

# Flow Selection Techniques

draft-peluso-flowselection-tech-00.txt

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# History

- draft-molina-flow-selection-00.txt
  - October 2003
  - Export of information about the flow selection process
  - Considered relevant but at that time other priorities (IPFIX Proto, PSAMP,...)
- draft-ietf-psamp-sample-tech-10.txt
  - Packet selection techniques
  - Mentions flow-state sampling, but no specification
  - Now finalized

# Flow Selection

- Selection of a subset of flows
  - Saving resources (flow cache, flow export)
  - Concentrating on specific flows
    - Specific applications
    - Large flows (due to elephant-mice phenomenon)
    - New flows, etc.
- Different Methods
  - Filtering or Sampling (see PSAMP definition)
  - Random or deterministic
  - Pure flow record selection (before export)
  - Combined with packet selection (e.g. flow-state dependent packet selection, Sample&Hold)

# Purpose of the Draft

- Definition of flow selection techniques that can dependent on:
  - Flow state
  - Flow record content
  - Flow record arrival time
  - External events (e.g. exhaustion of resources)
- Configuration of flow selection techniques
  - Analogous to PSAMP
- Reporting of flow selection information
  - Integration of IEs from Molina draft
  - Flow selection state reporting (e.g. flow cache status, etc.)
- Flow Cache Data Structures
  - Storage and update methods
  - Effectiveness of different approaches

# Status

- Very first version
- Integrated version with parts of draft-molina-flow-selection-00.txt planned
- October 2003 was too early for this
- Situation now:
  - PSAMP finalized
  - IPFIX Protocol finalized
- Now ready to address flow selection?