Additional Data Fields for IOAM Trace Option Types

draft-gafni-ippm-ioam-additional-data-fields-00

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Introduction

- IOAM data draft defines data fields as part of the IOAM trace header
  - https://datatracker.ietf.org/doc/draft-ietf-ippm-ioam-data/
- Our intention is to define additional data fields to complement the already-defined ones in order to cover additional use cases

New Suggested Data fields

- Tx_bytes
  - Allows tracking the amount of data transmitted from an interface over time

```
 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|                            tx_bytes                           |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
```

New Suggested Data fields – cont'

- Interface errors
  - Allows tracking the health and quality of an interface a packet is going through. In general – the path in the network that is used by an application

- Interface speed
  - Allows tracking the capacity of an interface and the whole path a packet is going through in the network. For bigger networks, that allows an operator to adjust the usage of its infrastructure in real time

```
 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
| interface_|                   interface_errors                |
|   speed   |                                                   |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
```

Next Steps

- Asking for the WG feedback
- Asking the WG to suggest additional important data fields to be added
- Targeting WG addoption