Initial Comments on PSAMP
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Observation

- **High end routers see scaling issues associated with fixed flow based export**

  – **Number of flows increases, export BW increases**

  – **Need lightweight mechanisms that aren't significant overhead for packet forwarding**

  – **General trend must be to more "Intelligent" mechanisms for packet sampling and filtering**

- **We are receiving requests from service providers to standardize the use of filtering/sampling in network measurement for traffic engineering**

PSAMP Goals?

- **With an IPFIX background in mind, a goal could be to clearly define the "metering process" in terms of sampling, filtering, hashing, etc…**

- **A goal could be to use IPFIX for export of PSAMP data off the box**

- **Note: resource and performance constraints would need to be addressed by PSAMP**

Cisco's Current Implementation

✓**Sampling**

✓**Filtering (limited)**

Netflow Sampling Methods

- **Sampled Netflow 1/N**

- **Future: more Netflow sampling methods in the pipeline**

Netflow Filtering Methods

- **Post-processing filtering**

- **Future: pre-processing filtering**

Conclusion

- **Filtering/Sampling are mechanisms that are becoming commonplace in all Cisco routers**