



# New BMP Features in FRRouting

*Maxence YOUNSI*, INSA Lyon - [maxence.younsi@insa-lyon.fr](mailto:maxence.younsi@insa-lyon.fr)

*Pierre FRANCOIS*, INSA Lyon - [pierre.francois@insa-lyon.fr](mailto:pierre.francois@insa-lyon.fr)

*Thomas GRAF*, Swisscom - [thomas.graf@swisscom.com](mailto:thomas.graf@swisscom.com)

# BGP Monitoring Protocol

- Allows to monitor the BGP behaviour of a router
  - Received Paths (BMP Adj-RIB-In) -- RFC 7854
  - Best Path (BMP Loc-RIB) -- RFC 9069
  - Advertised Paths (BMP Adj-RIB-Out) -- RFC8671
  - Statistics
- FRRouting
  - Only supports BMP Adj-RIB-In
- Project
  - Add other modes
  - Support of enhancements to BMP (from the GROW WG)

## Status

- Best Path (BMP Loc-RIB) -- RFC 9069
  - Implemented
  - Added support of BGP Multipath
- Advertised Paths (BMP Adj-RIB-Out)
  - Implemented
  - Limited stats support (to preserve performance)
- BMPv4 - TLV (draft-ietf-grow-bmp-tlv-12)
  - TLV structure for modular path information advertisement
  - Implemented
- Path Marking (draft-cppy-grow-bmp-path-marking-tlv-12)
  - TLVs describing the logic leading to a BGP decision
  - Implemented a first subset of status codes

## Ongoing

- Pull Requests
  - FRRouting: All new BMP features
  - Wireshark Dissector: BMP TLVs + Path Marking