

BGP Flow-Spec Traffic Compress Action

draft-shen-idr-flowspec-traffic-compress-action-01

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Why require compress network transmission data

- High cost of private lines: Some enterprises expect to compress traffic before transmitting it on the network, especially for service data that is not sensitive to latency.
- Limited network bandwidth resources: The data volume on the network increases rapidly, especially with the application of AIGC, and the network investment growth is limited. Therefore, data compression is also an effective technology to save network resources.

Why is the filtering action for compressed traffic required



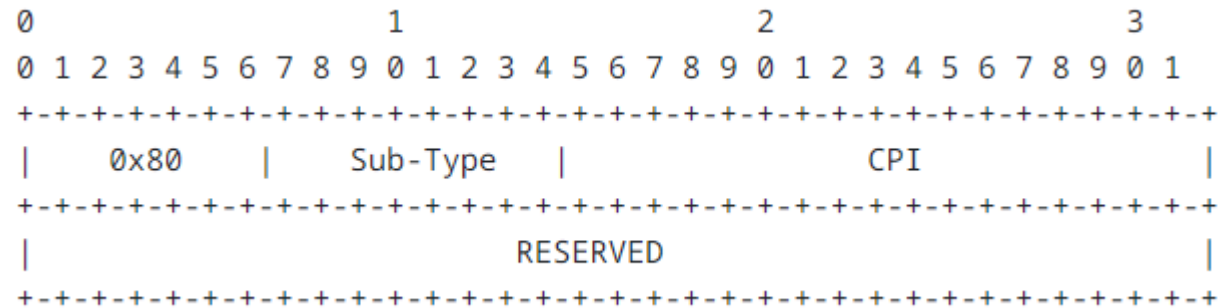
- The receiver needs to notify the sender of which packets need to be compressed and when to start data compression.
- If the decompression capability of the receive end is faulty, the transmit end needs to be notified to stop compressing data.
- The compression algorithm decoded by the receive end and the transmit end need to be matched.
- Periodically change the algorithm or optimize the algorithm as required.

Use Case

- Periodic data backup or transmission between data centers
- Remote transmission of enterprise service data (such as database, video or audio)

Traffic compress Extended Community

This new BGP extended community is encoded as follows :



- **Sub-Type:** TBD.
- **CPI:** 2 octets. The values 0-63 designate well-known compression algorithms. The values 64-255 are reserved for future use. The values 256-61439 are negotiated between the two nodes in definition of an IPComp Association[RFC3173].
- **RESERVED:** 4 octets. All bits in the local administrator field MUST be set to 0 by the originating BGP speaker and ignored by receiving BGP speakers.

Questions and comments?