PCEP SR Policy Association

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Recent updates

Version-02
• Encode Color + Endpoint in Extended Association ID TLV
• SR Policy Identifiers TLV is not necessary because SR Policy ID is encoded into the Association ID

Version-03 and Version-04
• Preparation for IANA allocation
• Cleaned up the wording and re-organize to be more clear
Extended Association ID TLV

• We encode the <headend, color, endpoint> Policy ID tuple directly into Association Parameters

• Association Key is the same as the Policy ID

• Association Source encodes the <headend> part of Policy ID

• Extended Association ID TLV encodes the <color, endpoint> part

```
<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+---------------------------------------------+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Type = 31</td>
<td>Length = 8 or 20</td>
<td></td>
</tr>
<tr>
<td>+---------------------------------------------+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Color</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+---------------------------------------------+</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| ~ Endpoint ~
| +---------------------------------------------+|
```

Figure 1: Extended Association ID TLV format
Example: two CPATHs of same SR Policy

- **PCInit CPATH B, Preference 200**
  - Color = 100, End-Point = 9.9.9.9
  
  Association Source = 1.1.1.1
  Association Ext ID = <100, 9.9.9.9>

- **PCInit CPATH A, Preference 100**
  - Color = 100, End-Point = 9.9.9.9

Association Source = 1.1.1.1
Association Ext ID = <100, 9.9.9.9>
Next steps

• Requested IANA code points
• Interop testing once IANA code points are allocated