• If any traffic tunneled over the data channel is not IP, congestion control will be needed.
NAT Traversal

• Not a full-blown any-case works solution
• Doesn’t describe very well the cases in which it doesn’t work
• E.g., how do you get a message to the AC when it is behind a NAT?
• Are there scenarios that should not be supported? (to clarify things)