

BMP Extension for Path Status TLV

draft-cppy-grow-bmp-path-marking-tlv-07

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Overview

- TLV option to convey path status in a BMP update
- There is an (optional) reason field, if needed for extra troubleshooting
- Depends on draft-ietf-grow-bmp-tlv and draft-ietf-grow-bmp-tlv-ebit
 - With the e-bit option, the tlv allows for definitions of private status or reason codes

Changes from latest version

- Small editorial changes
- Added a few more path status as examples

Value	Path type
0x00000000	Reserved
0x00000001	Invalid
0x00000002	Best
0x00000004	Non-selected
0x00000008	Primary
0x00000010	Backup
0x00000020	Non-installed
0x00000040	Best-external
0x00000080	Add-Path
0x00000100	Filtered in inbound policy
0x00000200	Filtered in outbound policy
0x00000400	Invalid ROV

Example of use cases

- Collect filtered paths at the ingress of the network. Analyze the data to find potential errors at the filters.
- Devices can pre-calculate backup paths. A centralized system could collect them and do basic failure infrastructure analysis using this information.
- Differentiating between paths used for forwarding to non-installed paths

Questions

Encodings

