

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?