

CDDL Container for vCon

draft-ietf-vcon-vcon-container-00

same as draft-petrie-vcon-04

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Changes and issues

- CBOR and CDDL
- Additions/resolutions of draft-rosenberg-cc-usecases metadata
- Hackathon findings
- Other new issues

Gap analysis of draft-rosenberg-vcon-cc-usecases: covered

draft-rosenberg-vcon-cc -usecases	draft-petrie-vcon-02	
CC Meta-Data	Parameter	Section
File Type	Dialog Object: type and mimetype	4.3.1 and 4.3.6
Media meta-data	Dialog Object and Dialog Content	4.3
Start Time	Dialog Object: start	4.3.2
Duration	Dialog Object: duration	4.3.3
Direction of call	Dialog Object: originator	4.3.5
First Name	Party Object: name	4.3.4
Last Name	Party Object: name	4.3.4
Participant Info	Party Object: tel, stir, mailto, jCard, etc	4.3.1, 4.2.2, 4.2.3, 4.2.6 and 4.2.X
Transfer Bit Flag	Dialog Object: Dialog Transfer	4.3.10
Conference Bit Flag	Dialog Object: parties	4.3.4
Number of Conferences	Dialog Object: parties	4.3.4
Number of Transfers	Dialog Object: Dialog Transfer	4.3.10
Disposition	Dialog Object: disposition	4.3.9

Gap analysis of draft-rosenberg-vcon-cc-usecases: added 03

draft-rosenberg-vcon-cc-usecases	draft-petrie-vcon-03
CC Meta-Data	Action
Participant UUID	Add uuid parameter to Party Object. Added 4.2.10
PII and PCI Information	Add type parameter to Redacted Object. Added to 4.1.6
Number of holds	Add party_history array parameter to Dialog Object. Added 4.3.10
Hangup Party	Add party_history array parameter to Dialog Object. Added 4.3.10

Gap analysis of draft-rosenberg-vcon-cc-usecases: resolved in 04

draft-rosenberg-vcon-cc-usecases	draft-petrie-vcon-04/draft-ietf-vcon-vcon-container		
CC Meta-Data	Parameter	Section	Action
Interaction Type	Dialog Object: type and mimetype??	4.3.1 and 4.3.6	Perhaps more needed? Currently no differentiation between email, SMS and web chat; or video and screen recording.
Interaction ID			Add interaction parameter to Dialog Object. Added 4.3.13
PII and PCI Information			Add type parameter to Redacted Object. Added to 4.1.6
Campaign			Add campaign parameter to Dialog Object. Added 4.3.12
Dialing List			Add contact_list parameter to Party Object. Added 4.2.12
Skill			Add skills parameter to dialog Object. Added to 4.3.14
Participant Type			Add role parameter to Party Object. Added some defined tokens for role types. Added 4.2.11

CDDL add to Appendix A

- CDDL added with intention to support JSON and **CBOR**
- A few quick edits were made to change JSON specific text to CDDL
- A lot more edits are needed to clean up some JSON specific language
- No plan to change parameter definition format
 - Will add text to describe JSON & CBOR specific handling where needed
- Still sorting out some issues with the use of CDDL tdate and CBOR tag 21
- No intention to support YAML
- Need CWS and CWT sections

Hackathon Work Items

- CDDL
- CBOR
- Redaction Object

Hackathon Findings

CDDL:

- CDDL Command Line and Python tools immature
 - Some CDDL features (e.g. unwrap, tags) not implemented
 - CDDL parsing errors cryptic
 - CDDL validation errors difficult to diagnose

CBOR:

- Implemented serialization to/from CBOR (JSON previously implemented)
- Still sorting out use of tdate and CBOR tag 21 use in vCon

CDDL or not to CDDL?

Keep CDDL in Appendix?

Support CBOR?

Finish the edits and continue forward?

Hackathon Findings continued

Redacted Object

- UUID and URL reference do not require original to be encrypted, restrict access
- Inline included original must be encrypted
 - Only useful when exchanging across trust domains
 - Not useful when both redacted and original are already in the same domain, duplicated data
- This issue may also apply to Amended Object and Group Object array
- Should less redacted vCon be reference only (remove inline **body**)?

Other issues:

Remove section 1.2 Use Cases and Requirements from container I-D

Remove JOSE: vCon JWS and JWT from container I-D

Support separate recording file for each party

Would like to be able to stream construction of vCon

TODO on draft-ietf-vcon-vcon-container

- Gap analysis of Use Cases and Requirements I-Ds needed for:
 - Emergency Services
 - Messaging
- Resolve TODOs in I-D
- Complete edits from JSON only to JSON and CBOR support
- Fill in missing examples
- Add CBOR examples
- Document COSE signing and encryption of vCon

Need more exploration with working code

- What we have not implemented:
 - Referential vCons
 - Groups
 - Amended
 - *Redacted*
- Implemented, needs more testing in real world cases:
 - JWS Signing & Verification
 - JWE Encryption & Decryption

Give vCon a try

Repo and doc:

<https://github.com/py-vcon/py-vcon>

Python Library and CLI:

```
pip3 install python-vcon
```

Python server package released in June!

PIPY: `pip3 install py_vcon_server`

Repo: https://github.com/py-vcon/py-vcon/py_vcon_server

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