Protocol Update

Forwarding and Control Element Separation
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Table Range Query

• Use case
  – Table with 1M populated rows
    • Need any rows between index 73-2003
    • Send upto 2000 forces messages or fewer batched messages but 2000 commands
      – Tedious, resource abuse

• Proposal: Add a table range TLV
  – Pathdata flag to indicate it is a table range
  – Contents to include start/end of range
Table append

• Use case: NB Controller wants to install at next available slot
  – It could keep state of all table rows
    • Not always possible
  – It could query the FE
    • Extra roundtrip, more app code and could be expensive, implementation dependent

• Proposal: Send a table row SET with any index and path flag to indicate *append*
  – Response tells you what table row was used
Additional Return Codes

- RFC 5810 error codes was a good starting point
  - Too generic codes like E_NOT_SUPPORTED
- Implementation experience has shown we could use more
  - Would allow easier debugging a response to an interopring implementation to say E_INVALID_OP instead of E_NOT_SUPPORTED which means 10 other things