Protocol Update

Forwarding and Control Element Separation (IETF86 Orlando,FI, USA March 2013)

Jamal Hadi Salim <hadi@mojatatu.com>

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 interoping implementation to say E_INVALID_OP instead of E_NOT_SUPPORTED which means 10 other things