



Verifiable Credentials Subcommittee

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Kick-off meeting, Sept 27, 2024

- Introduce the subcommittee charter, organizational planning and timelines
- Introduce participants and your use cases
- High-level overview of Verifiable Credentials
(Mihály Héder - Budapest University of Technology and Economics / SZTAKI Institute)
- Open discussion on activities of the subcommittee

W3C Verifiable Credentials (VC) are increasingly important to our community with the rise of Decentralized Identity and Wallet ecosystems. Several VC-based credential definitions already exist for expressing skills and micro-credentials (e.g., the Openbadges 3.0 specification).

However, there is no consistent and community-driven definition for expressing the 'identity related' claims of the commonly used schema managed by REFEDs like e.g. eduPerson, SCHAC, and voPerson.

This subcommittee sets out to define the VC representations of these well-known credentials so they may be used in a standardized and interoperable way.

- Bi-weekly meeting (online): Fri 08:00-09:00 CEST
- REFEDs Wiki: <https://wiki.refeds.org/display/STAN/VC+Subcommittee>
- Other
 - Do we want an email list?
 - Do we want a Slack channel?

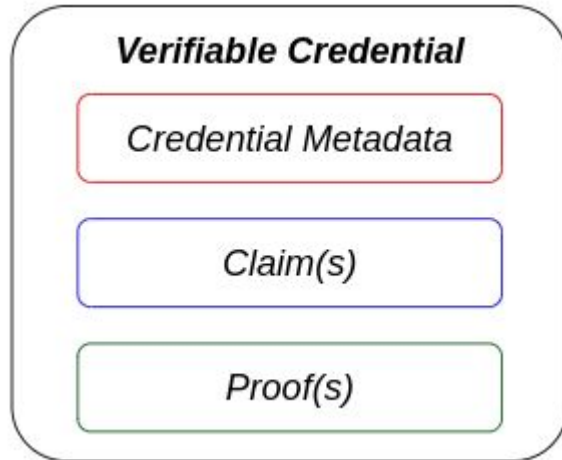


Participants & Use cases

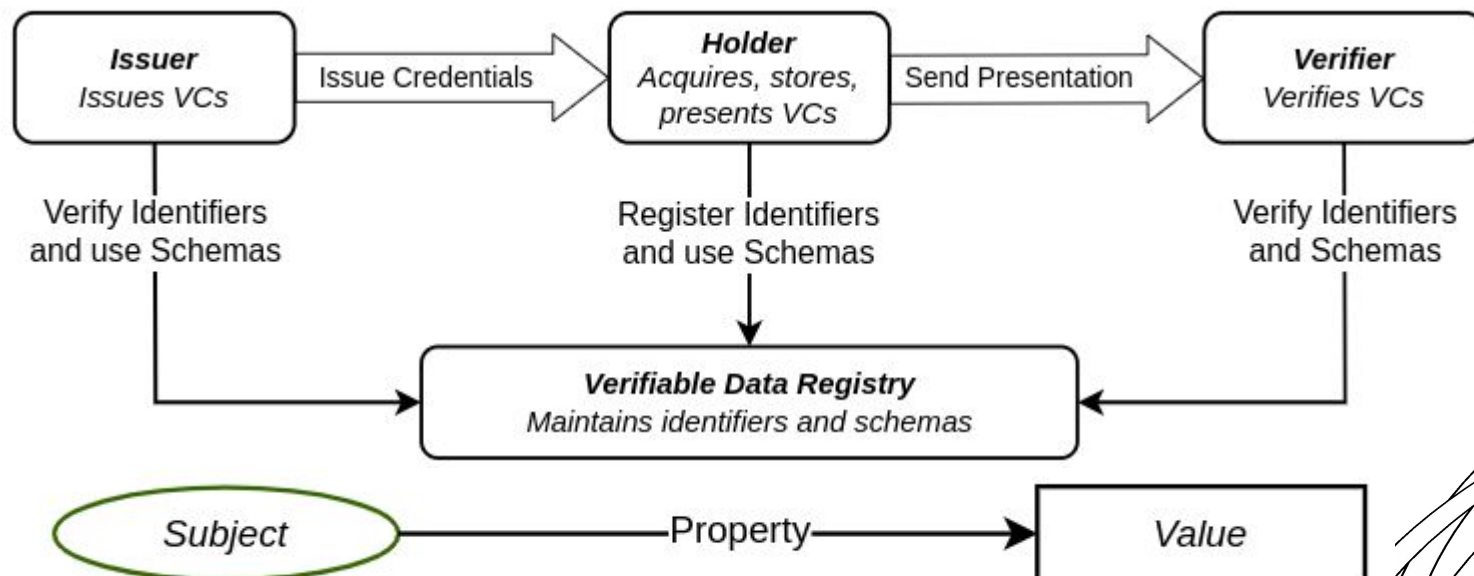
Please introduce yourself

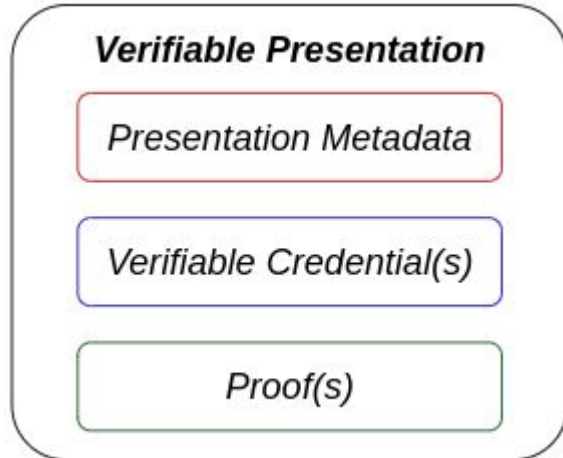
Describe 1 use case you have where we would need a VC representation of eduPerson/SCHAC/voPerson

Are you currently involved in an activity that would be able to test our work?

