

Alternate Marking Deployment Framework

draft-ietf-ippm-alt-mark-deployment-01

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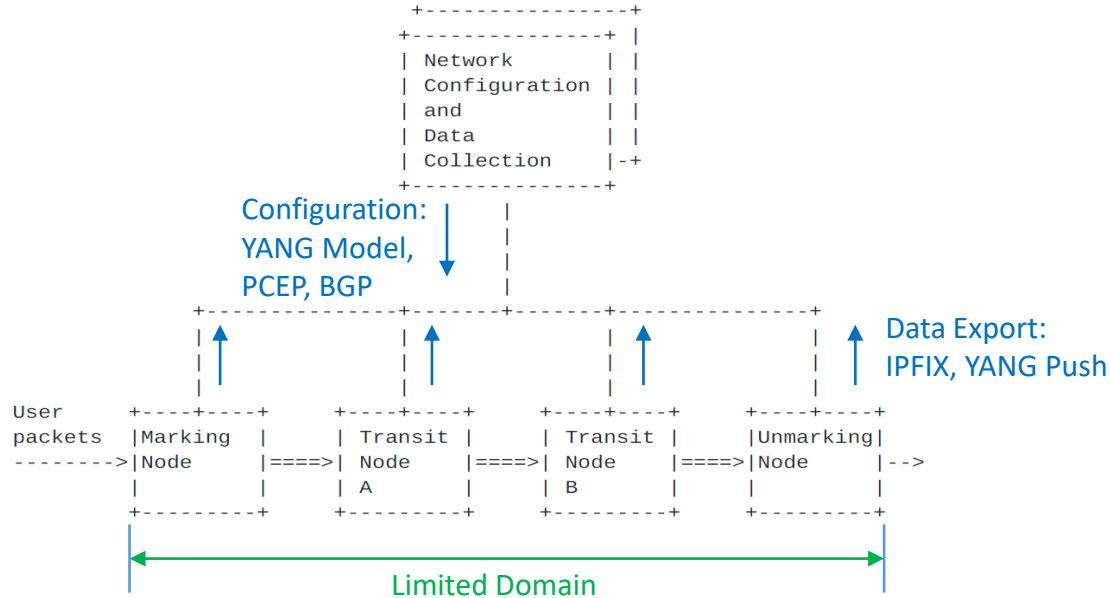
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Motivation

- This draft aims to provide guidance for the AltMark (RFC 9341, RFC 9342) deployment, especially with regard to the manageability



The scope is to clarify the following aspects:

- Deployment Domain
- Measurement Nodes
- Type of Measurements
- Configuration Aspects
- Data Export, Collection and Calculation
- Encapsulations
- Implementation Guidelines
- Security

Deployment Domain and Measurements

The AltMark Method is deployed in a **controlled domain** for security and compatibility reasons

- It is typically an overlay network domain:
 - the traffic is encapsulated at one border (**marking nodes**),
 - decapsulated at the other border (**unmarking nodes**)
 - the encapsulation incorporates the AltMark data (read by the **transit nodes**).

Either one or two flag bits might be available for marking in different deployments:

- **One flag:** packet loss measurement, while delay measurement according to the single-marking method. Mean delay could also be used.
- **Two flags:** packet loss measurement, while delay measurement according to double-marking method.

Configuration Aspects and Data Export

The YANG model can be used for the definition of the AltMark data sent over NETCONF and RESTCONF.

- [draft-ydt-ippm-alt-mark-yang](#) has been proposed as merge of two separate YANG models
- YANG Push can also be used: [draft-fz-ippm-on-path-telemetry-yang](#) has been submitted

The IPFIX Information Elements (IEs) to export AltMark measurement data are specified:

- [draft-ietf-opsawg-ipfix-alt-mark](#) has been adopted in OPSAWG

There are also control plane mechanisms to advertise and activate AltMark capabilities, using PCEP or BGP:

- [draft-ietf-idr-sr-policy-ifit](#)
- [draft-ietf-idr-bgp-ifit-capabilities](#)
- [draft-ietf-pce-pcep-ifit](#)

Next Steps

- Make this draft stable. Anything else to clarify?
- Move forward the companion documents on YANG Data Model

Comments are welcome!

Thank You