Extended Type Information for IPFIX Enterprise-Specific Information Elements

draft-boschi-ipfix-extended-type-00.txt

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Problem statement

► In IPFIX there is no current mechanism to provide the data type for a given Information Element
  ▪ e.g. enterprise-specific ones

PROBLEM:

► it will not be possible to use any existing analysis tool on IPFIX records containing enterprise-specific Information Elements, since the tools will not be able to decode these IEs.

► No full self-description.

► Potentially not fully interoperable if enterprise-specific IEs are used

Rationale and history

► FloCon 2005 – IPFIX panel

► David Moore's email to the list:
http://www1.ietf.org/mail-archive/web/ipfix/current/msg03040.html

► First ideas on the mailing list (Brian) november 2005:
http://www1.ietf.org/mail-archive/web/ipfix/current/msg03070.html

► Listed as open issue in the IPFIX Implementation Guidelines

► Draft solution included in draft-trammell-ipfix-file to meet the self-description requirement
  ▪ But the solution is generally applicable…

► Now an independent draft

Basic Idea

► mechanism for exporters to provide the data type and semantic information of enterprise-specific IEs within the exported data stream

► IPFIX Options Records allow the mapping from {enterpriseID, IE} pairs to corresponding data type and semantic information.

► Including the information inline allows
  ▪ more rapid processing
  ▪ self-description of flow streams (or files).

Conclusions

► Necessary IPFIX extension

► Addresses self description requirement

► => WG item