Export of Structured Data in IPFIX

IETF-78 July 29th, 2010

<draft-ietf-ipfix-structured-data-02.txt>

Gowri Dhandapani, Paul Aitken, Stan Yates, Benoit Claise

Presentation version 2

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New in this Version

- **Add a semantic field to the 3 list types: basicList, subTemplateList, and subTemplateMultiList**

  undefined, noneOf, exactlyOneOf, oneOrMoreOf, allOf, ordered

  Requires the creation of a new IPFIX "structured data types semantics" IPFIX subregistry [IANA-IPFIX]

- **Completely reworked the examples**

WG Last Call Feedback

- **Rahul Patel**

  Request for improved examples

  Specific example with Flows and None of BGP-AS PATH

- **Christoph Sommer**

  Specification clarification requested

  why: "in case of a single element in a Structured Data Information Element, the default "undefined" semantic SHOULD be used.

  Justification of: "when representing variable-length data, hierarchical data, and repeated data with variable element counts, we RECOMMEND these are encoded as a Variable-Length Information Element"

WG Last Call Feedback

- ## Carsten Schmoll

    ### One remark regarding the one-way delay

    ### Clarification on the 64k limit

- ## Gerhard Muenz

    ### Spent many hours reviewing all aspects of the drafts

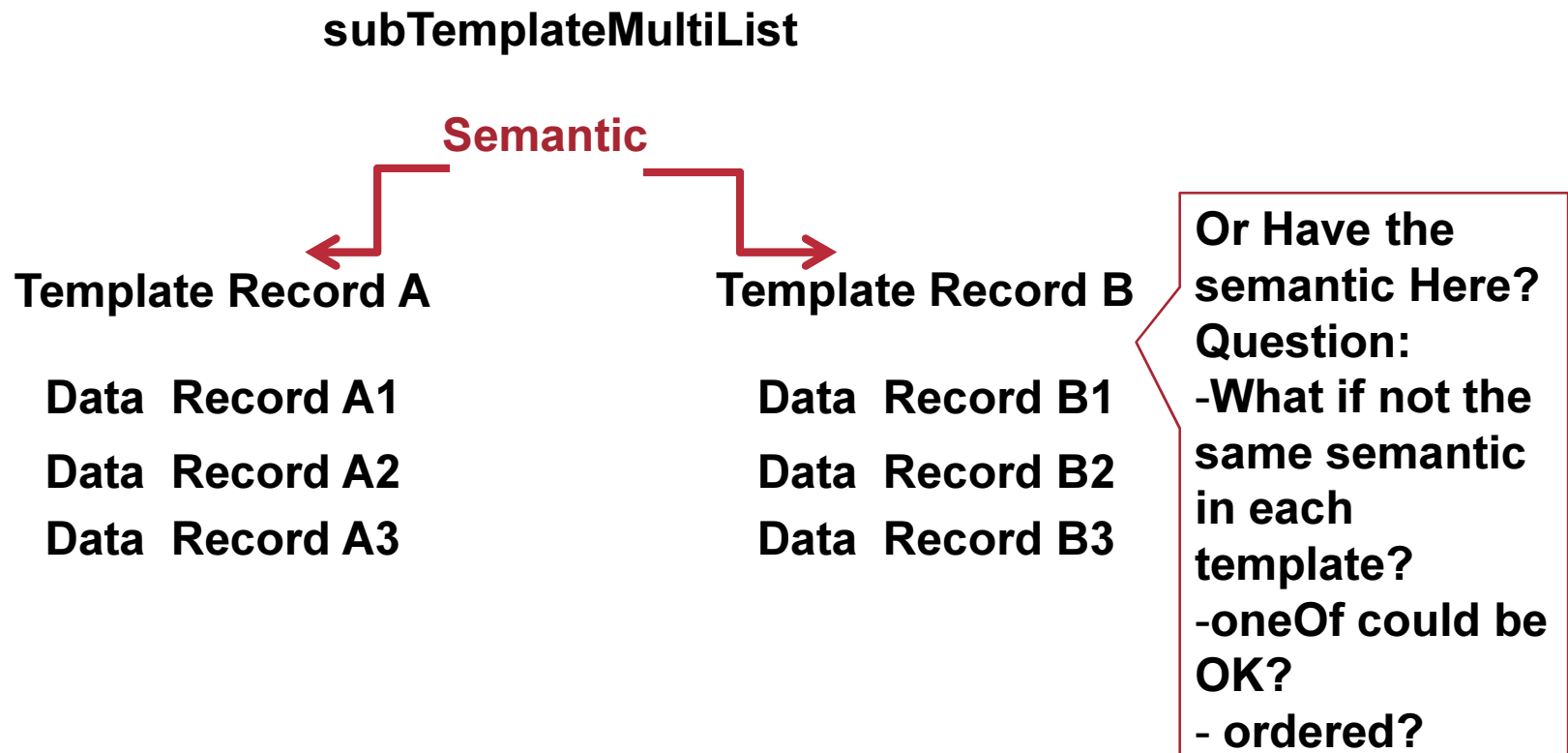   ### One point to debate: semantic of subTemplateMultiList

