Information Model Update

IETF 96

07/18/2016

Agenda

• Open issues

• Next steps

• Status

IPFIX syntax issue #1 – template properties

- name, elementId, dataType, status, enterpriseId, dataTypeSemantics, units, range, description, reference, revision, date
- Do we need an additional field to capture flags or other substructures rather than capturing it in the description field?
- Suggestion to extend status from "current"/"deprecated" to "added in version X"/"deprecated in version Y"?
 - revision the revision number of an IE. 0 when defined. +1 for each revision.
 - date date the IE was added into the registry

IPFIX syntax issue #2 - naming conventions

- Should we leverage the following IPFIX naming conventions?
 - 1. Names SHOULD be descriptive
 - 2. Names MUST be unique within the SACM registry. Enterprise-specific names SHOULD be prefixed with a vendor name.
 - 3. Names MUST start with lowercase letters
 - 4. Composed names MUST use capital letters for the first letter of each part
 - E.g. sourceMacAddress
 - Other options (SourceMacAddress, source-mac-address, source_mac_address, etc.)
- Feedback in favor of 1 3. Feedback against 4. What do others think?

IPFIX issue #3 - datatypes

- Adopted the existing IPFIX non-list datatypes
 - unsigned (8, 16, 32, 64), signed (8, 16, 32, 64), float (32, 64), boolean
 - macAddress, ipv4Address, ipv6Address
 - octetArray
 - string
 - dateTime (seconds, milliseconds, microseconds, nanoseconds)
- What other datatypes do we need to create and add?
 - Version types (simple, rpm, Cisco train), URI, array, map
- Do we need IPFIX datatype semantics (quantity, identifier, flags, etc.)?

IM/DM requirements issue #1 – DM-001

 DM-001 Element Association: The data model MUST contain a data model element for each information model element...

Does the use of SWID via SWID M&A violate this requirement?

• Do we need to distinguish between DMs for endpoint information (data plane) and SACM Components (management plane)?

IM/DM requirements issue #2 – DM-002

 DM-002 Data Model Structure: The data model can be structured either as one single module or separated into modules and submodules that allow for references between them. The data model structure MAY reflect structure in the information model, but, does not need to...

- Split DM-002 into two requirements:
 - 1. DM MAY be a single module or separated into modules and sub-modules
 - 2. DM structure MUST reflect the structure in the IM

Next steps

- Finish the IPFIX syntax updates
- Convert I-D IM IEs to the IPFIX syntax and pull into the IM
- Update Requirements I-D based on WG feedback
- Review Section 8 for any clean-up opportunities
- Further define Guidance in the IM

Status

 Clarified that the SACM Statement and Content-Element constructs are only conceptual and do not need to be implemented by a DM

Addressed some of the issues with the IPFIX syntax

Performed various clean up in Section 6 and Section 7

Removed appendices that were not referenced in the body of the I-D