

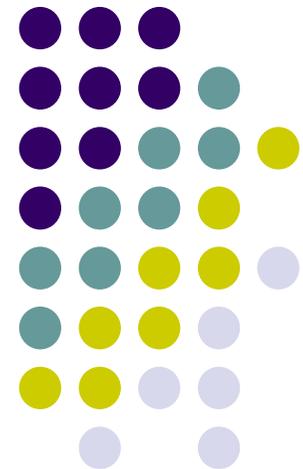
PSAMP MIB Status

Managed Objects for Packet Sampling

draft-ietf-ipfix-psamp-mib-00

A Status Report

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Overview

- Was draft-ietf-psamp-mib-06.txt
 - Moved to IPFIX WG due to closing of PSAMP WG
- Basic structure remained
- Integrated into the IPFIX MIB framework
- Selection/Filtering object aligned with
 - **RFC5477, Information Model for Packet Sampling Exports**
 - **RFC5474, A Framework for Packet Selection and Reporting**



MIB Structure

- Reduced from 4 groups of objects to 2
 - The sampling methods group
 - Defines all sampling methods and their parameters
 - The filtering methods group
 - Defines all filtering methods and their parameters
- Sampling and filtering have moved into IPFIX SELECTOR MIB tree
 - But are still defined in this MIB
- Reporting group and baseAssoc group are gone
 - Functionality is implemented in IPFIX MIB

Open Issue: Hash Function



- Schema similar to ipfixSelectionProcessTable and the selectors in the IPFIX SELECTOR MIB

```
PsampFiltHashParamSetEntry ::=
    SEQUENCE {
        psampFiltHashIndex          Integer32,
        psampFiltHashFunction       OBJECT IDENTIFIER,
        psampFiltHashInitializerValue Counter64,
        psampFiltHashIpPayloadOffset Counter64,
        psampFiltHashIpPayloadSize Counter64,
        psampFiltHashSelectedRangeMin Counter64,
        psampFiltHashSelectedRangeMax Counter64,
        psampFiltHashOutputRangeMin Counter64,
        psampFiltHashOutputRangeMax Counter64
    }
```

- Do we want to expose all of the parameters?
 - RFC5475, **Sampling and Filtering Techniques for IP Packet Selection**: “We also assume the possibility of using a private input parameter for the Hash Function that is kept secret

Open Issue: Hash Function



- Are these generic parameters or do we have something per hash function type: CRC, BOB, IPSX?
- **RFC5475, Sampling and Filtering Techniques for IP Packet Selection:**
 - “If a Hash-based Selection with the BOB function is used with IPv4 traffic, the following input bytes **MUST** be used
 - IP identification field
 - Flags field
 - Fragment offset
 - Source IP address
 - Destination IP address
 - A configurable number of bytes from the IP payload, starting at a configurable offset
- What to do about these dynamic parameters in the MIB?



Open Issues: Data Types

- Some objects need datatypes that are not defined by SMI
 - Float64 for psampSampUniProbProbability
 - defined as millionth part of one.
 - Unsigned64 for most objects in the sampFiltHashParamSetTable
 - Defined as Counter64

The End



Thank you for your attention