BGP Flow Specification for SRv6

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Background for this draft

• BGP Flow Specification has defined many component types for matching rules
  – IPv4, L2VPN, etc.

• This document proposes flow specifications rules for SRv6
  – Two new component types are defined
**Type TBD1 - Whole SID**

- **Encoding:** `<type (1 octet), length(1 octet), [op, value]+>`
- Contains a set of `{operator, value}` pairs that are used to match the SID/binding SID or a range of whole SID.

The operator byte:

```
+---+---+---+---+---+---+---+---+
| e | a | lt | gt | eq |  reserve |
```

- `e` - end-of-list bit. Set in the last `{op, value}` pair in the list.
- `a` - Unset - logical OR; Set - logical AND.
- `lt` - less than; `gt` - greater than; `eq` – equality

The value field:

```
01234567890123456789012345678901
```

SID 128bits

The bits `lt`, `gt`, and `eq` can be combined to produce match a certain SID or a range of SID (e.g. less than SID1 and greater than SID2).
Type TBD2 - Some bits of SID to match

- **Encoding:** \(<\text{type} (1 \text{ octet}), \text{length} (1 \text{ octet}), [\text{op, value}]^+>\)
- Contains a set of \{operator, value\} pairs that are used to match the SID/binding SID or a range of whole SID.

The operator:

```
+-----+-----+-----+-----+-----+-----+-----+-----+
| e   | a   | type | reserve |
+-----+-----+-----+-----+-----+-----+-----+-----+
```

\(e \& a\) the same as the last type defined.

**type:**
- 0 : SID’s LOC bits
- 1 : SID’s FUNCT bits
- 2 : SID’s LOC:FUNCT bits
- 3 : SID’s FUNCT:ARGS bits

The value field:
Next Steps

• Solicit comments
• Revise the draft accordingly
Discussion