



Delegations for Self-Sovereign Identities

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Motivation





To access private data or perform restricted operations, users often need to login or otherwise prove their identity. Sometimes they want to allow someone else to access those restricted resources for them. At other times, users need to act on behalf of other users, for example to sign documents in their name.

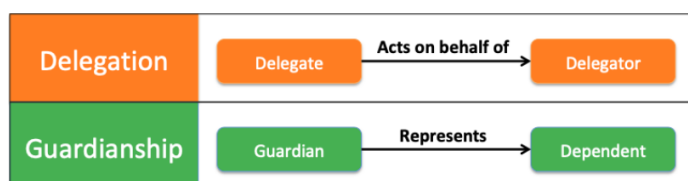
One way of doing so it to issue a delegation – a digitally signed document authorizing the other user to perform some task in the name of the issuer.

In the Self-sovereign identity (SSI) world, we represent those delegations in the form of Verifiable Credentials (VC), a data format using signed JSON.

Goals and Tasks

In this project we explore delegations in general and in the SSI world, and look into how they can be represented and verified.

-  Understand SSI concepts
-  Think about delegations
-  Implement tool to create delegations
-  Implement demo tool to verify delegations



Literature

- > G. Noble et al.
Verifiable Credentials Data Model 1.0 W3C Recommendation
<https://www.w3.org/TR/vc-data-model/>
- > G. Wagner, O. Omolola, and S. More
Harmonizing Delegation Data Formats
[Open Identity Summit 2017](#)

Courses & Deliverables

- Introduction to Scientific Working**
Short report on background
Short presentation
- Bachelor Project**
Project code and documentation
- Bachelor's Thesis**
Project code
Thesis
Final presentation

Recommended if you're studying

- CS
- ICE
- SEM

Prerequisites

- > Java or JavaScript programming
- > Basic understanding of identity management

Advisor / Contact

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