Conveying Vendor-Specific Information in PCEP extensions for Stateful PCE.

draft-dhody-pce-stateful-pce-vendor-07

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What is Vendor-Specific Information?

- The Vendor Information can be arbitrary, proprietary information such as vendor-specific constraints during path computation.
- Enterprise Number uniquely identifies the organization responsible for the definition of the content and meaning of the Vendor- Specific Information.
- By definition, this implies inability to interoperate at the functional level between vendors *unless* there is some cooperation.

History of Vendor-Specific Information

This I-D

RFC 7470

- Obsoletes 7150
- New codepoint for TLV

- Extend support for Stateful PCE by including VENDOR-INFORMATION Object in PCRpt, PCUpd & PCInitiate messages
- The TLV was already supported
- The VENDOR-INFORMATION TLV can be used by any PCEP object that allows optional TLVs
- The VENDOR-INFORMATION Object support in PCReq and PCRep messages

RFC 7150

 VENDOR-INFORMATION Object & TLV

Stateful PCE Messages

```
<PCInitiate Message> ::= <Common Header>
  <PCRpt Message> ::= <Common Header>
                                                                                                                    <PCE-initiated-lsp-list>
                       <state-report-list>
                                                                                       Where:
Where:
                                                                                          <PCE-initiated-lsp-list> ::= <PCE-initiated-lsp-request>
  <state-report-list> ::= <state-report>[<state-report-list>]
                                                                                                                        [<PCE-initiated-lsp-list>]
  <state-report> ::= [<SRP>]
                                                                                          <PCE-initiated-lsp-request> ::=
                      <LSP>
                                                                                                                (<PCE-initiated-lsp-instantiation>|
                      <path>
                                                                                                                 <PCE-initiated-lsp-deletion>)
                      [<vendor-info-list>]
Where:
                                                                                          <PCE-initiated-lsp-instantiation> ::= <SRP>
   <vendor-info-list> ::= <VENDOR-INFORMATION>
                           [<vendor-info-list>]
                                                                       PCInitiate
                                                            PCRpt
  <path> is defined in [RFC8231].
    <PCUpd Message> ::= <Common Header>
                                                                                          Where:
                         <update-request-list>
                                                                  PCUpd
 Where:
                                                                                          <vendor-info-list> ::= <VENDOR-INFORMATION>
                                                                                                                  <vendor-info-list>]
    <update-request-list> ::= <update-request>
                         [<update-request-list>]
                                                                                        <PCE-initiated-lsp-deletion> and <attribute-list> is as per
                                                                                        [RFC8281].
    <update-request> ::= <SRP>
                          <LSP>
                          <path>
                          [<vendor-info-list>]
 Where:
    <vendor-info-list> ::= <VENDOR-INFORMATION>
                             [<vendor-info-list>]
    <path> is defined in [RFC8231].
```

<LSP>

[<END-POINTS>]

[<attribute-list>] [<vendor-info-list>]

Questions & Next Steps

- This I-D extend support for the existing VENDOR-INFORMATION Object to the Stateful Messages
 - Is this useful?
 - Is the approach take by this I-D correct?
- Straight-forward & Intuitive...
 - Candidate for WG adoption?
- Thanks!