État de l'activité « web sémantique » au W3C

SemWeb.Pro 2023-11-14

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http://champin.net/2023/semwebpro/

Pierre-Antoine Champin

- Maître de conférences à l'Université Lyon 1

- En détachement à Inria

- W3C *fellow* depuis Février 2021

- [Ma présentation de l'an dernier](#)

W3C

- *World Wide Web Consortium*

- Organisme de standardisation des technologies du web

- Consortium d'organisations (390+)

- Forte culture de transparence et d'ouverture

- Standardisation et pré-standardisation/incubation

Bilan de l'année écoulée

- Recommandation candidates

- Autre recommandation en travaux

- Incubation

Web of Things WG

- *The Web of Things seeks to counter the fragmentation of the IoT through standard complementing building blocks (e.g., metadata and APIs) that enable easy integration across IoT platforms and application domains.*

- ○ WoT Architecture 1.1 (PR)

  ○ WoT Thing Description 1.1 (PR)

  ○ WoT Discovery (PR)

Dataset Exchange WG

- ○ *Maintain and revise the Data Catalog Vocabulary, DCAT, taking into account feature requests from the DCAT user community.*

  ○ *Define and publish guidance on the specification and use of application profiles when requesting and serving data on the Web.*

- Data Catalog Vocabulary (DCAT) - Version 3 (CR d'ici quelques jours)

RDF Dataset Canonicalization and Hash (RCH) WG

- *Define a standard to uniquely and deterministically calculate a hash of RDF Datasets for use cases such as Detecting changes in Datasets. The work will include defining RDF Dataset Canonicalization algorithms.*

- RDF Dataset Canonicalization (CR)

Forme canonique (1)

```
PREFIX : <http://schema.org/>              PREFIX s: <http://schema.org/>

[] a :Person ;                             _:a a s:Person ;
   :name "alice" ;                           s:name "alice" .
   :knows [
      a :Person ;                          _:b a s:Person ;
      :name "charlie" ;                      s:name "charlie".
   ] ;
.                                          _:a s:knows _:b.
```

RDFC 1.0 →

```
_:c14n0 <http://schema.org/name> "charlie" .
_:c14n0 <http://www.w3.org/1999/02/22-rdf-syntax-ns#type> <http://schema.org/Persc
_:c14n1 <http://schema.org/knows> _:c14n0 .
_:c14n1 <http://schema.org/name> "alice" .
_:c14n1 <http://www.w3.org/1999/02/22-rdf-syntax-ns#type> <http://schema.org/Persc
```