Semantic of subTemplateMultiList

- "It would be easier to understand if the meaning of the semantic of subTemplateList and subTemplateMultiList would be the same, namely that it specifies the semantic among the Data Records. At the moment, the draft specifies (although not very clearly) that the semantic refers to groups of Data Records associated to different Templates in the case of the subTemplateMultiList. I do not see a use-case for this. Also, no useful example is provided. On the contrary, it is always said that the semantic of subTemplateMultiList is not sufficient. "
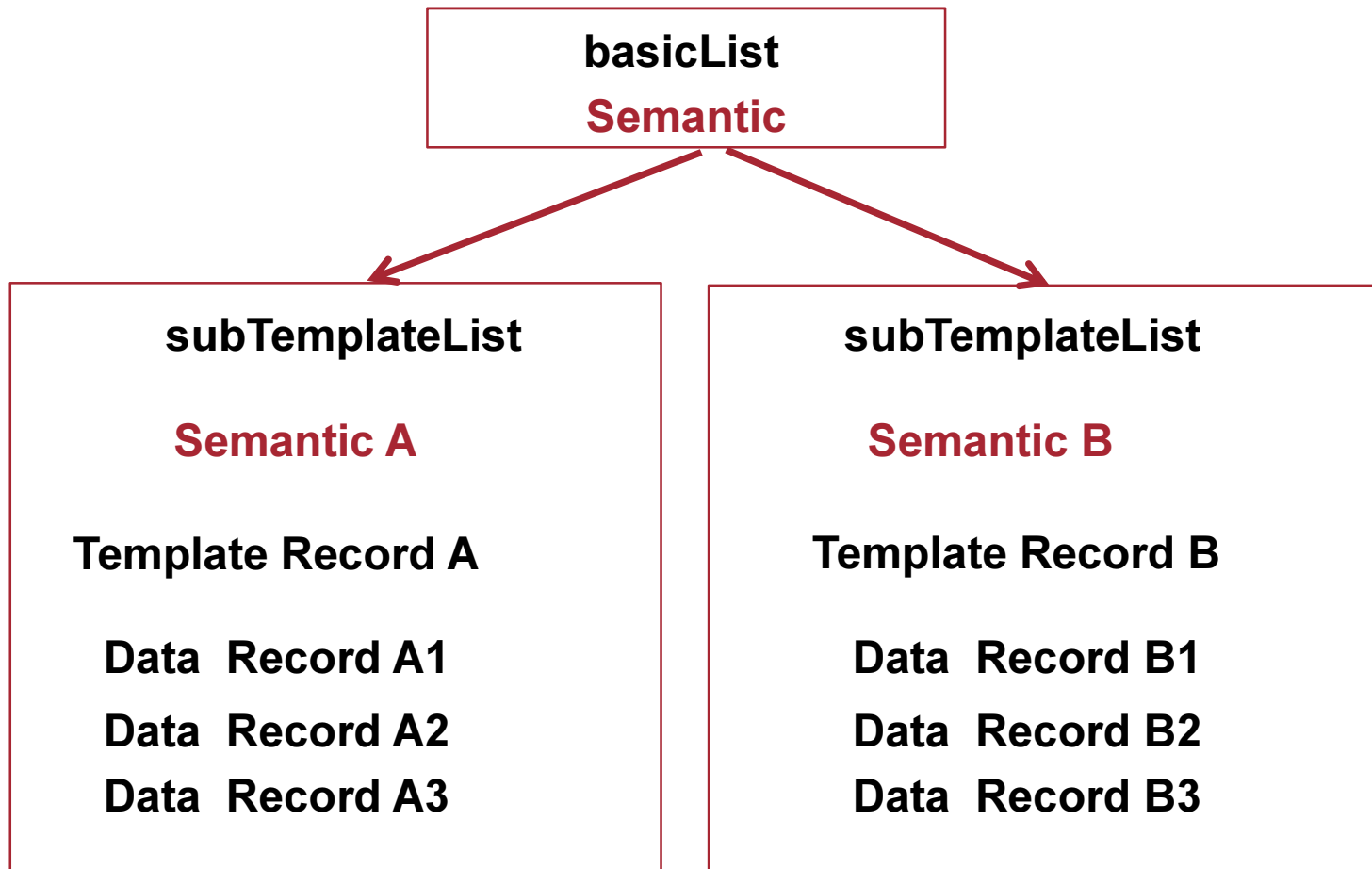
Gerhard

Semantic of subTemplateMultiList

- ## We need the semantic in the subTemplateMultiList

subTemplateMultiList

Semantic

Template Record A

   Data Record A1

   Data Record A2

   Data Record A3

Template Record B

   Data Record B1

   Data Record B2

   Data Record B3

Or Have the semantic Here?
Question:
-What if not the same semantic in each template?
-oneOf could be OK?
- ordered?

Semantic of subTemplateMultiList
Work with basicList of subTemplateList

basicList
Semantic

subTemplateList

Semantic A

Template Record A

Data Record A1

Data Record A2

Data Record A3

subTemplateList

Semantic B

Template Record B

Data Record B1

Data Record B2

Data Record B3

Summary

- **Something else you want to address here?**

- **Next steps**

  Post a new version with reviewers comments addressed

  Ready for **IESG**

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