Experimental Codepoint Allocation for PCEP

draft-dhody-pce-pcep-exp-codepoints

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Experimental Code Points in PCEP

• PCEP registry - [http://www.iana.org/assignments/pcep](http://www.iana.org/assignments/pcep)
  • Allocation Policy is – ‘IETF consensus’
  • New assignments via RFCs approved by IESG

• There is a need for keeping some codepoints for ‘Experimental Use’ in PCEP
  • Facilitate experimentation of PCEP and testing in closed environment
  • The value should not collide with existing and future allocations
  • Experiments on Open source PCEP implementation (ODL, ONOS…)

PCE WG, IETF 96 @ BERLIN
PCEP Codepoints

<table>
<thead>
<tr>
<th>Messages</th>
<th>Objects</th>
<th>TLVs</th>
</tr>
</thead>
</table>
| • Range – 246 to 255 (8)  
• 8 is not prime  
• That is true for 255 too!  | • Range – 224 to 255 (31) | • Range – 65280 to 65535 (255)  
• Suggestion to increase this a bit more  
• 65024 to 65535 (511)  |
Allocation Policy

• Set as “Experimental”

• IANA does not record specific assignment

• The ongoing experiment codepoints could be maintained at the PCE WG wiki
  • [https://trac.tools.ietf.org/wg/pce/trac/wiki](https://trac.tools.ietf.org/wg/pce/trac/wiki)
  • A new section is added

• As the experiment matures and an early IANA allocation (or RFC publication) is done, the new IANA assigned value is used.
  • The experimental codepoints are freed up.
Classifications for PCEP sub-registries

<table>
<thead>
<tr>
<th>Essentials</th>
<th>Good to have / simple to add</th>
<th>Cross Registry</th>
<th>Exist Already</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Messages</td>
<td>NO-PATH Object NI</td>
<td>IRO Subobjects</td>
<td>OF - private use for 32768-65535</td>
<td>Flag Fields</td>
</tr>
<tr>
<td>Objects</td>
<td>Metric Type</td>
<td>XRO Subobjects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TLV</td>
<td>Notification</td>
<td>PathKey Subobjects</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>RSVP-TE's ERO Subobjects*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Close reason</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Our Opinion – to not include this in the scope of this work
# Errors & Notifications

<table>
<thead>
<tr>
<th>Error-Types &amp; Error-Values</th>
<th>Error-Types – 224 to 255 with Error-Value 0 to 255 each</th>
</tr>
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<tbody>
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Questions to the WG?

Is this useful?
- +ve feedback on the list
- WG adoption...

Should we expand the scope of this work for the category -
- “Good to have / simple to add” ?

Do you agree with the author’s opinion to skip the others?
- Require cross registry work and alignment with RSVP-TE
- Flag Fields
Thank You!