SHA256 →

ea9e7d35887275da33b8646512dfece8b319edd01ba9025f2c818de9f975ede

Forme canonique (2)

```
{
  "@context": "https://schema.org/",
  "type": "Person",
  "name": "alice",
  "knows": {
    "type": "Person",
    "name": "charlie"
  }
}
```

```
<Person xmlns="http://schema.org/">
  <name>alice</name>
  <knows>
  <Person>
    <name>charlie</name>
  </Person>
  </knows>
</Person>
```
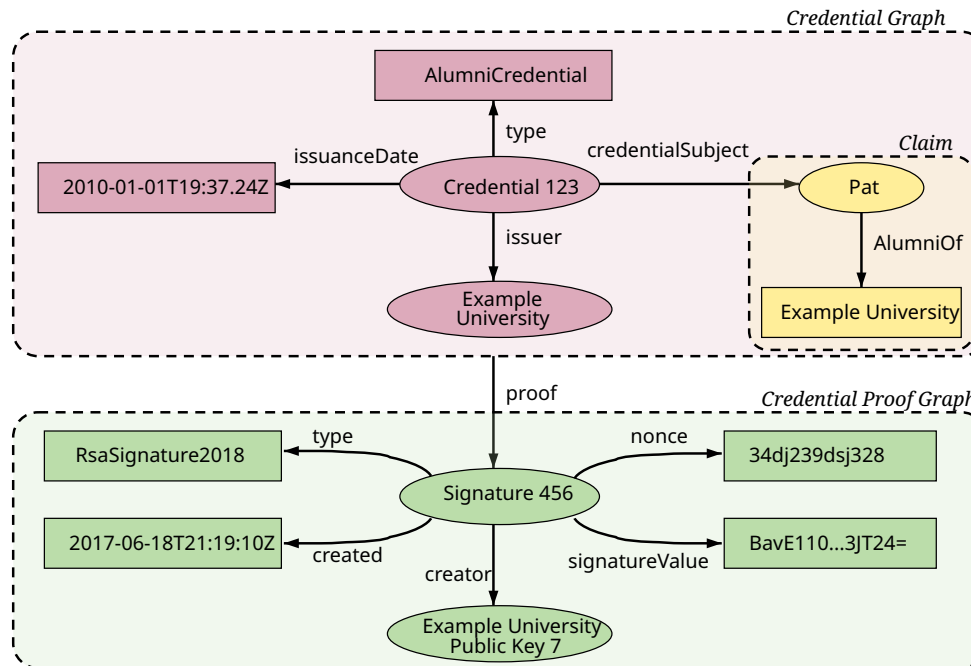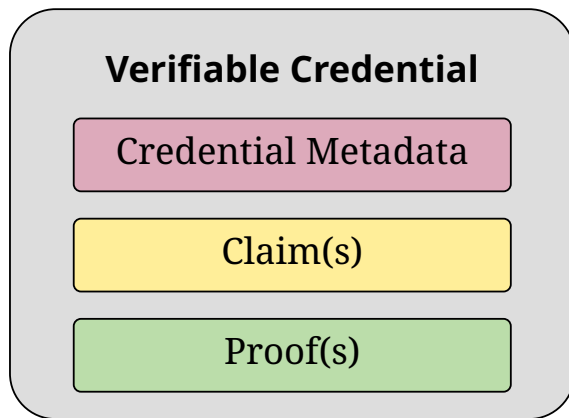
RDFC 1.0 →

```
_:c14n0 <http://schema.org/name> "charlie" .
_:c14n0 <http://www.w3.org/1999/02/22-rdf-syntax-ns#type> <http://schema.org/Perso
_:c14n1 <http://schema.org/knows> _:c14n0 .
_:c14n1 <http://schema.org/name> "alice" .
_:c14n1 <http://www.w3.org/1999/02/22-rdf-syntax-ns#type> <http://schema.org/Perso
```

SHA256 →

ea9e7d35887275da33b8646512dfece8b319edd01ba9025f2c818de9f975ede

Verifiable Credentials WG

«A credential is a set of one or more claims made by the same entity.»

Source https://www.w3.org/TR/vc-data-model/

Verifiable Credentials WG

- Verifiable Credential Data Integrity 1.0
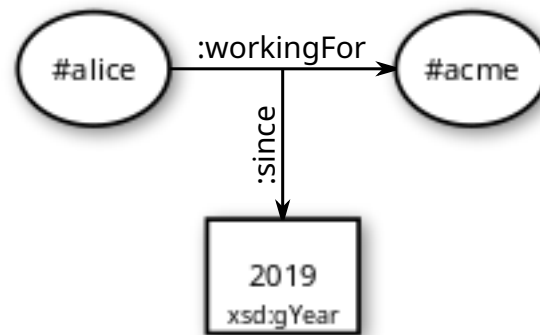
  Spécifie le contenu du *Proof Graph*

- Verifiable Credentials Data Model v2.0

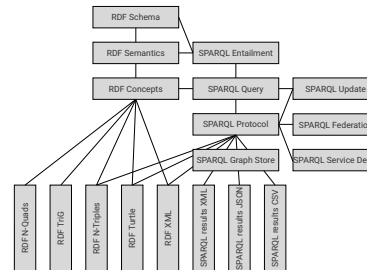 Nouvelle version du modèle de donnée général des VCs

RDF-star WG

- *Extend a set of RDF and SPARQL related recommendations, with the ability to concisely represent and query statements about statements.*

RDF-star WG

- 18 standards (RDF et SPARQL) mis à jours par le groupe

Spatial Data on the Web WG

- ○ *develop and maintain vocabularies and best practices that encourage better sharing of spatial data on the Web;*

  ○ *identify areas where standards should be developed jointly by both W3C and the Open Geospatial Consortium (OGC).*

- Time Ontology in OWL

Dataset Exchange WG

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  ○ *Define and publish guidance on the specification and use of application profiles when requesting and serving data on the Web.*

- Content Negotiation by Profile

Community Groups

- JSON-LD
  - Réflexions sur RDF-star

- Social Web Incubator
  - Projet de création d'un nouveau WG (ActivityPub ?)

- Solid
  - Projet de création d'un nouveau WG (toujours en cours...)
  - pub : *2nd Solid Symposium* à Louvain les 2 et 3 mai 2024

- Autonomous Agents on the Web

Merci de votre attention

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