IPFIX Mediation: Framework

draft-ietf-ipfix-mediators-framework-04

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What is this draft?

❖ Describes a generalized concept for IPFIX Mediation and its high-level architecture, key IPFIX Mediation architectural components

❖ Draft outline is as follows.

- ☐ IPFIX Mediation reference model
  - • Shows high-level architecture
- ☐ IPFIX Mediation Functional Blocks
  - • Describes necessary functions for specific Intermediate Processes.
    - – Intermediate Conversion/Selection/Aggregation/Anonymization/ Correlation Process
- ☐ Consideration points for the IPFIX Message header encoding
- ☐ Relevant Information Model

Status

❖ Posted version -04 in October

- ❑ Changes from -03 to -04
  - Introduces Intermediate Conversion Process
  - Lists up the functions for each process
  - Added bidirectional Flow composition in Intermediate Correlation Process description
  - Added Component Combination section, describing parallel or serial connection of Intermediate Processes

❖ There is no open issue among co-authors.

Intermediate Conversion Process

❖ Transforms non IPFIX into IPFIX

◻ Transforms a record stream into Data Records

- Transforms additional information (sampling parameters) into Data Records
- Converts the Information Element IDs

❖ Manages the relation among Templates and states of in/out transport sessions in the case of transport protocol conversion (from UDP to SCTP)

◻ Sets the trigger for EP to export IPFIX Template Withdrawal Messages when Templates become invalid

◻ Maintains the mapping information about Transport Sessions, Observation Domain IDs, and Template IDs on the incoming/outgoing sides

Typical Functions

❖ Generates a new record stream from an input record stream including context information

❖ Reports statistics and interpretations from an Original Exporter

❖ Maintains several data:

- ☐ Configurable relation between CP(es)/MP(es) and EP(es)/other IP(es)
- ☐ Database(s) of all the Data Records in the case of aggregation/correlation
- ☐ Statistics Information on the Intermediate Process itself
- ☐ Additional information related to Original Exporter

Next Step

❖ Needs to be consistent with problem statement draft

   ☐ I will post new version after posting PS draft.

❖ Needs some feedbacks:

   ☐ from point view of Mediation Protocol draft

   ☐ from IPFIX members

❖ After resolving some issues in Mediation Protocol draft, it can go on WGLC.