

Concise Software Identifiers

draft-ietf-sacm-coswid-04

IETF 101, SACM Working Group

Changes in the -03 Revision

- Updated CDDL to allow for a choice between a payload or evidence
- Re-index label values in the CDDL.
- Added item definitions
- Updated references for COSE, CBOR Web Token, and CDDL

Changes in the -04 Revision

- Re-index label values in the CDDL.
- Added a section (1.1) discussing the use of CoSWIDs in the context of a software lifecycle
- Added sections (2.1 thru 2.7) describing the CoSWID model in detail.
 - Includes discussion of co-constraints
 - Discussion of extension points
 - Interpretation of tag types based on specific data items
- Created IANA registries (sections 3 and 4) for entity-role and version-scheme values
 - Allows use of either index-based or textual values
 - Index values provide for standardization and size reduction
 - IANA registry reserves space for private use, standards action, and specification required allowing for future extension

Changes in the -05 Revision

- Addressed comments from Chris Inacio. Thanks Chris!
- Clarified language around SWID and CoSWID to make more consistent use of these terms.
- Added language describing CBOR optimizations for single vs. arrays in the model front matter.
- Fixed a number of grammatical, spelling, and wording issues.
- Documented extension points that use CDDL sockets.
- Converted IANA registration tables to markdown tables, reserving the 0 value for use when a value is not known.
- Updated a number of references to their current versions.

Issue: Remove the firmware extension?

- Appendix B is needs to be synced with the SUIT information model, which is still under development
- Waiting on SUIT will delay publication of CoSWID.
- Moving the firware extension to another draft will allow CoSWID to be published and the firmware work to continue at pace with SUIT

Any concerns with moving this text to a separate extension draft?

Issue: (X)Path Expressions for JSON and CBOR

In CoSWID we may need to:

- Translating SWIDs to CoSWIDs: Convert an XPath for an XML SWID to a path in a CoSWID
- Create CoSWID Path Expressions: Author a path expression based on CoSWID data

Examples:

- `swidpath://SoftwareIdentity\[Entity/@regid='http://contoso.com'\]`
- `swidpath://SoftwareIdentity\[Meta/@persistentId='b0c55172-38e9-4e36-be86-92206ad8eddb'\]`

Issue: (X)Path Expressions for JSON and CBOR (Cont'd)

Solution:

- Write additional drafts that address this problem
- Define an XPath binding for JSON and CBOR
- Map SWID data items to CoSWID data items
- Bind (X)Path to a URI form

Benefits

- Allows CoSWID to move forward while we address this issue
- Work could benefit other CBOR efforts

Does it make sense to do this work in SACM, CBOR, or another WG?

Other things we would like to do

- Add additional enumerations for text values.
 - link/ownership
 - link/use
- IANA Registrations
 - Register a media type for application/coswid+cbor.
 - Register a CoSWID content type for CoAPP.
- Editorial changes
 - Add figure names to tables.
 - Fix minor formatting issues

More review is needed

- The draft is (near-)complete in content
 - One more revision will address all current issues.
 - Can post this draft within a couple weeks after the meeting
- Does it make sense to have a WGLC to get more feedback?