A YANG Data Model for the Alternate Marking Method

draft-ydt-ippm-alt-mark-yang-02

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Alternate-Marking YANG Data Model

This draft is the result of the merge of `draft-gfz-ippm-alt-mark-yang` and `draft-wang-ippm-alt-mark-yang`

- Now we only have one AltMark YANG Data Model
- We agreed on the tree structure and related information
  - same structure as `draft-ietf-ippm-ioam-yang`

The AltMark YANG model is shown below:

```
+---rw altmark
    +---ro altmark-info
    |    +---ro timestamp-type?
    |    +---ro available-interface* [if-name]
    |    |    +---ro if-name if:interface-ref
    +---rw altmark-profiles
        +---rw admin-config
            |    +---rw enabled? boolean
        +---rw altmark-profile [profile-name]
            +---rw profile-name string
            +---rw filter
                |    +---rw filter-type? altmark-filter-type
                |    +---rw ace-name? -> /acl:acs/aces/ace/name
                +---rw method-type? altmark-method-type
                +---rw protocol-type? altmark-protocol-type
        +---rw node-action altmark-node-action
        +---rw period? uint64
    +---rw flow-mon-id? uint32
    +---rw measurement-mode? altmark-measurement-mode
    +---rw enable-loss-measurement? boolean
    +---rw enable-delay-measurement? boolean
```
AltMark Profile

The "altmark-profile" contains the information for the AltMark data:

- **profile-name**: it is the unique identifier for each AltMark profile.
- **filter**: it is used to identify a flow, where the AltMark data can be applied.
- **method-type**: it is used to indicate the type of the method: single marking, double marking.
- **protocol-type**: it is used to indicate the protocol for the AltMark application
- **node-action**: indicates the operation applied to the flow (e.g. marking AltMark header, read the AltMark data, or unmarking AltMark header).
- **period**: it indicates the AltMark period (see draft-ietf-ippm-alt-mark-deployment).
- **flow-mon-id**: it is used to identify the monitored flow and to correlate the exported data of the same flow from multiple nodes and from multiple packets.
- **measurement-mode**: it specifies the measurement mode: hop-by-hop or end-to-end.
- **enable-loss-measurement**: if true, it enables loss measurements.
- **enable-delay-measurement**: if true, it enables delay measurements.
Changes from -01 to -02

Some comments received and addressed in the new revision. The main changes are:

- The alternate-marking-period made totally flexible,
- A new flag to indicate the type of method (single or double marking),
- Solved the issue of the YANG model consistency,
- IPv6 and MPLS examples provided.
Next Steps

Evaluate WG Adoption

Comments are welcome!

Thank You