

# Exporting Aggregated Flow Data using IPFIX (draft-trammell-ipfix-a9n-03)

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# a9n in a nutshell

- Draft defines a general purpose architecture operational model for an Intermediate Aggregation Process (IAP), and support for aggregated flow export.
- Minimal changes since Prague:
  - Noted open issues raised in hallway conversations (not addressed)
  - Wrote first example in detail

# Contents

- 1. Introduction
- 2. Terminology
  - **Aggregated Flow:** *A Flow, as defined by [RFC5101], derived from a set of zero or more original Flows within a defined Aggregation Interval.*
- 3. Use Cases
  - Time series generation
  - Adaptive resolution of flow data
  - Anonymizing effects of aggregation
  - *This section requires some expansion, and harmonization with section 8 (Examples)*

# More Contents

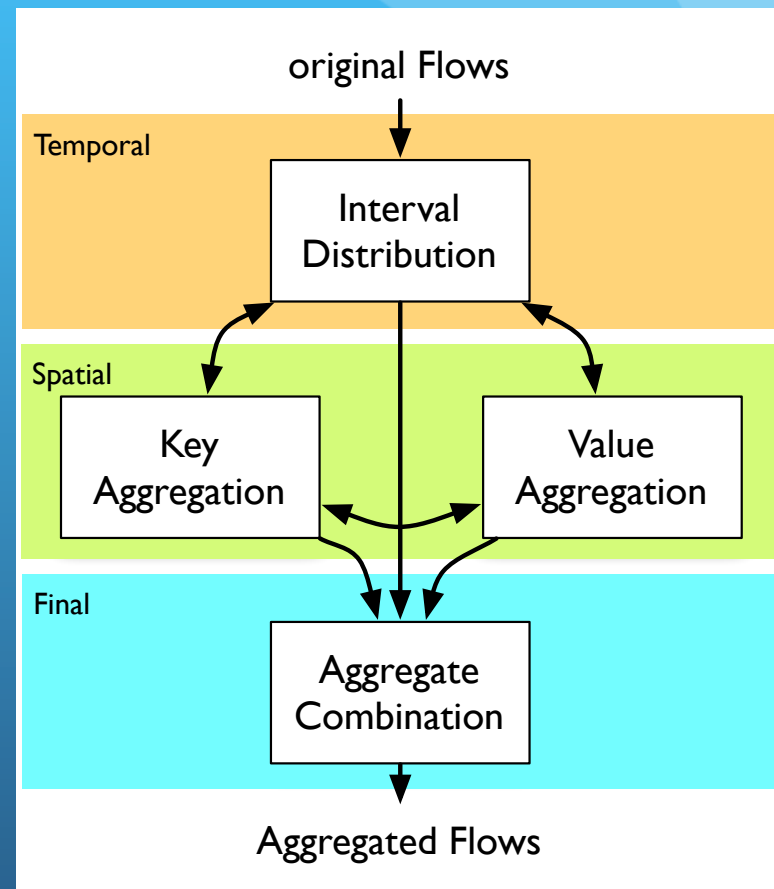
- 4. Architecture
  - How an Intermediate Aggregation Process fits into a Mediator, and with other IPFIX Architecture entities
  - A generalized, descriptive model for the internal arrangement of an Intermediate Aggregation Process
- 5. Operations
  - Detailed description of each of the operations outlined in the internal architecture
- 6. Additional Considerations
  - Exact versus Approximate Counting
  - Considerations for Aggregation of Sampled Data

# Yet More Contents

- 7. Export
  - Guidelines, IEs, and options templates for exporting according to the model in sections 4-6
- 8. Examples
  - **New in -03**: introduce conventions and toy data set used by all examples
    - Traffic Time-Series per Source
    - Core Traffic Matrix
    - Distinct Source Count
    - Traffic Time-Series with Counter Distribution
- 9. Security
- 10. IANA

# IAP Architecture

- Decomposition into iterative temporal and spatial steps
- Spatial aggregation implies temporal aggregation
  - interdependency due to special treatment of intervals in IPFIX



# Next steps

- Continued improvement of examples and use cases.
- Continue eliciting feedback and incorporating improvements from WG members.
  - One complete review of -03 already received (thanks, Christian Henke!) as well as comments on interval distribution (thanks, Lothar Braun!)
- WG adoption; to IESG in Taipei-Paris timeframe