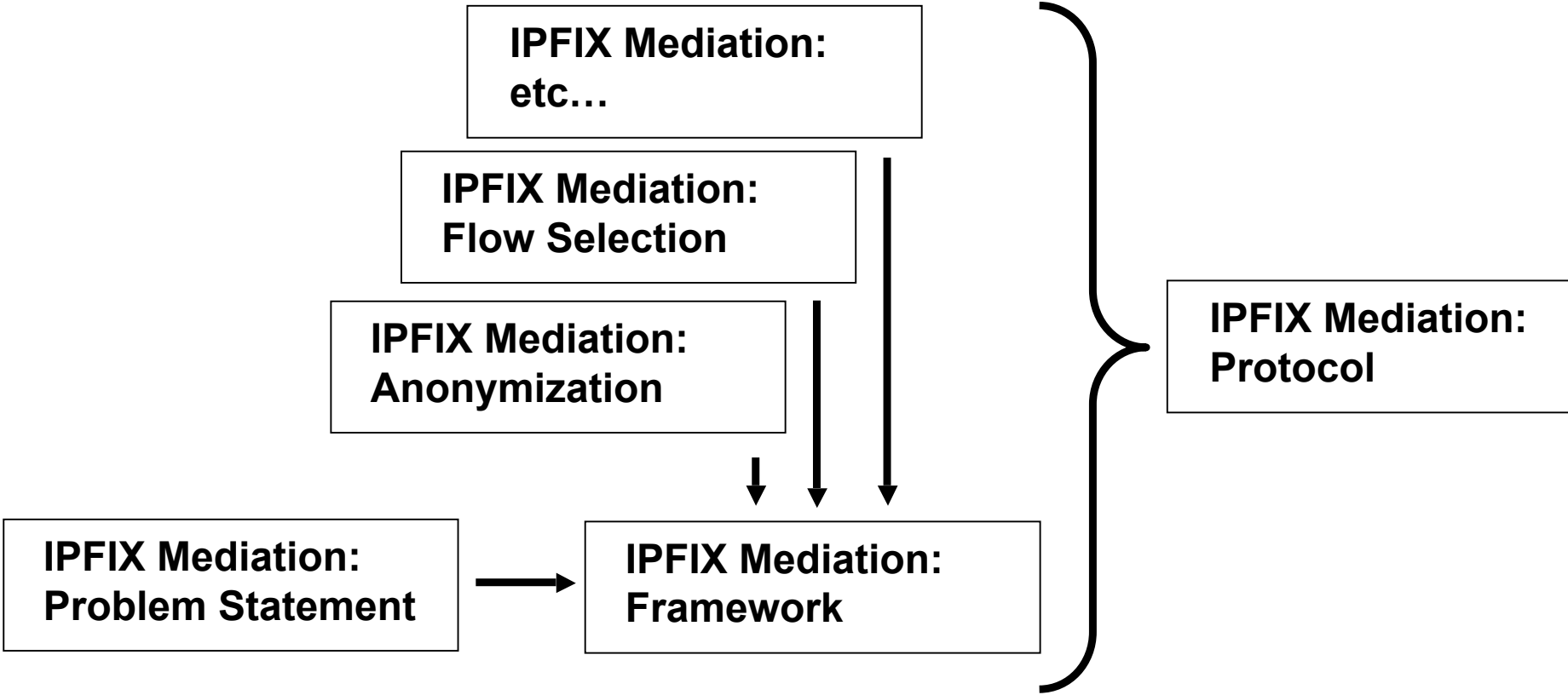


Specifications of the Protocol for IPFIX Mediations

**IPFIX IETF-76 Nov 11th, 2009
<draft-claise-ipfix-mediation-protocol-00.txt>**

Atsushi Kobayashi, Brian Trammell, Benoit Claise

Work Justification



Sometimes some generic solutions for all Intermediate Process Types

Sometimes some specific solutions per Intermediate Process Type

Introduction

- **Not a complete new protocol, but a series of conventions on the top of the IPFIX protocol RFC5101**
- **First draft is a starting point: a lot of open issues**
- **Draft must evolve with the [IPFIX-MED-FMWK] draft**

For example, section 7 “Encoding for IPFIX Message Header” discusses the export time and observation domain id

Problem 1: Observation Domain

- **If an IPFIX Mediator observes data records from multiple observation domains (OD), which one does it report?**
- **Solution 1: 0?**
- **Solution 2: a new one?**
- **Solution 3: 0 + a list of ODs**
- **Solution 4: keep the Original Exporter IDs + original ODs**
- **Solution 5: keep the ODs when data records are not moved to different messages, and ODs don't collide**

Problem 2: Observation Point

- **If an IPFIX Mediator observes data records from multiple observation points (OP), which one does it report?**
- **Solution 1: none**
- **Solution 2: we use the IPFIX Structured Data to compute an aggregated OP**

Problem 3: Template Management

- **Must keep the mapping of incoming versus outgoing templates mapping**
- **Which transport to include?**
 - SCTP, TCP, UDP**
- **Proposal**
 - Template management without a record change**
 - Template management with a record change**

Problem 3: Time

- **“It is RECOMMENDED that IPFIX Mediators handle time using absolute timestamps”**
- **What about data records aggregation?**
Export the min and max of all data record times?

Open Issues

- **What to put in this protocol draft versus in the specific intermediate process drafts?**
 - Anonymization -> not in this draft**
 - Flow Keys management?**
 - New sampling rate management?**
 - Etc...**
 - There is no draft for the Intermediate Aggregation and Correlation Processes...**
- **Should we export the aggregation/correlation functions for an IPFIX concentrator?**
- **Shall we (always) export the original exporter information?**

Conclusion

- **We have no choice that solving those problems now...**
- **Please read the draft and provide feedback**

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