Path Computation Element WG Status

IETF 105 - Montreal

Julien Meuric (julien.meuric@orange.com) Dhruv Dhody (<u>dhruv.ietf@gmail.com</u>) Adrian Farrel (<u>adrian@olddog.co.uk</u>)

Note Well

This is a reminder of IETF policies in effect on various topics such as patents or code of conduct. It is only meant to point you in the right direction. Exceptions may apply. The IETF's patent policy and the definition of an IETF "contribution" and "participation" are set forth in BCP 79; please read it carefully.

As a reminder:

- •By participating in the IETF, you agree to follow IETF processes and policies.
- •If you are aware that any IETF contribution is covered by patents or patent applications that are owned or controlled by you or your sponsor, you must disclose that fact, or not participate in the discussion.
- •As a participant in or attendee to any IETF activity you acknowledge that written, audio, video, and photographic records of meetings may be made public.
- Personal information that you provide to IETF will be handled in accordance with the IETF Privacy Statement.

•As a participant or attendee, you agree to work respectfully with other participants; please contact the ombudsteam (<u>https://www.ietf.org/contact/ombudsteam/</u>) if you have questions or concerns about this.

Definitive information is in the documents listed below and other IETF BCPs. For advice, please talk to WG chairs or ADs:

- BCP 9 (Internet Standards Process)
- •BCP 25 (Working Group processes)
- •BCP 25 (Anti-Harassment Procedures)
- •BCP 54 (Code of Conduct)
- •BCP 78 (Copyright)
- •BCP 79 (Patents, Participation)
- <u>https://www.ietf.org/privacy-policy/</u> (Privacy Policy)



Administrivia

- Please, sign blue sheets
- Minute taker(s), jabber scribe(s)
- Audio & video streaming
 - Please speak only using the microphones
 - Please state your name before speaking
 - Presenters, please stay within the pink box
- We have folks attending remotely

 Please mind audio/video ☺

Personnel Change

• Welcome Hari as our WG Secretary.

- Adrian is temporarily providing help during the transition and would be stepping down SOON after the IETF meeting.
- Thank you Adrian for serving as PCE chair (again) and guiding us during this transition.

Using the Mailing List

- Please use the mailing list actively to discuss all working group business
- Open issues with drafts should be discussed on the list, and conclusions reported to the list
- New drafts should be introduced to the working group first on the mailing list, to gauge interest
- Working group consensus is determined from the mailing list
- Priority in meetings is given to drafts that have been discussed on the list

Using the Wiki

- A way to give you visibility as the document progress through the WG
 - adoption queue
 - WG LC queue
 - balancing work between chairs
 - shepherding responsibilities
 - pending actions
 - IPR polls
- Use this wiki
 - make sure this is up to date!
- <u>https://trac.ietf.org/trac/pce/wiki/WikiStart</u>

Implementation Policy

- All WG I-Ds are required to include an 'Implementation Status' Section (as per RFC 7942) to document known existing or planned implementations. The chairs can make exceptions on a per-document basis.
 - It is expected that all WG I-Ds requesting WG LC from May 2019 must follow the above implementation policy.
 - Reach out to the chairs in case an exception needs to be made for your document.
 - A lot of documents that authors believe are ready for WG LC still lacks this section.
 - <u>https://trac.ietf.org/trac/pce/wiki/WikiStart</u>

Agenda Bashing

1. Introduction

- 1.1. Administrivia, Agenda Bashing (chairs, 5 min)
- 1.2. WG Status (chairs, 10 min) [15/120]
- 1.3. State of WG I-Ds and next steps (chairs, 10 min) [25/120]

2. Stateful PCE

- 2.1. Operational Clarifications for Stateful PCE (Mike Koldychev, 10 min) [35/120]
- 2.2. State Syncronization between Stateful PCEs (Haomian Zheng, 10 min) [45/120]
- 2.3. Mark Objects as optional in Stateful PCE (Haomian Zheng, 10 min) [55/120]
- 2.4. Vendor Information Object in Stateful PCE (Cheng Li, 5 min) [60/120]

3. Segment Routing

3.1. Encoding ECMP/UCMP Information in PCEP (was Supporting Multiple ERO (SID-List) in PCEP) (Mike Koldychev, 10 min) [70/120]

