

Information Model Update

IETF 96

07/22/2016

Agenda

- Open issue resolutions
- Other updates
- Next steps

IPFIX syntax issue #1 – template properties

- Do we need an additional field to capture flags or other substructures rather than capturing it in the description field?
- ***Add a new “structure” property.***
- 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
- ***Use “revision” and “date” properties. Work towards “expert review” model. Revisit discussion around more detailed versioning later.***

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 PEN.
 3. Names MUST start with lowercase letters unless it begins with a PEN
 4. Composed names MUST use capital letters for the first letter of each part
 - E.g. sourceMacAddress
- ***Keep the IPFIX naming conventions. Update (2) to use a Private Enterprise Number (PEN) instead of a vendor name.***

IPFIX issue #3 - datatypes

- What other datatypes do we need to create and add?
 - Version types (simple, rpm, Cisco train), URI, array, map
- ***Change versions from primitive datatypes to IEs.***
- ***Received a request for an enumeration primitive datatype.***
- ***Received a potential definition for the map datatype.***
- Do we need IPFIX datatype semantics (quantity, identifier, flags, etc.)?
- ***Leave out until we have a clearer need for them?***

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?
- ***It is not supposed to. Subset DMs are ok. Working to update DM-001 to reflect this.***
- Do we need to distinguish between DMs for endpoint information (data plane) and SACM Components (management plane)?
- ***We may need to do this. Needs more discussion.***

IM/DM requirements issue #1 – DM-001 rewrite*

- Each data model artifact that is derived from the SACM information model MUST be associated with at least one and MAY be associated with more than one SACM information model artifacts.
- A SACM data model MAY include additional data model artifacts that are not associated with SACM information model artifacts.
- For example, two Information Elements from the SACM information model could be mapped to a single item in the SACM data model. As another example, an item in a SACM data model does not need to directly correspond to any item in the SACM information model.

*We are still discussing this off list. Should we continue to discuss and propose our update to the group? Or, should we bring the entire discussion to the list?

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 sub-modules 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
- ***Leave as-is with the understanding structure is not referring to relationships in the IM. Relationships in the IM still need to be implemented by DMs.***

IM/DM requirements issue #3 – DM-014

- DM-014 Attribute Extensibility:
- Use Cases in the whole of Section 2 describe the need for an attribute dictionary. With SACM's scope focused on posture assessment, the data model attribute collection and aggregation MUST have a well-understood set of attributes inclusive of their meaning or usage intent.
- ***Not sure how we would achieve this. Remove this text from the requirement?***
- The data model MUST include all attributes defined in the information model and MAY include additional attributes beyond those found in the information model.
- ***Covered by the DM-001 rewrite. Remove this text from the requirement?***
- Additional attributes MUST be defined in accordance with the extensibility framework provided in the information model (see IM-001).
- ***Change “additional attributes” to “additional data model attributes”.***

Other updates

- Removed Section 8 (usage scenario for detecting posture deviations) from the IM
- Closed some basic typo issues as well as other issues that are now irrelevant given recent changes to 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
- Further define Guidance in the IM