Configuration Data Model for IPFIX and PSAMP

draft-ietf-ipfix-configuration-model-03

Gerhard Münz, Benoit Claise, Paul Aitken

75th IETF Meeting, Stockholm, 2009

Changes in -03

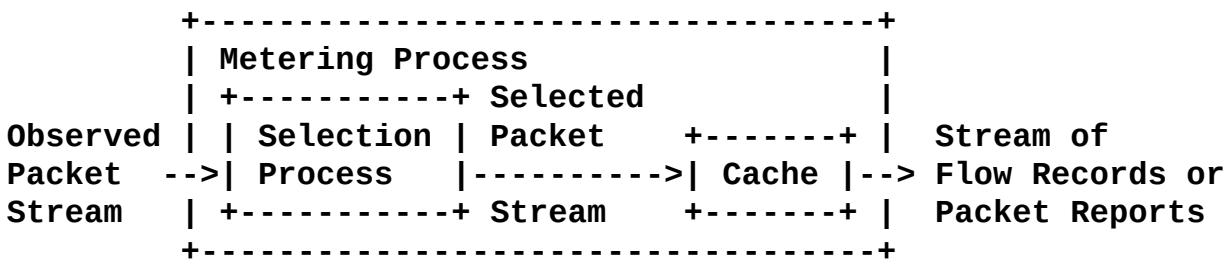
- Many editorial changes
- UML class diagrams:
  - "readOnly" *property*
  - parameter *multiplicity*
    - [0..X] = does not have to be configured
    - text and YANG **`description`** explains how to interpret or handle a non-existing parameter (specific meaning, default value, or value set by device)

Example:

```
+----------------------------+
| Selector                   |
+----------------------------+
| name                       |
| selectorId[0..1]           |
| packetsObserved {readOnly} |
| packetsDropped {readOnly}  |
+----------------------------+
```

- Relationship
  Observation Domain ⇔ *Selection Process/Cache*
  clarified (➔ slide 3)
- New parameters regarding transport layer security (➔ slide 4)
- Update of YANG module

Observation Domain ⇔ Selection Process/Cache



- Definition of *Observation Domain* in RFC 5101:

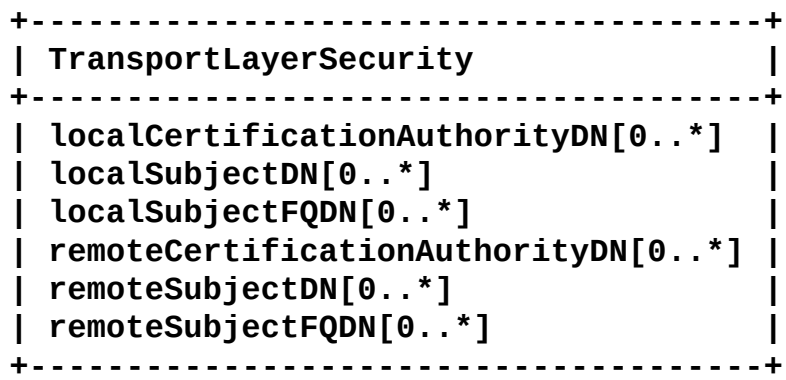
  An Observation Domain is the largest set of Observation Points for which Flow information can be aggregated by a Metering Process.

- Clarification in -03:

  The Observed Packet Stream at the input of a Selection Process MUST only contain packets originating from a single Observation Domain. Similarly, the Selected Packet Stream at the input of a Cache MUST only contain packets originating from a single Observation Domain. Packets from Observation Points belonging to different Observation Domains MUST NOT enter the same Selection Process or the same Cache.

- YANG module:
  - enforced with **`must`** statements for non-cascaded Selection Processes
  - other cases covered by **`description`** statement, only

Configuration of Mutual Authentication (+ Authorization)



- Enable (D)TLS separately for every destination of an Exporting Process and every receiver of a Collecting Process

- **`local*` parameters:**
  - identify/restrict certificates to be used to authenticate local endpoint
  - configuration error if no matching certificate is installed on the Monitoring Device

- **`remote*` parameters:**
  - restrict authentication of remote endpoint (➔ authorization)

Open issues

- PSAMP parameters
  - goal: same parameters as in PSAMP-MIB
  - still waiting for feedback/answers from PSAMP-MIB authors…
- TLS/DTLS parameters
  - additional parameters going beyond certificates?
    ➔ e.g. enable message authentication, message encryption, …
- WGLC to see…
  - if people understand the model and
  - where further clarification is needed