Update on PCEP-SDN discussion

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Should PCEP have full-fledged SDN capabilities?

• Discussion on-list last year

• What did we conclude?
  – Using PCEP for SDN-like function is reasonable and has already happened
  – PCEP-SDN offers an alternative to other SBI protocols (e.g. netconf, OpenFlow)
  – PCEP-SDN is not “replacing” anyone’s control plane
What is happening?

• Some SDN features are already adopted / published
  – Stateful PCE
  – PCE-initiated LSP
  – LSP control request
  – PCE-CC work in TEAS
  – PCEP flowspec

• There is disagreement about the scope of the SDN features we should take on
  – PCEP-LS is particularly unclear
What about PCEP-LS?

• We need to clarify the situation w.r.t. PCEP-LS and take a final decision

• Polling right now would just lead to the same arguments on either side being repeated
  – That would not be progress
  – Instead, we need to finish the debate on the reasons why PCEP-LS is or isn’t valid

• We need more discussion of the objections raised to PCEP-LS
  – We will summarize the key objections here
  – The chairs will also send a summary to the list so that discussion can take place there
What is blocking PCEP-LS?

• Significant doubts raised over the technical requirement
  – There are (at least) three other ways to send link state to a controller (IGP / BGP-LS / netconf)
  – Is there a real, operational context in which none of those other methods can be used?

• Is a multi-vendor, interoperable solution required?
  – Can the requirement be satisfied with experimental code points c/f RFC 8356?

• Does PCEP have the right scalability properties for this purpose?
Discussion Time

• Is this a fair summary of where we have got to?

• Can we progress the PCEP-LS debate?