### draft-cppy-grow-bmp-path-marking-tlv-00

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#### Introduction

- Goal: Communicate state of BGP paths in the local-RIB
- Uses the TLV mechanism described in draft-lucente-bmp-tlv-00
- Follow-up on draft-bgp-path-marking-00 (IDR, 2013):
  - Back then BMP was not mature and we had to abuse BGP for monitoring
  - BMP TLVs better suited to convey implementation specific data

# Path marking TLV

# Types (bitfield)

++	
Value	Path type
0x0000	Unknown
0x0001	Best path
0x0002	Best external path
0x0004	Primary path
0x0008	Backup path
0x0010	Non-installed path
0x0020	Unreachable next-hop
+	+

# Reason string

```
0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1

| Sub Type 1 (2 octets) | Length (2 octets) |
| Non-Best Reason String(Variable) |
| Sub Type 2 (2 octets) | Length (2 octets) |
| Non-installed Reason String(Variable) |
| Sub Type 3 (2 octets) | Length (2 octets) |
| Unreachable Reason String(Variable) |
| Unreachable Reason String(Variable) |
```

## Open questions

- Relationship with draft-ietf-grow-bmp-local-rib:
  - For Unreachable Next-Hop type we would need to transmit all paths (i.e. also invalids)