

verifiable LEI (vLEI) Ecosystem Governance Framework

Technical Requirements Part 3: vLEI Credential Schema Registry

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This Controlled Document specifies all policies regarding the publication of the official JSON Schema for the vLEI credentials.

1 Related Specifications

JSON Schema

JSON Schema 2020-12 https://json-schema.org/draft/2020-12/release-notes.html

ACDC

IETF ACDC (Authentic Chained Data Containers) Internet
Draft https://github.com/trustoverip/tswg-acdc-specification

SAID

IETF SAID (Self-Addressing IDentifier) Internet Draft https://github.com/WebOfTrust/ietf-said

CESR

IETF CESR (Composable Event Streaming Representation) Internet Draft https://github.com/WebOfTrust/ietf-cesr

Semantic Versioning

Semantic Versioning Specification 2.0 https://semver.org

2 Official vLEI Credential Schema

2.1 Requirements

A SAID (Self-Addressing Identifier) is an encoded agile cryptographic digest of the contents of the schema. Any change to the schema results in a new SAID. Therefore each and every version of any schema has a universally unique SAID across all schema and all versions of all schema. Any copy of a schema that verifies against the SAID published in the following table



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Page **2** of **4** Version 0.1 2022-12-01 can be assumed to be identical to any other copy that verifies to the same SAID by virtue of the strong collision resistance of the digest employed.

- 1. The digest algorithm employed for generating schema SAIDs MUST have an approximate cryptographic strength of 128 bits.
- 2. The SAID MUST be generated in compliance with the IETF-SAID internet draft specification and MUST be encoded using CESR. The CESR encoding indicates the type of cryptographic digest used to generate the SAID.
- 3. The schema MUST be JSON-Schema 2020-12 compliant. The table in 2.3 below provides the normative SAIDs for each of the official schema.

2.2 Versioning

As ACDCs (Authentic Chained Data Containers), the vLEI schema uses composition operators from JSON Schema. This allows extensibility in schema such that in many cases, newer schema versions may be backward compatible with older schema versions. A new schema version is considered backward incompatible with respect to a previous version of a schema when any instance of a vLEI credential that validates against the previous version of the schema may not be guaranteed to validate against the new version.

1. As per the semantic versioning rules, a backward incompatible schema MUST have a higher MAJOR version number than any backward incompatible version.

2.3 Schema Table

The following table provides, in descending order, row-by-row, the latest version, the SAID, and the type of each official schema, along with a URL. The URL is a network location where a copy of the schema may be obtained. Updated versions will be added to the top of the table upon designation by GLEIF as official Governing Body of the vLEI Ecosystem. The version number for each schema follows the Semantic Versioning 2.0.0 specification.

Ver sio n	SAID	Туре	URL
1.0. 0	ELqriXX1- lbV9zgXP4BXxqJlpZTgFchl l3cyjaCyVKiz	QualifiedvLEIIssuervLEI Credential	https://github.com/WebOfTrust/ vLEI/blob/dev/schema/acdc/qua lified-vLEI-issuer-vLEI- credential.json
1.0.	EK0jwjJbtYLlynGtmXXLO5 MGJ7BDuX2vr2_MhM9Q jAxZ	LegalEntityvLEICredenti al	https://github.com/WebOfTrust/ vLEI/blob/dev/schema/acdc/lega l-entity-vLEI-credential.json



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Ver sio n	SAID	Туре	URL
1.0. 0	EDqjl80uP0r_SNSp- yImpLGglTEbOwgO77ws OPjyRVKy	OORAuthorizationvLEIC redential	https://github.com/WebOfTrust/ vLEI/blob/dev/schema/acdc/oor- authorization-vlei-credential.json
1.0.	EIL-RWno8cEnkGTi9cr7- PFg_IXTPx9fZ0r9snFFZ0n m	LegalEntityOfficialOrga nizationalRolevLEICred ential	https://github.com/WebOfTrust/ vLEI/blob/dev/schema/acdc/lega l-entity-official-organizational- role-vLEI-credential.json
1.0.	ED_PcIn1wFDe0GB0W7B k9I4Q_c9bQJZCM2w7Ex9 Plsta	ECRAuthorizationvLEIC redential	https://github.com/WebOfTrust/ vLEI/blob/dev/schema/acdc/ecr- authorization-vlei-credential.json
1.0.	EOhcE9MV90LRygJuYN1 N0c5XXNFkzwFxUBfQ24v 7qeEY	LegalEntityEngagement ContextRolevLEICreden tial	https://github.com/WebOfTrust/ vLEI/blob/dev/schema/acdc/lega l-entity-engagement-context- role-vLEI-credential.json
1.0.	EJEMDhCDi8gLqtaXrb36D RLHMfC1c08PqirQvdPPS G5u	iXBRLDataAttestation	https://github.com/WebOfTrust/ vLEI/blob/dev/schema/acdc/veri fiable-ixbrl-report- attestation.json

3 Informative Notes

At some time in the future, this registry document may be augmented with a live registry that follows the future Trust over IP (ToIP) Trust Registry Protocol specification. The current in progress draft may be found here: https://docs.google.com/document/d/1ZGXUB0oODHO66PQkO66-fbAu6f7sVVToOz3Q8RNG0fs/edit

