

BMP YANG Module

draft-cptb-grow-bmp-yang

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Main objective

- Provide a standard module for managing BMP on a device.

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Basic points

- Configure and monitor BMP
- It includes an action to clear a BMP station
- Explicit configuration of the source of data to send to each station:
 - RIB 'modes'
 - Address-families
 - Peers (for the RIBs where it applies)
 - Identified individually, based on peer type (e.g. external, internal), or "all-peer"

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Feedback

Thanks to Tim Evens, Jeffrey Haas, Tom Petch for their valuable feedback

A few observations we already addressed in version -02:

- Wrong port type
- Counter units
- NACM default deny-all
- discontinuity leaf in the stats container

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Feedback

Some pending points:

- Extend the BMP session options (initiation delay, backoff times)
- How to use leverage the TCP module
- Units for stats
- Where to place the model in the routing tree
- Add examples to help with the previous discussions

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- Does the draft make sense for the group?
- Any other question/comments?

```
module: ietf-bmp
+--rw bmp
  +-rw stations
    | +-rw station* [id]
    |   +-rw id      string
    | +-rw connection
    |   +-rw destination-address  inet:ip-address
    |   +-rw local-address?      inet:ip-address
    |   +-rw destination-port?   inet:port-number
  +-rw bmp_session
    | +-rw initiation-message? string
    | +-rw statistics-interval? uint32
  +-rw bmp_sources
    | +-rw adj-rib-in-pre
      |   +-rw enabled?      boolean
      |   +-rw address-families
        |     +-rw address-family* [name]
          +-rw name  -> /rt:routing/control-plane-protocols/control-plane-protocol/bgp:bgp/global/afi-safis/afi-safi/name
        |     +-rw peers* union
    | +-rw adj-rib-in-post
      |   +-rw enabled?      boolean
      |   +-rw address-families
        |     +-rw address-family* [name]
          +-rw name  -> /rt:routing/control-plane-protocols/control-plane-protocol/bgp:bgp/global/afi-safis/afi-safi/name
        |     +-rw peers* union
    | +-rw local-rib
      |   +-rw enabled?      boolean
      |   +-rw address-families* identityref
  +-rw adj-rib-out-pre
    | +-rw enabled?      boolean
    | +-rw address-families
      |   +-rw address-family* [name]
        +-rw name  -> /rt:routing/control-plane-protocols/control-plane-protocol/bgp:bgp/global/afi-safis/afi-safi/name
      |   +-rw peers* union
```

```
| | +-rw adj-rib-out-post
| |   +-rw enabled?      boolean
| |   +-rw address-families
| |     +-rw address-family* [name]
| |       +-rw name    -> /rt:routing/control-plane-protocols/control-plane-protocol/bgp:bgp/global/afi-safis/afi-safi/name
| |       +-rw peers*   union
| +-rw session-stats
|   +-rw discontinuity-time      yang:date-and-time
|   +-ro established-session?    boolean
|   +-ro total-route-monitoring-messages? uint64
|   +-ro total-statistics-messages? uint64
|   +-ro total-peer-down-messages? uint64
|   +-ro total-peer-up-messages?  uint64
|   +-ro total-initiation-messages? uint64
|   +-ro total-route-mirroring-messages? uint64
+-rw actions
  +-x session-reset
    +-w input
    | +-w station? -> /bmp/stations/station/id
    +-ro output
      +-ro (outcome)?
        +-:(success)
        | +-ro success? empty
        +-:(failure)
          +-ro failure? string
```