IPFIX Applicability Update

draft-ietf-ipfix-as-01.txt

Tanja Zseby, FhG FOKUS

Reinaldo Penno, Nortel Networks

Nevil Brownlee, CAIDA

Benoit Claise, Cisco Systems

Applications

- Accounting
  - Flow definition according to tariff
  - Useful: Connection to AAA

- Security Analysis and Intrusion detection
  - Useful basic input (e.g. high load on specific flows)
  - But no details on packet content ➔ PSAMP
  - IPIFX can trigger a further analysis
  - Analysis close to exporting or collecting process
  - Useful: allow IPFIX reports on incident detection (not just flow end, timeout, etc.)

- Network Planning
  - Long term traces
  - Analysis of traces from different observation points

- Peering Agreements
  - Data exchanged between providers

Applications

- **Traffic Engineering**
  - Load balancing based on prefixes
- **Data Warehousing and Mining**
  - Storage and off-line analysis of traces
  - Input for service packaging
- **Traffic Monitoring**
  - Usage analysis
  - Trouble shooting
- **QoS Monitoring**
  - Round-trip-time (RTT)
  - One-way-delay (OWD)
  - One-way-loss (OWL)
  - IP delay variation (IPDV)
  - Useful: allow transfer of per packet information (e.g. ID) ➔ PSAMP
  - Useful: accurate timestamping

Relation to Other Frameworks/Protocols

- **IPFIX and AAA**
  - Connecting via an AAA Client
  - Connecting via an Application Specific Module (ASM)

- **IPFIX and RTFM**
  - Definition of 'flow'
  - Configuration and Management
  - Data Model details
  - Transport protocol

- **IPFIX and IPPM**
  - Transfer of IPPM metrics or information to calculate IPPM metrics

Open Issues

- ## Applications
  - Combine some ?
  - Further applications ?
  - Further details ?
  - Limitations/recommendations where **not** to use IPFIX ?

- ## Relation to other Protocols and Frameworks
  - Section on Middleboxes
    - was removed ➔ will there be a separate draft ?
  - Additional Sections on
    - IPFIX and PSAMP (currently pretty dynamic relation)
    - IPFIX and RMON (volunteers ?)
    - IPFIX and TEWG (volunteers ?)
    - Further groups ?

Thank you for your attention !

Questions ?

Comments ?

Volunteers ?