IPFIX Export per SCTP Stream

IPFIX IETF-69 July 24th, 2007

<draft-claise-ipfix-export-per-sctp-stream-01.txt>

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[IPFIX-PROTO] Reminder

- All Template Sets **SHOULD** be sent on the SCTP stream 0
- Data Sets **MUST NOT** be sent on stream 0
- Data Sets are sent on a different SCTP stream
Proposal

- Each Template Set SHOULD be sent on the same unique stream as its associated Data Set
Advantages

• Data loss for each Template Record can be deduced

  From the Sequence Number in the IPFIX Message header (sequence counter of all IPFIX Data Records sent on this PR-SCTP stream)

• Collecting Process’s job is easier

  Sure that the Templates arrive before the Data Records, as the transmission order is maintained within a SCTP stream (but not across steams)
Not Enough Streams?

- **New Template creation can lead to an stream exhaustion**

- **Solution**
  
  Add new streams (draft-stewart-sctpstrrst-05.txt) with the existing SCTP association

  OR

  Use stream 1, the only one that can export multiple Template Sets.
Open Issue

• What if the Option Template Record is used in multiple streams?

  Proposal: Leave it open

  Send a single time

  OR Send in every stream (guarantee the transmission order)

Note: The template ID is unique per SCTP association and Observation Domain
Discussion

• Does it clash with IPFIX-PROTO?
  No. We don’t use stream 0, except for Template Withdraw Message
  No. “All Templates Records SHOULD be sent on the SCTP stream 0”

• Conclusion:
  I see this specification as an useful IPFIX extension
  New WG item?
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