

OPSAWG@IETF117, San Francisco, California

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# Export of Flow Precision Availability Metrics Using IPFIX

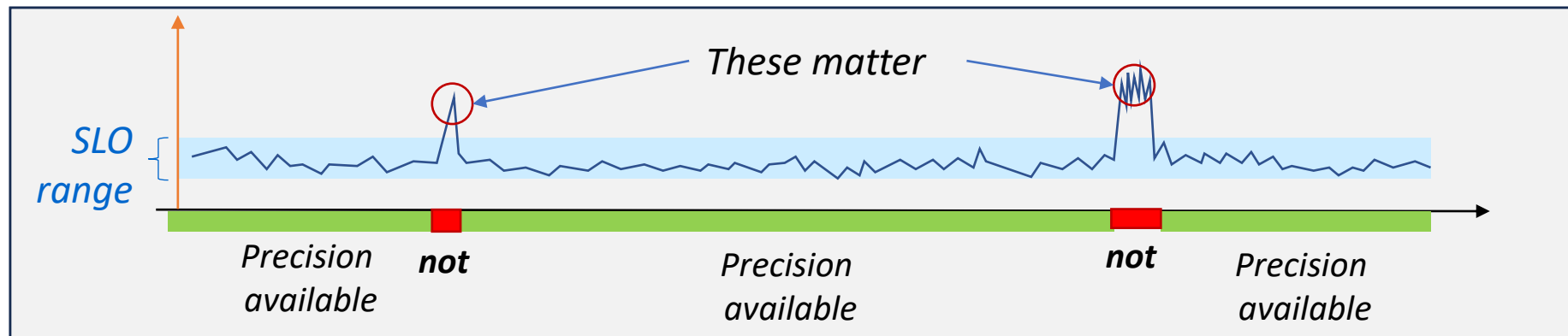
draft-clemm-opsawg-pam-ipfix-00

<https://datatracker.ietf.org/doc/draft-clemm-opsawg-pam-ipfix/>

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# Background

- draft-ietf-ippm-pam defines Precision Availability Metrics for services governed by Service Level Objectives
  - Violated Intervals being one key metric
  - In general, related to a given flow over time



- Not defined: how to collect, retrieve, export those metrics
- IPFIX allows to export flow records with statistics about flows
- This draft: extend IPFIX to export PAM

# Overview

- Draft specifies largely based on definitions for a set of new IPFIX Information Elements
  - First category to reflect Precision Availability Metrics (per ietf-ippm-pam)
    - Violated Intervals Count, Violation-Free Intervals Count, Mean Time between VIs, etc
  - Second category to reflect “manifest” to provide required context
    - Precision Availability Interval Length
    - SLO Identifier
      - What is a violation or not depends on the SLO, not just on observed service levels
      - Representation of SLOs themselves a possibility but may not be required
  - Not every PAM is reflected
    - Some can be easily computed by processor of the record (e.g. violated interval ratio)
    - Some are for further study, omitted for now to keep the set relatively lean
  - Currently, 9 Information Elements have been defined

# Discussion

- OPSAWG vs IPPM
  - IPPM defines the underlying metrics, this draft builds on that
  - However, IPFIX expertise and scope lies more with OPSAWG
- We are trying to gauge interest & solicit feedback for this work
- Next steps will include assessing if more IEs should be included (including SLO context/manifest)

**THANK YOU!**

Comments? Questions? Please contact us  
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