ForCES Model Extension

IETF – 86 Orlando

Evangelos Haleplidis (ehalep@ece.upatras.gr)
Optional access type in structs

- Optional allow access type in structs
  - Current schema allows access type definition only on LFB components.

- Use case:
  - OpenFlow lib: FlowTable entries contain counters – should be read-only or read-reset.
New datatype: Bitmap

- New datatype: Bitmap
- Current solution is a struct of booleans
- Goal is to transport in a more compact way.
- Need to define data packing rule for bitmap.
- Suggestion treat like variable-length field – use a separate TLV in encoding:

<table>
<thead>
<tr>
<th>TYPE</th>
<th>LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>BITCOUNT</td>
<td>BITS</td>
</tr>
<tr>
<td>BITS</td>
<td>PADDING</td>
</tr>
</tbody>
</table>
New datatype: Bitmap (cont.)

- Ordering in packaging MUST be as defined in XML.

- Definition example:

```xml
<dataTypeDef>
  <name>Bitmap example</name>
  < synopsis >A bitmap field example</ synopsis >
  < bitmap >
    < bit name="Bit0"/>
    < bit name="Bit1"/>
  </ bitmap >
</ dataTypeDef >
```
New event condition: Become Equal To

- Addition of a new event condition: Equal To
  - Useful to monitor specific state changes.

- Use case:
  - CEHA: Useful for master CE to know which backup CEs are associated.

- The event is generated when the value of target becomes equal to the event and is generated only once.
New event condition: Become Equal To (cont.)

- Discussion with Joel:
  - Probably worth having a Become Not Equal To.
- A suggestion is to use event hysteresis.
Request to be added to the charter and as working group item.