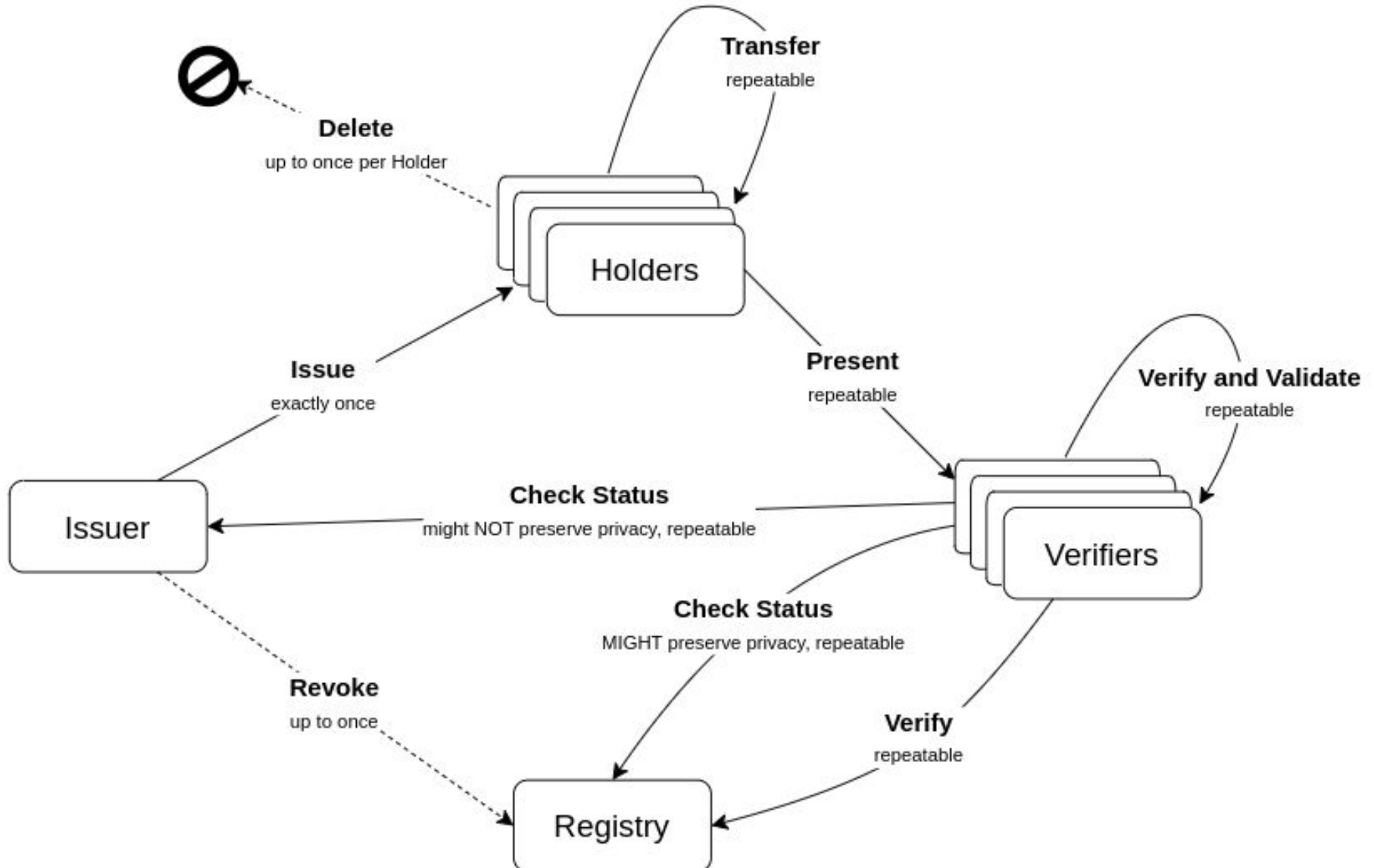


- Simple concept
 - Subject can be anything, incl. Organizations
 - Async -> more privacy but revocation issues
- verifiable, therefore
 - involves PKI
- Interpretation involves schemas





- Separation of credential and presentation
- Allows for reveal of information
 - Typical example: 18+ claim
 - Academic example: affiliation type
- Remarks
 - Achieved by SD-JWTs
 - Credentials might be presented directly



Claim example:

```
{
  "@context": [
    "https://www.w3.org/ns/credentials/v2",
    "https://www.w3.org/ns/credentials/examples/v2"
  ],
  "id": "https://university.example/Credential123",
  "type": ["VerifiableCredential", "ExampleAlumniCredential"],
  "issuer": "did:example:2g55q912ec3476eba2l9812ecbfe",
  "validFrom": "2010-01-01T00:00:00Z",
  "credentialSubject": {
    "id": "https://www.example.org/persons/pat",
    "name": "Pat",
    "alumniOf": {
      "id": "did:example:c276e12ec21ebfeb1f712ebc6f1",
      "name": "Example University"
    }
  }
}
```

Introduction into VCs

- Standard Vocabulary
 - Type, issuer, credentialSubject
- Custom
 - AlumniCredential
 - alumniOf

Main use case: OpenBadges (now W3C spec)

```
"id": "http://example.edu/credentials/3732",
"type": ["VerifiableCredential", "OpenBadgeCredential"],
"issuer": {
  "id": "https://example.edu/issuers/565049",
  "type": ["Profile"],
  "name": "Example University"
},
"validFrom": "2010-01-01T00:00:00Z",
"name": "Example University Degree",
"credentialSubject": {
  "id": "did:example:ebfeb1f712ebc6f1c276e12ec21",
  "type": ["AchievementSubject"],
  "achievement": {
    "id": "https://example.com/achievements/21st-century-skills/teamwork",
    "type": ["Achievement"],
    "criteria": {
      "narrative": "Team members are nominated for this badge by their peers and recogn
