Information Model Update

SACM Virtual Interim Meeting 01/11/2017

Agenda

• Status

• Open issues

Next steps

Status

- Submitted -08 on December 5, 2016
 - Various clarifications with respect to subjects and attributes
 - Defined a syntax for category IEs
 - Fixed numerous errors generated by Travis-Cl

Still need to figure out the scope of the IM

Issue #8: Define a provenance/chain-of-custody information module¹

- Captured as a need for provenance and chain-of-custody information in the early meetings of the EID-DT²³
- While the WG wants to support this, there seems to be some consensus around providing extensions points rather than explicit mechanisms

• Is there agreement with this line of thinking? If so, can we close out the issue?

^{1.} https://github.com/sacmwg/draft-ietf-sacm-information-model/issues/8

https://www.ietf.org/mail-archive/web/sacm/current/msg02351.html

^{3.} https://www.ietf.org/mail-archive/web/sacm/current/msg02409.html

Issue #9: Consider network topology and location information as identifying attributes¹

- Raised out of the April 17, 2015 EID-DT meeting²
- Support location via the locationName IE (Section 7.52)³

- Does not currently support network topology information. Some ideas:
 - Network layer
 - L2 (e.g. link-layer-neighborhood, shared-broadcast-domain, broadcast-domain-label)
 - L3 (e.g. next-hop-routing-neighbor)
 - Zones (e.g. internet, enterprise DMZ, enterprise WAN, enclave DMZ, enclave)

^{1.} https://github.com/sacmwg/draft-ietf-sacm-information-model/issues/9

https://www.ietf.org/mail-archive/web/sacm/current/msg02587.html

^{3.} https://tools.ietf.org/html/draft-ietf-sacm-information-model-08#section-7.52

Issue #11: Security considerations - IP spoofing¹

- During an EID-DT Meeting, there was a suggestion that the Security Considerations section should include text about spoofing IP addresses as well as other identifying information²
- Security Considerations section³ currently operates at a much higher level
 - Authentication, confidentially, integrity, restricted access
- Operational Considerations section⁴ focuses on endpoint designation among other things
 - Multiplicity, persistence, immutability, verifiable
- Do we need to capture this in our Security Considerations section? Or, can we close out the issue?

^{1.} https://github.com/sacmwg/draft-ietf-sacm-information-model/issues/11

https://www.ietf.org/mail-archive/web/sacm/current/msg02612.html

^{3.} https://tools.ietf.org/html/draft-ietf-sacm-information-model-08#section-10

Issue #15: Identification and definition of attributes¹

 Focuses on naming and defining IEs as well as acceptable datatypes and requirement levels

- The current IM provides naming conventions², a format for defining IEs³, and datatypes⁴
 - Still need to figure out which IEs are MTI⁵
- With the exception of selecting MTI IEs, has this issue been addressed and can we close it out?
- 1. https://github.com/sacmwg/draft-ietf-sacm-information-model/issues/15
- 2. https://tools.ietf.org/html/draft-ietf-sacm-information-model-08#section-4.1
- 3. https://tools.ietf.org/html/draft-ietf-sacm-information-model-08#section-4
- 4. https://tools.ietf.org/html/draft-ietf-sacm-information-model-08#section-5
- 5. https://github.com/sacmwg/draft-ietf-sacm-information-model/issues/65

Issue #17: Identifying attributes¹

- There was some confusion around the original title of the section concerned with attributes that identify endpoints
 - Suggestion to change the title from "Identifying Attributes" to "Endpoint Identifying Attributes" and to update the first sentence of the section
- The current IM contains a section titled "Endpoint Designation"² that addresses identifying attributes as well as includes revised introductory text
- Does the text in the current IM address this issue?

^{1.} https://github.com/sacmwg/draft-ietf-sacm-information-model/issues/17

^{2.} https://tools.ietf.org/html/draft-ietf-sacm-information-model-08#section-11.1

Issue #18: How known¹

 Previously, the IM had a section concerned with how a provider knew about an attribute²

- It was suggested that a "derived" value be added to the collectionTaskType (network-observation, remote-acquisition, self-reported, etc.)³. Also, want to add "authority" and "verified".
- Does this make sense to the WG? Can we close out the issue after we add "derived"?

https://github.com/sacmwg/draft-ietf-sacm-information-model/issues/18

^{2.} https://tools.ietf.org/html/draft-ietf-sacm-information-model-02#section-4.1.1

^{3.} https://tools.ietf.org/html/draft-ietf-sacm-information-model-08#section-7.27

Issue #25: SACM components (except at endpoints) MUST have time synchronization¹

- Out of an EID-DT meeting, there was discussion around the need for SACM components to support time synchronization²
- From the discussion, two requirements were proposed:
 - SACM components residing on target endpoints SHOULD implement time synchronization and add correct timestamps
 - SACM components that do not reside on target endpoints MUST implement time synchronization and add correct timestamps
- Do these requirements belong in the Architecture draft provided the IM supports the necessary information needs?

^{1.} https://github.com/sacmwg/draft-ietf-sacm-information-model/issues/25

^{2.} https://www.ietf.org/mail-archive/web/sacm/current/msg03177.html

Issue #26: Terminology change away from the terms "identification", "identity", "identifying"¹

- At IETF 93, there were concerns raised around identifying endpoints²
- Renamed the process of identifying attributes to "endpoint designation", however, the IM still makes reference to "identifying attributes"
- Feedback in the GitHub tracker suggests that, if the terms are accurate, we should use them despite any negative connotations as long as we provide a way to protect privacy in the Privacy Considerations³ section
- How do we want to proceed on this issue?

^{1.} https://github.com/sacmwg/draft-ietf-sacm-information-model/issues/26

^{2.} https://www.ietf.org/proceedings/93/minutes/minutes-93-sacm

^{3.} https://tools.ietf.org/html/draft-ietf-sacm-information-model-08#section-12

Issue #35: Do we care whether an attribute was authenticated or unauthenticated¹

- As part of the feedback on the Vulnerability Assessment Scenario, it was asked if the WG cared if data was authenticated or unauthenticated²
- It was noted that this is closely tied to provenance and we may also want to consider quality of the data
- One suggestion was to add basic enumerations for things like level of authentication, level of assurance, etc.
- How do we want to proceed?
 - Boolean attribute for whether an attribute is authenticated
 - Add enumerations for different levels of authentication, assurance, etc.
 - Something more complex

https://github.com/sacmwg/draft-ietf-sacm-information-model/issues/35

^{2.} http://www.ietf.org/mail-archive/web/sacm/current/msg03597.html

Next steps

• Continue resolving open issues on the mailing list

Need to decide on the scope of the IM