- 3.2. P2MP SR Policy (Hooman Bidgoli, 10 min) [80/120]
- 3.3. SR Path Ingress Protection (Huaimo Chen, 10 min) [90/120]
- 3.4. SR-MPLS Inter-domain (Quan Xiong, 10 min) [100/120]

4. Other Topics

- 4.1. Security capability in the PCE discovery (Qin Wu, 5 min) [105/120]
- 4.2. Stitching LSP Association (Quan Xiong, 10 min) [115/120]

WG Status

Beyond the WG

- Two new RFC since Prague (IETF 104)
 - RFC 8637 (Applicability of PCE for ACTN)
 - RFC 8623 (Stateful P2MP)
- Documents in RFC editor queue
 - draft-ietf-pce-segment-routing (SR Cluster C340)
 - https://www.rfc-editor.org/cluster_info.php?cid=C340
 - draft-ietf-pce-wson-rwa-ext (MISREF to PCEP-GMPLS)
 - draft-ietf-pce-hierarchy-extensions (AUTH)
- Drafts with the IESG
 - draft-ietf-pce-gmpls-pcep-extensions (Pending update that resolves the DISCUSS)
 - draft-ietf-pce-association-group (Pending update after IESG)

Beyond the WG

- Drafts with the IESG
 - draft-ietf-pce-inter-area-as-applicability (Update made after IESG)
 - draft-ietf-pce-stateful-pce-auto-bandwidth (Ready for IETF LC)
 - draft-ietf-pce-stateful-hpce (Ready for IETF LC)
 - draft-ietf-pce-stateful-path-protection (Pending update after RTGDIR)
 - draft-ietf-pce-lsp-control-request (Pending update after RTGDIR)
 - draft-ietf-pce-association-diversity (Pending RTGDIR)
- Early codepoint allocations
 - draft-ietf-pce-segment-routing (expires August 2019)
 - draft-ietf-pce-association-group (expires October 2019)
- Errata
 - None

Status of WG I-Ds & Next Steps

WG documents nearing WG LC

- draft-ietf-pce-association-policy
 - Pending an update that includes implementation section
- draft-ietf-pce-pcep-flowspec
 - Pending an update that includes implementation section
- draft-ietf-pce-association-bidir
 - Pending an update that includes implementation section
- draft-ietf-pce-pcep-stateful-pce-gmpls
 - Was merged with draft-ietf-pce-remote-initiated-gmpls-lsp
 - A new editorial update is pending
 - An implementation section is pending

draft-ietf-pce-pcep-yang

- A new update (-12) was posted.
- Change include
 - Use of lsp-id as a key in LSP-DB along with PLSP-ID and PCC-ID.
 - Reference to I-Ds in YANG module
 - Thanks to Tom Petch
- Early Yang Doctor review is already done.
- No known implementations yet

WG documents

- draft-ietf-pce-pcep-extension-for-pce-controller
 - update posted on 2019-07-08
 - Added Implementation Status
- draft-ietf-pce-pcep-extension-native-ip
 Presented at IETF 104, no update since.
- draft-ietf-pce-stateful-pce-lsp-scheduling
 - update posted on 2019-07-07 (refresh), no technical changes.
- Recent WG I-D adopted
 - draft-ietf-pce-flexible-grid
 - draft-ietf-pce-segment-routing-ipv6

draft-ietf-pce-enhanced-errors

- Guideline (as per mailing list discussion)
 - Error and Notification handling as per [I-D.ietf-pceenhanced-errors] should be considered in PCE documents that include new errors and notifications. A requirement for the authors of these drafts is to evaluate the applicability of the procedure in [I-D.ietf-pce-enhancederrors] and provide details about the "Error-criticality" TLV and "Propagation" TLV for errors and notifications defined in the draft. Examples of this can be found in section 5.4.3 of [I-D.ietf-pce-enhanced-errors].
- Thoughts on the guideline?
- Guideline to be put in the Wiki or the I-D
- Work with the WG I-D authors

Adoption Poll Queue

- draft-leedhody-pce-vn-association
 - Poll on -07 ends 2019-08-04, please respond!
- draft-sivabalan-pce-binding-label-sid
- draft-zhao-pce-pcep-extension-pce-controller-sr
- draft-li-pce-sr-path-segment
- draft-li-pce-sr-bidir-path
- draft-dugeon-pce-stateful-interdomain
- draft-barth-pce-segment-routing-policy-cp

Thanks