    },
    "description": "This badge recognizes the development of the capacity to collaborat
    "name": "Teamwork"
  }
},
"credentialSchema": [{
  "id": "https://purl.imsglobal.org/spec/ob/v3p0/schema/json/ob_v3p0_achievementcredent
  "type": "1EdTechJsonSchemaValidator2019"
}]
```

Main use case: OpenBadges (now W3C spec)

email	<u>EmailAddress</u>	An email address.	[0..1]
address	<u>Address</u>	An address for the individual or organization.	[0..1]
otherIdentifier	<u>IdentifierEntry</u>	A list of identifiers for the described entity.	[0..*]
official	<u>String</u>	If the entity is an organization, official is the name of an authorized official of the organization.	[0..1]
parentOrg	<u>Profile</u>	The parent organization of the entity.	[0..1]
familyName	<u>String</u>	Family name. In the western world, often referred to as the 'last name' of a person.	[0..1]
givenName	<u>String</u>	Given name. In the western world, often referred to as the 'first name' of a person.	[0..1]
additionalName	<u>String</u>	Additional name. Includes what is often referred to as 'middle name' in the western world.	[0..1]
patronymicName	<u>String</u>	Patronymic name.	[0..1]
honorificPrefix	<u>String</u>	Honorific prefix(es) preceding a person's name (e.g. 'Dr', 'Mrs' or 'Mr').	[0..1]
honorificSuffix	<u>String</u>	Honorific suffix(es) following a person's name (e.g. 'M.D, PhD').	[0..1]

Challenges/Questions:

- VCs are not attributes
- 'Identity related'
- Are all eduPerson, SCHAC, and voPerson attributes equally important?

Fri Oct 11 08:00-09:00

Homework

- Read background information
- Fill in input for discussion
The idea is to capture the knowledge/experiences & ideas about VCs and VC usage in our context

<https://docs.google.com/document/d/1S2DGfVfAbeJV18fmHyUvOdhk-CyC4MH9HP5r3Pg-YLo/edit>