BGP Extension for Advertising In-situ Flow Information Telemetry (IFIT) Capabilities

draft-ietf-idr-bgp-ifit-capabilities-02

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History and Updates

➢ Presented at IETF#109/110/114 and got good feedback from WG
  • Thanks people below for their comments and suggestions
    • Ketan Talaulikar, Susan Hares, Haoyu Song, Jie Dong, Robin Li, Jeffrey Haas, Robert Raszuk, Zongpeng Du, Yisong Liu, Yongqing Zhu, Aijun Wang, Fan Yang, Tianran Zhou.
  • All comments have been addressed.

➢ Synchronize with draft-ietf-idr-entropy-label (The next hop capability draft has been incorporated into the entropy label draft).
Encoding IFIT Capabilities in the RCA attribute

The BGP Router Capabilities Attribute (RCA attribute, or just RCA) [I-D.ietf-idr-entropy-label] is an optional, transitive BGP attribute with type code 39.

The IFIT Capabilities can be encoded as a capability (IFIT Router Capability) TLV in the RCA attribute.

It is defined as a 32-bit bitmap:

```
0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1
+++-----------------------------++
<table>
<thead>
<tr>
<th>P</th>
<th>I</th>
<th>D</th>
<th>E</th>
<th>M</th>
<th>Reserved</th>
</tr>
</thead>
</table>
++-----------------------------++
```

When a specific flag is set, this indicates that the router can process that method:

- **P-Flag**: IOAM Pre-allocated Trace Option Type flag.
- **I-Flag**: IOAM Incremental Trace Option Type flag.
- **D-Flag**: IOAM DEX Option Type flag.
- **E-Flag**: IOAM E2E Option Type flag.
- **M-Flag**: Alternate Marking flag.
Discussion & Next Steps

➢ Comments and questions are welcome!
➢ Revise the document accordingly.

Thank you!