Information Model Update

IETF 95
04/06/2016
Agenda

• Status

• Discussion

• Next steps
Status

• Discussed the latest draft at the 3/9 Virtual Interim Meeting

• Asked for feedback on how to indicate special things about IEs

• Put out a call for IEs that we would like to see in the IM
  • We need help on a variety of tasks if you are interested :) 
    • Survey of information we would like to support 
    • IM modeler 
    • Data model reviewer 
    • …

Why do we have an IM

• Define a vocabulary that describes the information we want to support in the SACM Domain\(^1\)

• Define the structures necessary to specify IEs in the IM

• Ensure interoperability between DMs

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A few definitions

• Information Model\(^1\): An abstraction of entities, their properties, and how they relate to each other

• Data Model\(^2\): A mapping of an information model to a form specific to a particular type of data store or repository

• Serialization\(^3\): A translation of data structures or objects into a format that can be stored and/or transmitted and reconstructed later

IM, DM, and Serialization

IM

DM₁

Serialization₁₁

DM₂

Serialization₂₁

DM₃

Serialization₃₁

...

DMₙ

Serializationₙ₁
IM, DM, and Serialization

Software Instance

- $\text{DM}_1$
  - Serialization$_{1,1}$
- $\text{DM}_2$
  - Serialization$_{2,1}$
- $\text{DM}_3$
  - Serialization$_{3,1}$
- $\ldots$
- $\text{DM}_n$
  - Serialization$_{n,1}$
IM, DM, and Serialization

Software Instance

SWID XML Schema
Serialization_{1,1}

SWID CBOR Data Definition
Serialization_{2,1}

DM_3
Serialization_{3,1}

... ...

DM_n
Serialization_{n,1}
IM, DM, and Serialization

SwID

SwID XML Schema
Serialization_{1,1}

SwID CBOR Data Definition
Serialization_{2,1}

Software Instance

DM_3
Serialization_{3,1}

... DM_n
Serialization_{n,1}

IETF 95 - April 2016
draft-cam-winget-sacm-information-model-00

• Submitted on 3/21

• Intent was to integrate text into the current IM (not replace it)

• Provides structure and content

• Focused on building DMs

Integration of structure

• Reordering and refactoring of sections in the current IM

• Adopting more precise terminology
  • Attribute => Attribute Information Element (AIE)
  • Object => Composite Information Element (CIE)
Integration of vocabulary

• Make use of the IPFIX syntax

• Investigate extensions to the IPFIX syntax used in the IM to support:
  • Cardinality
  • Datatype semantics
Next steps

• Integrate text from draft-cam-winget-sacm-information-model-00 into the IM

• Fix a few bugs in the IM that have been reported

• Add IEs proposed by the WG into the IM

• Continue discuss, resolve, and close out open issues