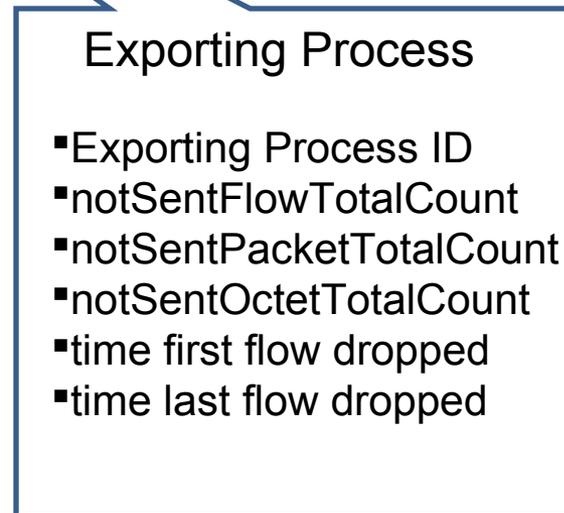
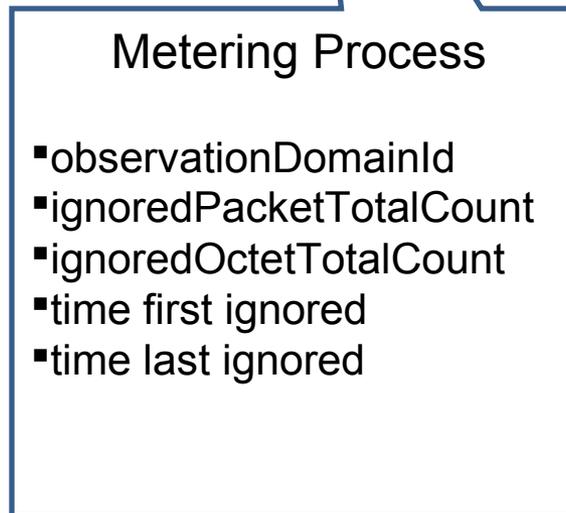


Reliability template Extension for IPFIX

Sujay Gupta, Infosys
Technologies

Reliability

- To ensure reliability *Metering* and *Exporting* process export “Reliability Statistics”



Problem Statement

- IPFIX device under some temporary conditions may be unable to collect all the statistics, like when in;
 - Control Plane Restarts
 - Device overload
- Proposal: At least send the time duration for which the condition has persisted;

Metering Process

- observationDomainId
- ignoredPacketTotalCount
- ignoredOctetTotalCount
- **time first ignored**
- **time last ignored**

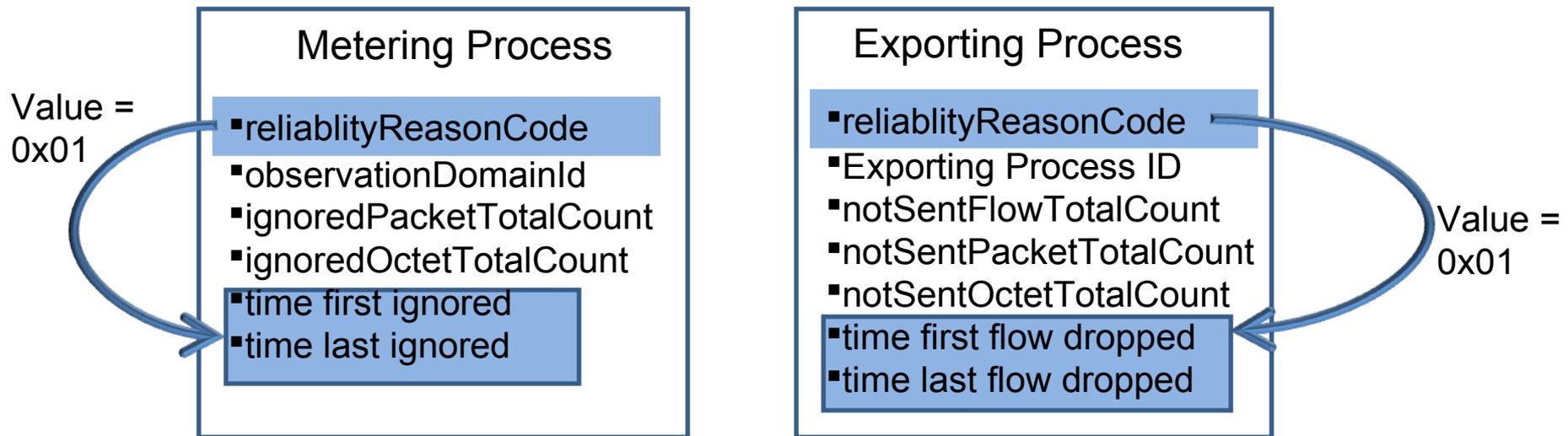
Exporting Process

- Exporting Process ID
- notSentFlowTotalCount
- notSentPacketTotalCount
- notSentOctetTotalCount
- **time first flow dropped**
- **time last flow dropped**

- This condition of the device is indicated by a new element added in the template. “reliabilityReasonCode” -added to the Reliability statistics template.

Value - 0x00 -> In this state the device is assumed to have the capacity to accumulate ALL counters. (Default value)

0x01 -> This value is used when the device sends reliability statistics but has been unable to accumulate any or all counters.



discussion list mails

- Thread 1:

Optional method : use existing IE `systemInitTimeMilliseconds`

Send it when the system reboots(or is down), leave the collector app to take it as an indication of Device unable to collect stats.

- *Works with an existing IE, however: Not a clear cut solution, not flexible.*

- Thread 2:

Enhance the proposed IE to carry 'hard-reboot' condition

- *The `systemInitTimeMilliseconds` can be sent after hard-reboot to indicate this condition.*

- Thread 3:

Usage of `start_time` and `end_time`?

- *Subject to application type and usage*

Next Steps

- Need for a solution;
 - Proposal for a new IE/Alternate protocol solution or
 - Text addition
- Need for more discussion?